



Vidya Pratishthan's
Institute of Information Technology
We Shape Tomorrow...Today



NAAC
NATIONAL ASSESSMENT AND
ACCREDITATION COUNCIL

"B"
Grade
CYCLE II

AQAR 2023-24

Criteria I

1.1.1 The Institution ensures effective curriculum delivery through a well-planned and documented process includes following things.





ACADEMIC CALENDAR AUGUST 2023 – JUNE 2024

Sr. No	Particulars	Date	Remark
August 2023			
1	Independence Day	15 th August 2023	VIIT Staff
2	Pateti	16 th August 2023	Holiday
3	Entrepreneurs Day	21 st August 2023	MBA/MCA
4	Commencement of MCA-I/MCA-II/MBA-I	21 st August 2023	MBA/MCA
September 2023			
5	Teachers Day	5 th September 2023	MCA/MBA
6	Induction Program	8 th and 9 th September 2023	MCA/MBA
7	Ganesh Chaturthi	19 th September 2023	Holiday
8	Anant Chaturdashi and Eid	28 th September 2023	Holiday
9	Commencement of MBA-II	25 th September 2023	MBA-II
October, 2023			
10	Gandhi Jayanti	2 nd October 2023	Holiday
11	Dussehra	5 th October 2023	Holiday
12	Vidya Pratishthan raising day	16 th October 2023	VIIT Staff
13	Freshers Party	19 th October 2023	MBA/MCA
November, 2023			
14	Diwali Vacation	10 th to 15 th September 2023	VIIT
15	Preliminary Exam	20 th November 2023	MBA/MCA
16	Constitution Day	26 th November 2023	MCA/MBA
December, 2023			
17	University Exam MCA-II	1 st December 2023	MCA
18	University Exam MCA-I	7 th December 2023	MCA
19	Alandi Yatra	8 th December 2023	VIIT
20	University Exam MBA-I	11 th December 2023	MBA
21	Christmas	25 th December 2023	Holiday
January, 2024			
22	Commencement of MCA & MBA-I	1 st January 2024	MCA/MBA
23	University Exam MBA-II	2 nd January 2024	MBA
24	Republic Day	26 th January 2024	Holliday
February, 2024			
25	Shivjayanti	19 th February 2024	Holiday
26	Industrial Visit	23 rd to 26 th February 2024	MCA/MBA
27	Sports and Cultural activities	26 th to 29 th Febraury 2024	MCA/MBA
28	Marathi Bhasha Gaurav Din	27 th February 2024	MCA/MBA
March, 2024			
29	Women's Day	8 th March 2024	MCA/MBA
30	Mahashivratri		Holiday



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Director
Vidya Pratishthan's
Institute of Information Technology
Vidyanagari, Baramati Dist, Pune



ACADEMIC CALENDAR AUGUST 2023 - JUNE 2024

Sr. No	Particulars	Date	Remark
29	Unit Test	11 th March 2024	MBA/MCA
30	Dhulivandan	25 th March 2024	Holiday
31	Good Friday	29 th March 2024	Holiday
April, 2024			
32	Gudhi Padva	9 th April 2024	Holiday
33	Ramjan Eid	11 th April 2024	Holiday
34	Dr. Babasaheb Ambedkar Jayanti	14 th April 2024	Holiday
35	Preliminary Exam	22 nd April 2024	MCA/MBA
36	Farewell Party	30 th April 2024	MCA/MBA
May, 2024			
37	Maharashtra Day	1 st May 2024	Holiday
38	SPPU examination		MCAMBA
39	Buddhapournima	23 rd May 2024	Holiday
June, 2024			
40	World Environment Day	5 th June 2024	All students and staff
41	e-ITBM 2024, National Conference	7 th and 8 th June 2024	VIIT
42	International Yoga Day	21 st June 2024	VIIT Staff
43	Conclusion of Academic year 2023-24		

HOD



Director

Director

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Vidya Pratishthan's
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Vidyanagari, Baramati Dist, Pune

B| GENERIC ELECTIVES UNIVERSITY LEVEL (GE – UL) COURSES – 2 Credits.

C| GENERIC ELECTIVES INSTITUTE LEVEL (GE – IL) COURSES – 2 Credits.

Course No.	Course Name	Name of Faculty	Course No.	Course Name	Name of Faculty
107	Management Fundamentals	Mr. Ajit Adsul	114	Enterprise Analysis & Desk Research	Dr. Yuvraj Nalwade
109	Entrepreneurship Development	Mrs. Anuradha Kadam	113	Verbal Communication Lab	Mrs. Anuradha Kadam
111	Legal Aspects of Business	Ms. Nilophar Khan	116	MS Excel	Ms. Nilophar Khan

D| OTHER ADDITIONAL COURSES- 1/2 Credits.

HR-I	Human Rights-I	Mrs. Anuradha Kadam	IS-I	Information Security-I	Ms. Nilophar Khan
SDA	Student Driven Activity	All staff	MOOC	Online Certification Course MOOC	Mrs. Anuradha Kadam



HOD

Dr. Manisha Shelkande

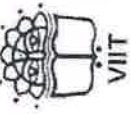


Deshmukh
Director

Dr. Anand Deshmukh

Deshmukh
Director

Vidya Pratishthan's
Institute of Information Technology
Vidyanagari, Baramati Dist, Pune



Vidya Pratishthan's
INSTITUTE OF INFORMATION TECHNOLOGY, BARAMATI
(NAAC ACCREDITED)

Time Table: 21 Aug. 2023 – Nov. 2023

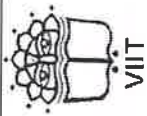
MBA-I, SEM-I

Class Room: C2

Time	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
9.00-10.00	OB (SN)	EABD (MS)	BRM (YN)	BOM (AA)	ED (AK)	EADR (YN)
10.00-10.30	Tea Break					
10.30-11.30	DB (MS)	MF (AA)	LAB (NK)	OB (SN)	EABD (MS)	IS-I (NK)
11.30-12.30	BRM (YN)	MA (AD)	BOM (AA)	MA (AD)	MA (AD)	Guest Session by Industry Expert
12.30-1.30	BOM (AA)	DB (MS)	OB (SN)	EABD (MS)	BRM (YN)	
1.30-2.30	Lunch Break					
2.30-3.30	ED (AK)	LAB (NK)	DB (MS)	VCL (AK)	MF (AA)	
3.30-4.30	MSE (NK)	EADR (YN)	VCL (AK)	MSE (NK)	HR-I (AK)	SDA (All Staff)
4.30-5.00	Mentoring Activity					
	Online Certification Course (MOOC)- Mrs. Anuradha Kadam					

SUBJECT CORE (SC) COURSES- 3 Credits						
Course No.	Course Name	Name of Faculty	Course No.	Course Name	Name of Faculty	
101	Managerial Accounting	Dr. Anand Deshmukh	104	Business Research Methods	Dr. Yuvraj Nalwade	
102	Organizational Behaviour	Dr. Sagar Nimbalkar	105	Basics of Marketing	Mr. Ajit Adsul	
103	Economic Analysis for Business Decisions	Dr. Manisha Shelkande		Digital Business	Dr. Manisha Shelkande	





Vidya Prathishthan's

INSTITUTE OF INFORMATION TECHNOLOGY, BARAMATI

(ACCREDITED BY NAAC WITH "B" GRADE)

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Time Table: 25 Sept. 2023 – Nov. 2023

MBA-II, SEM-III

Class Room: C-3

Time	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
9.00-10.00	CG (NK)	SM (SN)	IC (NK)	MNPO (NK)	IBE (AK)	IC (NK)
10.00-10.30	Tea Break					
10.30-11.30	IBE (AK)	AFM(YN)/ MA(MS)/ SHRM(AK)	SM (SN)	DS (SP)	MNPO (NK)	Guest Session by Industry Expert
11.30-12.30	SM (SN)	CG (NK)	TAFM(YN)/ TM(NK)	DS (SP)	DS (SP)	
12.30-1.30	FM(NK)/ IHR(AK)	SDM(AA)/ HRO(SN)	FM(NK)/ IHR(AK)	PMS(SN)/ IM(AA)	PMS(SN)/ IM(AA)	SDA
1.30-2.30	Lunch Break					
2.30-3.30	AFM(YN)/ MA(MS)/ SHRM(AK)	IS-III (NK)	SDM(AA)/ HRO(SN)	AFM(YN)/ SHRM(AK)	TAFM(YN)/ TM(NK)	
3.30-4.30	SDM(AA)/HRO(SN)	SD-I (AK)	SD-I (AK)	SIP	SIP	Sports
4.30-5.00	-	-	-	-	-	-

Specialization	Sub. Code	Subject	Students	Faculty
Common Subjects	301-SM	Strategic Management	68	Dr. Sagar Nimbalkar
	302-DS	Decision Science	68	Dr. Santosh Parakh
	303-SIP	Summer Internship Project	68	All Faculties
Electives-University Level	307-IBE	International Business Environment	68	Mrs. Anuradha Kadam
	310-CG	Corporate Governance	68	Ms. Nilophar Khan
	311-MNPO	Management of Non-profit Organizations	68	Ms. Nilophar Khan
Other Subjects	SD-I	Skill Development-I	68	Mrs. Anuradha Kadam
	IS-III	Information Security-III	68	Ms. Nilophar Khan
	IC	Introduction to Constitution	68	Ms. Nilophar Khan
Financial Management (24)	304-AFM	Advanced Financial Management	26	Dr. Yuvraj Nalwade
	305- IF	International Finance	8	Ms. Nilophar Khan



313-TAFM	Technical Analysis of FM	26	Dr. Yuvraj Nalwade
317-FM	Financial Modeling	23	Ms. Nilophar Khan
320-PFTF	Project Finance & Trade Finance	8	Ms. Nilophar Khan
304-SM	Services Marketing	5	Dr. Manisha Shelkande
305-SDM	Sales & Distribution Management	18	Mr. Ajit Adsul
313-IM	International Marketing	18	Mr. Ajit Adsul
314-DM-II	Digital Marketing-II	5	Dr. Manisha Shelkande
316-MA	Marketing Analytics	16	Dr. Manisha Shelkande
304-SHRM	Strategic Human Resource Management	11	Mrs. Anuradha Kadam
305-HRO	HR Operations	37	Dr. Sagar Nimbalkar
312- TM	Talent Management	13	Ms. Nilophar Khan
315- IHR	International HR	20	Mrs. Anuradha Kadam
318-PMS	Performance Management System	39	Mr. Sagar Nimbalkar
304- SOM-II	Services Operations Management - II	1	
305-LM	Logistics Management	5	
312- MRP	Manufacturing Resource Planning	1	Mr. Ajit Adsul
315-TPS	Toyota Production System	2	
317-SSO	Six Sigma for Operations	5	
01-IEDP	Import Export Documentation & Procedure	10	Mrs. Anuradha Kadam
04-IBEL	International Business and Employment Laws	10	Mrs. Anuradha Kadam
305 MLCIP	Machine Learning & Cognitive intelligence using Python	9	
312-SMWTA	Social Media, Web & Text Analytics	6	Mr. Sagar Nimbalkar
314- SCA	Supply Chain Analytics	3	
316- PMSM	Predictive Modelling using SPSS Modeler	3	
01-AIE	Agriculture & Indian economy	6	
03-RCF	Rural Credit and Finance	6	Dr. Manisha Shelkande
FHM	Fundamental of Hospitality Management	1	
EM	Event Management	1	Dr. Yuvraj Nalwade

HOD



Director
Vivec Poktishan's
 Institute of Information Technology
 Vidyanaagari, Baramati Dist, Pune



Dr. Manisha Shelkande

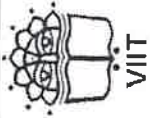
Dr. Anand Deshmukh



Deshmukh

Director

**Vidya Pratishthan's
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Vidyanagari, Baramati Dist, Pune**



Vidya Pratishthan's

INSTITUTE OF INFORMATION TECHNOLOGY, BARAMATI

(ACCREDITED BY NAAC WITH "B" GRADE)

Time Table : Jan. 2024 - May 2024

MBA-I, SEM-II

Class Room: C2, C1 & C12

Time	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
9.00-10.00	OSCM (AA)	IADR (YN)	HRM (SN)	MM (MS)	CFM (SK)	FM (YN)
10.00-10.30	Tea Break					
10.30-11.30	QRM (SK)	FM (YN)	SNVM (SK)	HRM (SN)	HRM (SN)	IADR (YN)
11.30-12.30	FM (YN)	OSCM (AA)	MM (MS)	QRM (SK)	SNVM (SK)	IS-II (SK)
12.30-1.30	FM (YN)	MM (MS)	CFM (SK)	OSCM (AA)	MR(MS)/ FMBO(YN)/ ERLL(NK)	HR-II (NK)
1.30-2.30	Lunch Break					
2.30 -3.30	CB(AA)/ PFP(NK)/ CBHRM(SN)	PBM(MS)/ SAPM(AD)/ LRS(SK)	PSL(MS)/ DT(NK)/ HRA(SN)	MR(MS)/ FMBO(YN)/ ERLL(NK)	CB(AA)/ PFP(NK)/ CBHRM(SN)	Sports (All Faculty)
3.30-4.30	PBM(MS)/ SAPM(AD)/ LRS(SK)	PSL(MS)/ DT(NK)/ HRA(SN)	MR(MS)/ FMBO(YN)/ ERLL(NK)	CB(AA)/ PFP(NK)/ CBHRM(SN)	Mentoring Activity	
4.30-5.00	MOOC (Online Certification Course)	MOOC (Online Certification Course)	MOOC (Online Certification Course)	MOOC (Online Certification Course)	MOOC (Online Certification Course)	-

Subject Code	Name of the Subject	Credits	Number of Students	Name of Faculty
GENERIC CORE (GC) COURSES – 50 Marks CCE, 50 Marks ESE				
201	Marketing Management	3	66	Dr. Manisha Shelkande
202	Financial Management	3	66	Dr. Yuvraj Nalwade

203	Human Resources Management	3	66	Dr. Sagar Nimbalkar
204	Operations & Supply Chain Management	3	66	Mr. Ajit Adsul
GENERIC ELECTIVES UNIVERSITY LEVEL (GE – UL) COURSES – 50 Marks ESE				
207	Contemporary Frameworks in Management	2	66	Mrs. Sojal Kadam
208	Qualitative Research Methods	2	66	Mrs. Sojal Kadam
209	Start Up and New Venture Management	2	66	Mrs. Sojal Kadam
GENERIC ELECTIVES INSTITUTE LEVEL (GE – IL) COURSES – 50 Marks CCE				
214	Industry Analysis & Desk Research	2	66	Dr. Yuvraj Nalwade
OTHER COURSES – 25 Marks CCE				
IS-II	Information Security-II	1	66	Mrs. Sojal Kadam
HR-II	Human Rights-II	1	66	Ms. Nilolphar Khan
SUBJECT CORE (SC) COURSES: Specialization – Marketing Management (MKT)				
205 MKT	Marketing Research	3	18	Dr. Manisha Shelkande
206 MKT	Consumer Behaviour	3	18	Mr. Ajit Adsul
SUBJECT ELECTIVE (SE - IL) COURSES: Specialization – Marketing Management (MKT)				
218 MKT	Product & Brand Management	2	18	Dr. Manisha Shelkande
219 MKT	Personal Selling Lab	2	18	Dr. Manisha Shelkande
SUBJECT CORE (SC) COURSES: Specialization – Financial Management (FIN)				
205 FIN	Financial Markets and Banking Operations	3	24	Dr. Yuvraj Nalwade
206 FIN	Personal Financial Planning	3	24	Ms. Nilolphar Khan
SUBJECT ELECTIVE (SE - IL) COURSES: Specialization – Financial Management (MKT)				
217 FIN	Securities Analysis & Portfolio Management	2	24	Dr. Anand Deshmukh
219 FIN	Direct Taxation	2	24	Ms. Nilolphar Khan
SUBJECT CORE (SC) COURSES: Specialization – Human Resource Management (HRM)				
205 HR	Competency Based Human Resource Management	3	16	Dr. Sagar Nimbalkar
206 HR	Employee Relations & Labour Legislation	3	16	Ms. Nilolphar Khan
SUBJECT ELECTIVE (SE - IL) COURSES: Specialization – Human Resource Management				
218 HRM	Lab in Recruitment and Selection	2	16	Mrs. Sojal Kadam
221 HRM	HR Analytics	2	16	Dr. Sagar Nimbalkar
SUBJECT CORE (SC) COURSES: Specialization – Operations & Supply Chain Management (OSCM)				
205 OSCM	Services Operations Management - I	3	03	Mr. Ajit Adsul



206 OSCM	Supply Chain Management	3	03	Mr. Ajit Adsul
SUBJECT ELECTIVE (SE - IL) COURSES: Specialization – Operations & Supply Chain Management				
217 OSCM	Planning & Control of Operations		03	Mr. Ajit Adsul
219 OSCM	Inventory Management		03	Mr. Ajit Adsul
SUBJECT CORE (SC) COURSES: Specialization – Business Analytics (BA)				
205 BA	Basic Business Analytics using R		04	Dr. Sagar Nimbalkar
206 BA	Data Mining		04	Dr. Sagar Nimbalkar
SUBJECT ELECTIVE (SE - IL) COURSES: Specialization – Business Analytics				
219 BA	Workforce Analytics		04	Dr. Sagar Nimbalkar
221 BA	Data Warehousing Project Life Cycle Management		04	Dr. Sagar Nimbalkar




HOD

Dr. Manisha Shelkande

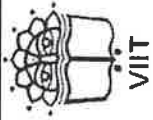
Director

Dr. Anand Deshmukh




Director

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Vidya Pratishthan's
INSTITUTE OF INFORMATION TECHNOLOGY, BARAMATI
(ACCREDITED BY NAAC WITH "B" GRADE)

Time Table: April 2023 to July 2023

MBA-II, SEM-IV

Class Room: C3, C1 & C12

Time	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
9.00-10.00	EPM (NK)	IEBE (SK)	EPM (NK)	IEBE (SK)	EPM (NK)	SD-II (NK)
10.00-10.30	Tea Break					
10.30-11.30	ODD (SN)	GSM (SK)	CSRS (NK)	CSRS (NK)	GSM (SK)	SDA/ Guest
11.30-12.30	MS (AA)	ODD (SN)	CTCF (YN)	CTCF(YN)	MS (AA)	Session by
12.30-1.30	RAM (MS)	MS (AA)	ODD (SN)	RAM (MS)	DHRP (SN)	Industry Expert
1.30-2.30	Lunch Break					
2.30 -3.30	IEBE (SK)	CTCF (YN)	BV (YN)	DHRP (SN)	BV (YN)	Sports (All Faculty)
3.30-4.30	SD-II (NK)	MOOC Certification Course	IS-II (SK)	Mentoring Activity	Mentoring Activity	
4.30-5.00	-					

Subject Code	Name of the Subject	Credits	Number of Students	Name of Faculty
GENERIC CORE (GC) COURSES – 50 Marks CCE, 50 Marks ESE				
401	Enterprise Performance Management	3	69	Ms. Nilophar Khan
402	Indian Ethos & Business Ethics	3	69	Mrs. Sojal Kadam
GENERIC ELECTIVES UNIVERSITY LEVEL (GE – UL) COURSES – 50 Marks ESE				
405	Global Strategic Management	2	69	Mrs. Sojal Kadam
408	Corporate Social Responsibility & Sustainability	2	69	Ms. Nilophar Khan
OTHER COURSES – 75 / 50 Marks CCE				
IS-IV	Information Security-IV		69	Mrs. Sojal Kadam
SD-II	Skill Development-II (Grooming)		69	Ms. Nilophar Khan

SUBJECT CORE (SC) COURSES: Specialization – Financial Management (FIN)				
403 Fin.	Financial Laws	3	08	Dr. Yuvraj Nalwade
404 Fin.	Current Trends & Cases in Finance	3	26	Dr. Yuvraj Nalwade
SUBJECT ELECTIVE (SE - IL) COURSES: Specialization – Financial Management (MKT)				
410 Fin.	Business Valuation	2	26	Dr. Yuvraj Nalwade
411 Fin.	Risk Management	2	08	Dr. Yuvraj Nalwade
SUBJECT CORE (SC) COURSES: Specialization – Marketing Management (MKT)				
403 Mkt.	Marketing 4.0	3	04	Dr. Manisha Shelkande
404 Mkt.	Marketing Strategy	3	19	Mr. Ajit Adsul
SUBJECT ELECTIVE (SE - IL) COURSES: Specialization – Marketing Management (MKT)				
410 Mkt.	Rural & Agriculture Marketing	2	19	Dr. Manisha Shelkande
412 Mkt.	Retail Marketing	2	04	Mr. Ajit Adsul
SUBJECT CORE (SC) COURSES: Specialization – Human Resource Management (HRM)				
403 HRM	Organizational Diagnosis & Development	3	39	Dr. Sagar Nimbalkar
404 HRM	Current Trends & Cases in Human Resource Management	3	09	Dr. Sagar Nimbalkar
SUBJECT ELECTIVE (SE - IL) COURSES: Specialization – Human Resource Management				
409 HRM	Labour Legislation	2	09	Dr. Sagar Nimbalkar
410 HRM	Designing HR Policies	2	39	Dr. Sagar Nimbalkar
SUBJECT CORE (SC) COURSES: Specialization – Operations & Supply Chain Management (OSCM)				
403 OSCM	E Supply Chains & Logistics	3	05	Mr. Ajit Adsul
415 OSCM	Strategic Supply Chain Management	2	05	Mr. Ajit Adsul
SUBJECT CORE (SC) COURSES: Specialization – Business Analytics (BA)				
404 BA	Artificial Intelligence in Business Applications	3	10	Dr. Sagar Nimbalkar
SUBJECT ELECTIVE (SE - IL) COURSES: Specialization – Business Analytics				
412 BA	Scala and Spark	2	10	Dr. Sagar Nimbalkar
SUBJECT CORE (SC) COURSES: Specialization – Rural & Agribusiness Management (RABM)				
02 RABM	ICT for Agriculture Management	3	06	Dr. Manisha Shelkande
SUBJECT ELECTIVE (SE - IL) COURSES: Specialization – Rural & Agribusiness Management				
05 RABM	Agri – Entrepreneurship	2	06	Dr. Manisha Shelkande
SUBJECT CORE (SC) COURSES: Specialization – Tourism & Hospitality Management (THM)				
02 THM	Tourism & Travel Management	3	01	Ms. Nilophar Khan

SUBJECT ELECTIVE (SE - IL) COURSES: Specialization – Tourism & Hospitality Management			
05 THM	Strategic Hospitality Management	2	01
			Ms. Nilophar Khan



HOD

Dr. Manisha Shelkande

Director

Dr. Anand Deshmukh



Deshmukh

Director

Vidya Pratishthan's

Institute of Information Technology

Vidyanagari, Baramati Dist, Pune



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Time Table Semester - I (AY: 2023-2024, Term - 1)

MCA I (Batch : 2023-25)						
Timetable w.e.f. 21 st August 2023, Monday						
Class room : C4, LAB - 4						
Time/Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
8.00 am to 10.00 am	Java	Java	SI	NT	NT	OC-2
Tea						
10.30 am to 11.30 am	DSA	DSA	OSA	Java LAB	Java SE	Student Driven Activities
11.30 am to 12.30 pm	Soft Skills-1	NT	Java LAB	SE	IS-I	Guest Session
12.30 pm to 1.30 pm	OS	OC-I				
Lunch						
2.30 pm to 3.30 pm	HR - I	OS	Mini Project	Mini Project	OS	Sports
3.30 pm to 4.30 pm	Training & Placement	Training & Placement				
4.30 pm to 5.00 pm						

Sr. No.	Subject Code	Course Title	Int.	Ext.	CP	Faculty
1	IT11	Java Programming	25	50	3	Mr. Rakesh Kulkarni
2	IT12	Data Structure and Algorithms	25	50	3	Mr. Swapnil Chermate
3	IT13	Object Oriented Software Engg.	25	50	3	Dr. Santosh Parakh
4	IT14	Operating System Concepts	25	50	3	Mr. Pradip Shendage
5	IT15	Network Technologies	25	50	3	Dr. Mayank Kothawade
6	OC11	Open Course-1	25	-	1	Mr. Ajit Adsul
7	OC12	Open Course-2	25	-	1	Mr. Rakesh Kulkarni
Practicals						
8	IT11L	Practical	75	50	5	Mr. Rakesh Kulkarni
9	ITC11	Mini Project	75	50	5	Dr. Mayank Kothawade/ Dr. Santosh Parakh
Soft Skills						
10	SS11	Soft Skills - I	25	-	1	Mr. Rakesh Kulkarni
			350	350	78	
11	IS-I		-	-	-	Dr. Mayank Kothawade
12	HR-I		-	-	-	Mr. Ajit Adsul
13	Training & Placement		-	-	-	Mr. Rakesh Kulkarni

Dr. Mayank R. Kothawade
HOD, MCA



Dr. A. A. Deshmukh
Director

Director

Vidya Pratishthan's
Institute of Information Technology

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(Maharashtra) - 413 143, India.
Phone : (02112) 239551, 55553
Fax : - 21-2112-239550
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Web : www.vitindia.org



Vidyanagar Baramati Dist, Pune
INSTITUTE OF
INFORMATION
TECHNOLOGY



Vidya Pratishthan's
Institute of Information Technology
Vidya Pratishthan's



NAAC

B
CG/ASE

Time Table Semester - III (AY: 2023-2024, Term - I)

MCA II (Batch : 2023-25)						
Timetable w.e.f. 21 st August 2023, Monday						
Class room : C.S. LAB-4						
Time/Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
9.00 am to 10.00 am	MAD LAB	MAD	MAD	MAD	MAD LAB	SS-III
Tea						
10.30 am to 11.30 am	MAD LAB	CC	CC	CC	MAD LAB	Student Dessen Activities/ Guest Section
11.30 am to 12.30 pm	OC-5	DWDM	STQA	STQA	SD-1	
12.30 pm to 1.30 pm	KRAI	STQA	SD-1	DWDM	DWDM	
Lunch						
2.30 pm to 3.30 pm	Mini Proj	KRAI	KRAI	IS-III	IOC	Sports
3.30 pm to 4.30 pm		OC-6	Training & Placement		IOC	
4.30 pm to 5.00 pm		Mini Proj				

Sr. No.	Course Title	Course Code	CP	EXT	INT	Faculty
1	Mobile Application Development	IT31	3	50	25	Mr. Rahul Shah
2	Data Warehousing and Data Mining	IT32	3	50	25	Mr. Rakesh Kulkarni
3	Soft Testing and Quality Assurance	IT33	3	50	25	Dr. Mayank Kothawade
4	Knowledge Representation & Artificial Intelligence - ML, DL	IT34	3	50	25	Mrs. Komal Jadhav
5	Cloud Computing	IT35	3	50	25	Dr. Santosh Parakh
6	Open Course 5	OC31	1	-	25	Dr. Santosh Parakh
7	Open Course 6	OC32	1	-	25	Dr. Mayank Kothawade
* Practical's						
8	Practical	IT31L	5	50	75	Mr. Rahul Shah
9	Mini Project	IT31	5	50	75	Dr. Mayank Kothawade Dr. Santosh Parakh
* Soft Skills						
10	Soft Skills-III	SS31	1	-	25	Mr. Ajit Adsul
			28	350	350	
11	Information Security-III	IS-III	-	-	25	Dr. Santosh Parakh
12	Skill Development-I	SD-1	2	-	50	Mr. Ajit Adsul
13	Introduction to Constitution	IOC	2	-	50	Mr. Rakesh Kulkarni
14	Training & Placement	-	-	-	-	Mr. Rakesh Kulkarni

Dr. Mayank R. Kothawade
HOD, MCA



Dr. A. A. Deshmukh

Director

Director

Vidya Pratishthan's
Institute of Information Technology
Vidyanagari, Baramati Dist. Pune

Vidyanagari, Bhimgvan Road,
Baramati, Dist. Pune

Vidya Pratishthan's



MCA-I – Timetable						
Academic Year – 2023-24 [Semester-II]						
Timetable with effect from 1 st Jan 2024						
Classroom	C-4				LAB	Lab-4
Time/Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
9:00 to 10:00	AIT	AIT	SPM	PP	ADBMS	ADBMS
10:00 to 10:30	TEA BREAK					
10:30 to 11:30	OT	OT	OT	ADBMS	SPM	PP
11:30 to 12:30	PP LAB	PP LAB	AIT LAB	SPM	AIT LAB	AIT
12:30 to 1:30	PP LAB	PP LAB	AIT LAB	PP	AIT LAB	Mini Project
1:30 to 2:30	LUNCH BREAK					
2:30 to 3:30	OS-3	OS-4	SS-II	IS-II	HR-II	SPORTS
3:30 to 4:30	T&P	T&P	Mini Project	Mini Project	Mini Project	SPORTS

SEMESTER-II						
Sr. No	Course Title	Course Code	CP	EXT	INT	Name of the Faculty
1.	Python Programming	IT21	3	50	25	Mr. Rakesh Kulkarni
2.	Software Project Management	IT22	3	50	25	Dr. Mayank Kothawade
3.	Optimization Techniques	MT21	3	50	25	Dr. Santosh Parakh
4.	Adv. Internet Technologies	IT23	3	50	25	Ms. Vaishnavi Tilekar
5.	Advanced DMBS	IT24	3	50	25	Ms. Vaishnavi Tilekar
6.	Open Course 3	OC21	1	-	25	Dr. Santosh Parakh
7.	Open Course 4	OC22	1	-	25	Dr. Mayank Kothawade
8.	Practical (Python & AIT)	IT21L	5	50	75	Mr. Rakesh Kulkarni & Ms. Vaishnavi Tilekar
9.	Mini Project	ITC21	5	50	75	Dr. Mayank Kothawade & Dr. Santosh Parakh
10.	Soft Skills-II	SS21	1	-	25	Mr. Ajit Adsul
11.	Information Security-II	IS-II	1	-	25	Dr. Santosh Parakh
12.	Human Resource-II	HR-II	1	-	25	Dr. Mayank Kothawade
13.	Training & Placement	-	-	-	-	Mr. Rakesh Kulkarni

Pravin



Adeshwari
Director
Vidya Pratishthan's
Institute of Information Technology
Vidyanagari, Baramati Dist, Pune



MCA-II – Timetable						
Academic Year – 2023-24 [Semester-IV]						
Timetable with effect from 1 st Jan 2024						
Classroom	C-5				LAB	Lab-4
Time/Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
9:00 to 10:00	Project Work / Internship	DevOps	SD-II	IS-IV	SD-II	Project Presentation
10:00 to 10:30	TEA BREAK					
10:30 to 11:30	Project Work / Internship		DevOps	Project Work / Internship	PPMOB	Project Presentation
11:30 to 12:30			PPMOB	PPMOB	DevOps	
12:30 to 1:30		Project Work / Internship				
1:30 to 2:30	LUNCH BREAK					
2:30 to 3:30	Project Work / Internship			Training & Placement		SPORTS
3:30 to 4:30						SPORTS

SEMESTER-II						
Sr. No	Course Title	Course Code	CP	EXT	INT	Name of the Faculty
1.	DevOps	IT41	3	50	25	Dr. Mayank Kothawade
2.	PPM & OB	BM41	3	50	25	Mr. Ajit Adsul
3.	Project	ITC41	22	250	300	Dr. Mayank Kothawade & Dr. Santosh Parakh
			28	350	350	
4.	Skill Development-II		2	-	50	Dr. Santosh Parakh
5.	Information Security-IV	IS-IV	1	-	25	Mr. Rakesh Kulkarni
6.	Training & Placement	-	-	-	-	Mr. Rakesh Kulkarni

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Director
Vidya Pratishthan's
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Vidyanagari, Baramati Dist, Pune



ACADEMIC FILE - SUMMARY SHEET

Class	MCA - I	Semester	I/II
Subject Code & Name	IT-11 - Java Programming	Faculty	M & Rakesh Kulkarni

1. Time Table
2. Syllabus
3. Teaching Plan
4. Program Outcomes, Course Objectives and Course Outcomes
5. Program Outcome and Course Outcome Correlation Matrix
6. Course Outcome Attainment
7. Attendance sheet
8. Lecture Record
9. Unit test paper
10. Mark-sheet of unit test
11. Prelim Exam paper
12. Mark-sheet of prelim exam
13. Assignment
14. Internal performance of the student
15. Question Bank
16. Other, if any (Pl. specify)

Deekshant
Director
Vidya Pratishthan's
Institute of Information Technology
Vidyanagari, Baramati Dist-Pune

[Signature]
Subject Teacher



[Signature]
Dr. Santosh Parakh



Time Table Semester - 1 (AY: 2023-2024, Term - 1)

MCA I (Batch : 2023-25)						
Timetable w.e.f. 21 st August 2023, Monday						
Class room : C4, LAB - 4						
Time/Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
9.00 am to 10.00 am	Java	Java	SE	NT	NT	OC-2
Tea						
10.30 am to 11.30 am	DSA	DSA	DSA	Java LAB	Java SE	Student Driven Activities/ Guest Session
11.30 am to 12.30 pm	Soft Skills-1	NT	Java LAB	SE	IS-1	
12.30 pm to 1.30 pm	OS	OC-1	LAB	SE	IS-1	
Lunch						
2.30 pm to 3.30 pm	HR-1	OS	Mini Project	Mini Project	OS	Sports
3.30 pm to 4.30 pm	Training & Placement	Training & Placement				
4.30 pm to 5.00 pm						

Sr. No.	Subject Code	Course Title	Int.	Ext.	CP	Faculty
1	IT11	Java Programming	25	50	3	Mr. Rakesh Kulkarni
2	IT12	Data Structure and Algorithms	25	50	3	Mr. Swapnil Chamate
3	IT13	Object Oriented Software Engg.	25	50	3	Dr. Santosh Parakh
4	IT14	Operating System Concepts	25	50	3	Mr. Pradip Shendare
5	IT15	Network Technologies	25	50	3	Dr. Mayank Kothawade
6	OC11	Open Course-1	25	-	1	Mr. Ajit Adsul
7	OC12	Open Course-2	25	-	1	Mr. Rakesh Kulkarni
*Practical's						
8	IT11L	Practical	75	50	5	Mr. Rakesh Kulkarni
9	ITC11	Mini Project	75	50	5	Dr. Mayank Kothawade Dr. Santosh Parakh
*Soft Skills						
10	SS11	Soft Skills - 1	25	-	1	Mr. Rakesh Kulkarni
			350	350	28	
11		IS-1	-	-	-	Dr. Mayank Kothawade
12		HR-1	-	-	-	Mr. Ajit Adsul
13		Training & Placement	-	-	-	Mr. Rakesh Kulkarni

Dr. Mayank R. Kothawade
HOD, MCA

Dr. A. A. Deshmukh
Director



Director

Semester I

Course Code: IT-11

Course Name: Java Programming

Credit Scheme			Evaluation Scheme				
Lecture	Practical	Credit	Internal			External	Total
			Written	Practical	Tutorial		
3 Hrs./Week	-	3	25	-	-	50	75

Course Description:

Prerequisite:

Knowledge of programming structures like decision flows, loops, etc.

Course Objectives:

1. To familiarize students with the concepts of OOPs.
2. To enable the students to understand the core principles of the Java Language and use AWT tools to produce well designed, effective applications.
3. Students will be able to develop server-side applications with database handling using servlets, JSP, JDBC

Course Outcomes:

Student will be able to

- CO1 Understand Basic Concepts of OOPs, Java, Inheritance, Package. (Understand)
- CO2: Understand Exception handling, arrays and Strings and multi-threading in Java (Understand.)
- CO3: Understand collection framework (Understand)
- CO4: Develop GUI using Abstract Windows Toolkit (AWT) and event handling (Apply)
- CO5: Develop Web application using JSP and Servlet, JDBC (Apply)

Course Structure:

Sr. No.	Topics Details	Weightage in %	No of Sessions
1	1. Introduction - 1.1 About Java 1.2 Flavours of Java 1.3 Java Installation 1.4 Java Program Development Environment Extra reading: docs oracle docs	3	2



2	<p>2. Object Oriented Programming</p> <p>2.1 Class Fundamentals 2.2 Object & Object reference 2.3 Object Life time & Garbage Collection 2.4 Creating and Operating Objects 2.5 Constructor & initialization code block 2.6 Access Control, Modifiers, Use of Modifiers with Classes & Methods. 2.7 Nested, Inner Class & Anonymous Classes, Abstract Class & Interfaces 2.8 Methods, Defining Methods, Argument Passing Mechanism, Method Overloading, Recursion, Dealing with Static Members, Finalize () Method, Native Method. 2.9 Use of "this "reference, 2.10 Design of Accessors and Mutator Methods 2.11 Cloning Objects, shallow and deep cloning 2.12 Generic Class Types.</p> <p>Extra Reading : OCA Java Programmer :I Exam Kathy Sierra</p>	8	3
3	<p>3. Extending Classes and Inheritance</p> <p>3.1 Use and Benefits of Inheritance in OOP 3.2 Types of Inheritance in Java 3.3 Inheriting Data members and Methods 3.4 Role of Constructors in inheritance 3.5 Overriding Super Class Methods, Use of "super" 3.6 Polymorphism in inheritance 3.7 Type Compatibility and Conversion 3.8 Implementing interfaces</p> <p>Extra Reading: Understanding and practicing above concept in depth - OCA Java Programmer: I Exam Kathy Sierra</p>	6	3
4	<p>4. Package</p> <p>4.1 Organizing Classes and Interfaces in Packages 4.2 Package as Access Protection 4.3 Defining Package 4.4 CLASSPATH Setting for Packages 4.5 Making JAR Files for Library Packages 4.6 Import and Static Import 4.7 Naming Convention for Packages.</p> <p>Extra Reading: Oracle Java tutorial</p>	3	2
5	<p>5. Exception Handling</p>	6	3



	<p>5.1 The Idea behind Exception 5.2 Exceptions & Errors 5.3 Types of Exception 5.4 Control Flow in Exceptions 5.5 JVM reaction to Exceptions 5.6 Use of try, catch, finally, throw, throws in Exception Handling 5.7 In-built and User Defined Exceptions Checked and Un-Checked Exceptions</p> <p>Extra Reading: Oracle Java tutorial</p>		
6	<p>6. Array & String: 6.1 Defining an Array 6.2 Initializing & Accessing Array 6.3 Multi –Dimensional Array 6.4 Operation on String, Mutable & Immutable String 6.5 Using Collection Bases Loop for String, Tokenizing a String 6.6 Creating Strings using StringBuffer, String Builder</p> <p>Extra Reading : Java arrays, tokenizer applications– Jenkov Tutorials</p>	4	2
7	<p>7. Thread 7.1 Understanding Threads 7.2 Needs of Multi-Threaded Programming 7.3 Thread Life-Cycle 7.4 Thread Priorities 7.5 Synchronizing Threads 7.6 Inter Communication of Threads 7.7 Critical Factor in Thread –Deadlock</p> <p>Extra Reading : Animation Using Thread</p>	6	3
8	<p>8. A Collection of Useful Classes 8.1 Utility Methods for Arrays 8.2 Observable and Observer Objects, 8.3 Date & Times, 8.4 Using Scanner 8.5 Regular Expression, 8.6 Input/output Operation in Java (java.io Package) 8.7 Streams and the new I/O Capabilities 8.7.1 Understanding Streams 8.7.2 The Classes for Input and Output 8.7.3 The Standard Streams 8.8 Working with File Object 8.8.1 File I/O Basics, 8.8.2 Reading and Writing to Files</p>	6	3



	<p>8.8.3 Buffer and Buffer Management 8.8.4 Read/Write Operations with File Channel 8.9 Serializing Objects</p> <p>Extra Reading : regex – Pattern matching, split examples, reading and writing Character Stream, Byte stream and Objects in java files.</p>		
9.	<p>9. UI Programming 9.1 Designing Graphical User Interfaces in Java, 9.2 Components and Containers, 9.3 Basics of Components 9.4 Using Containers 9.5 Layout Managers, 9.6 AWT Components 9.7 Adding a Menu to Window 9.8 Extending GUI Features Using Swing Components</p> <p>Extra Reading : Using Swing toolkit GUI –oracle java tutorial</p>	12	5
10	<p>10. Event Handling 10.1 Event-Driven Programming in Java 10.2 Event- Handling Process 10.3 Event Handling Mechanism 10.4 The Delegation Model of Event Handling 10.5 Event Classes, Event Sources, Event Listeners 10.6 Adapter Classes as Helper Classes in Event Handling.</p> <p>Extra Reading : Hierarchy of Event Classes, Event Sources, Event Listeners- Oracle java docs</p>	10	4
11	<p>11. The Collection Framework 11.1 Introduction to Java Frameworks 11.2 Collections of Objects 11.3 Collection Types, Sets, Sequence, Map 11.4 Understanding Hashing 11.5 Use of ArrayList & Vector 11.6 Java Utilities (java.util Package)</p> <p>Extra Reading : searching, sorting, insertion, manipulation, deletion of data using Java Collections</p>	10	4
12	<p>12. Database Programming using JDBC 12.1 Introduction to JDBC 12.2 JDBC Drivers & Architecture 12.3 CURD operation Using JDBC 12.4 Connecting to non-conventional databases</p>	10	4



	Extra Reading: List of JDBC Drivers and Jars, Statement, Prepared Statement and Callable Statement.		
13	13. Java Server Technologies 13.1 Servlet Web Application Basics, 13.2 Architecture and challenges of Web Application 13.3 Introduction to servlet 13.4 Introduction to JSP 13.5 Servlet life cycle 13.6 Developing and Deploying Servlets, Exploring Deployment Descriptor (web.xml) 13.7 Handling Request and Response. Extra Reading : Session handling 4 methods, Request Dispatcher ,JSP Tags, JSP Implicit objects, Generic Servlet	16	7
Total:		100	45

Course References:

Recommended Books:

Text Books:

1. Java Complete Reference Schildt Herbert, TMH.
2. Java Fundamentals (SIE), Schildt Herbert, TMH
3. The Complete Reference JSP, Phil Hanna, TMH
4. JDBC, Servlet and JSP, Black Book, Santosh Kumar K. Dremtech publication

Reference Books:


1. Head First Servlets and JSP, 2nd Edition by Bert Bates, Bryan Basham, Kathy Sierra
2. OCJP Oracle Certified Programmer for Java Study Guide by Kathy Sierra and Bert Bates.
3. A Programmer's Guide to Java OCJP Certification (A Comprehensive Primer) by Khalid A. Mughal and Rolf W. Rasmussen.
4. Java Server Programming Java Ee&(J2EE 1.7), Black Book, Wiley publications

Recommended Learning Material:

1. www.javatpoint.com
2. www.oracle.com
3. www.tutorialspoint.com
4. www.geeksforgeeks.org/java

Recommended Certification:

1. OCA- Oracle Certified Associate
2. OCP- Oracle Certified Professional


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TEACHING PLAN

CLASS MCA I SEMESTER I
SUBJECT & CODE JAVA PROGRAMMING-IT 11 TEACHER RAKESH R. KULKARNI

Objective: To familiarize students with the concepts of OOPs, To enable the students to understand the core principles of the Java Language and use, AWT tools to produce well designed, effective applications, Students will be able to develop server-side applications with database handling using servlets, JSP, JDBC

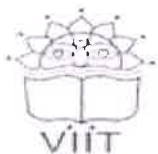
S. No.	CHAPTER	TOPICS	TEACHING METHODOLOGY	NO. OF SESSIONS
1	Introduction	1.1 About Java 1.2 Flavours of Java 1.3 Java Installation 1.4 Java Program Development Environment	Chalk, Board, Presentation, Case studies, Practical	2
2	Object Oriented Programming	2.1 Class Fundamentals 2.2 Object & Object reference 2.3 Object Life time & Garbage Collection 2.4 Creating and Operating Objects 2.5 Constructor & initialization code block 2.6 Access Control, Modifiers, Use of Modifiers with Classes & Methods. 2.7 Nested, Inner Class & Anonymous Classes, Abstract Class & Interfaces 2.8 Methods, Defining Methods, Argument Passing Mechanism, Method Overloading, Recursion, Dealing with Static Members, Finalize () Method, Native Method. 2.9 Use of "this" reference, 2.10 Design of Accessors and Mutator Methods 2.11 Cloning Objects shallow and deep	Chalk, Board, Presentation, Case studies, Practical	3





		cloning 2.12 Generic Class Types.		
3	Extending Classes and Inheritance	3.1 Use and Benefits of Inheritance in OOP 3.2 Types of Inheritance in Java 3.3 Inheriting Data members and Methods 3.4 Role of Constructors in inheritance 3.5 Overriding Super Class Methods, Use of "super" 3.6 Polymorphism in inheritance 3.7 Type Compatibility and Conversion 3.8 Implementing interfaces	Chalk, Board, Presentation, Case studies, Practical	3
4	Package	4.1 Organizing Classes and Interfaces in Packages 4.2 Package as Access Protection 4.3 Defining Package 4.4 CLASSPATH Setting for Packages 4.5 Making JAR Files for Library Packages 4.6 Import and Static Import 4.7 Naming Convention for Packages.	Chalk, Board, Presentation, Case studies, Practical	2
5	Exception Handling	5.1 The Idea behind Exception 5.2 Exceptions & Errors 5.3 Types of Exception 5.4 Control Flow in Exceptions 5.5 JVM reaction to Exceptions 5.6 Use of try, catch, finally, throw, throws in Exception Handling 5.7 In-built and User Defined Exceptions Checked and Un-Checked Exceptions	Chalk, Board, Presentation, Case studies, Practical	3





6	Array & String:	6.1 Defining an Array 6.2 Initializing & Accessing Array 6.3 Multi –Dimensional Array 6.4 Operation on String, Mutable & Immutable String 6.5 Using Collection Bases Loop for String, Tokenizing a String 6.6 Creating Strings using StringBuffer, String Builder	Chalk, Board, Presentation, Case studies, Practical	3
7	Thread	7.1 Understanding Threads 7.2 Needs of Multi-Threaded Programming 7.3 Thread Life-Cycle 7.4 Thread Priorities 7.5 Synchronizing Threads 7.6 Inter Communication of Threads 7.7 Critical Factor in Thread –Deadlock	Chalk, Board, Presentation, Case studies, Practical	3
8	A Collection of Useful Classes	8.1 Utility Methods for Arrays 8.2 Observable and Observer Objects, 8.3 Date & Times, 8.4 Using Scanner 8.5 Regular Expression, 8.6 Input/output Operation in Java (java.io Package) 8.7 Streams and the new I/O Capabilities 8.7.1 Understanding Streams 8.7.2 The Classes for Input and Output 8.7.3 The Standard Streams 8.8 Working with File Object 8.8.1 File I/O Basics, 8.8.2 Reading and Writing to Files 8.8.3 Buffer and Buffer Management 8.8.4 Read/Write Operations with File Channel 8.9 Serializing Objects	Chalk, Board, Presentation, Case studies, Practical	3





9	UI Programming	9.1 Designing Graphical User Interfaces in Java, 9.2 Components and Containers, 9.3 Basics of Components 9.4 Using Containers 9.5 Layout Managers, 9.6 AWT Components 9.7 Adding a Menu to Window 9.8 Extending GUI Features Using Swing Components	Chalk, Board, Presentation, Case studies, Practical	5
10	Event Handling	10.1 Event-Driven Programming in Java 10.2 Event- Handling Process 10.3 Event Handling Mechanism 10.4 The Delegation Model of Event Handling 10.5 Event Classes, Event Sources, Event Listeners 10.6 Adapter Classes as Helper Classes in Event Handling.	Chalk, Board, Presentation, Case studies, Practical	4
11	The Collection Framework	11.1 Introduction to Java Frameworks 11.2 Collections of Objects 11.3 Collection Types, Sets, Sequence, Map 11.4 Understanding Hashing 11.5 Use of ArrayList & Vector 11.6 Java Utilities (java.util Package)	Chalk, Board, Presentation, Case studies, Practical	4
12	Database Programming using JDBC	12.1 Introduction to JDBC 12.2 JDBC Drivers & Architecture 12.3 CRUD operation Using JDBC 12.4 Connecting to non-conventional databases	Chalk, Board, Presentation, Case studies, Practical	4





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13	Java Server Technologies	13.1 Servlet Web Application Basics, 13.2 Architecture and challenges of Web Application 13.3 Introduction to servlet 13.4 Introduction to JSP 13.5 Servlet life cycle 13.6 Developing and Deploying Servlets, Exploring Deployment Descriptor (web.xml) 13.7 Handling Request and Response.	Chalk, Board, Presentation, Case studies, Practical	7
Reference Books: 1. Head First Servlets and JSP, 2nd Edition by Bert Bates, Bryan Basham, Kathy Sierra 2. OCJP Oracle Certified Programmer for Java Study Guide by Kathy Sierra and Bert Bates. 3. A Programmer's Guide to Java OCJP Certification (A Comprehensive Primer) by Khalid A. Mughal and Rolf W. Rasmussen. 4. Java Server Programming Java Ee&(J2EE 1.7), Black Book, Wiley publications			Int. Marks Breakup (out of 25): 5 Marks : Attendance 5 Marks : Assignments 5 Marks : Unit Test 5 Marks : Prelim 5 Marks : Seminar/GD/Oral/ Presentation	

Signature of Teacher



Signature of HOD

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Vidyanagari, Baramati Dist-Pune



ACADEMIC YEAR 2023- 2024

Course Code: IT-11

Course Name: Java Programming

MCA Program Outcomes (PO's)

MCA Programme Outcomes (POs): At the end of the MCA programme the learner will possess the following Program Outcome:

PO1	Apply knowledge of computing fundamentals, computing specialization, mathematics, and domain knowledge appropriate for the computing specialization to the abstraction and conceptualization of computing models from defined problems and requirements.
PO2	Identify, formulate, research literature, and solve complex Computing problems reaching substantiated conclusions using fundamental principles of Mathematics, Computing sciences, and relevant domain disciplines.
PO3	Design and evaluate solutions for complex computing problems, and design and evaluate systems, components, or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations.
PO4	Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of information to provide valid conclusions.
PO5	Create, select, adapt and apply appropriate techniques, resources, and modern computing tools to complex computing activities, with an understanding of the limitations.
PO6	Understand and commit to professional ethics and cyber regulations, responsibilities, and norms of professional computing practice.
PO7	Recognize the need, and have the ability, to engage in independent learning for continual development as a Computing professional.
PO8	Demonstrate knowledge and understanding of computing and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
PO9	Communicate effectively with the computing community, and with society at large, about complex computing activities by being able to comprehend and write effective reports, design documentation, make effective presentations, and give and understand clear instructions.
PO10	Understand and assess societal, environmental, health, safety, legal, and cultural issues within local and global contexts, and the consequential responsibilities relevant to professional computing practice.
PO 11	Function effectively as an individual and as a member or leader in diverse teams and in multidisciplinary environments.
PO 12	Identify a timely opportunity and using innovation to pursue that opportunity to create value and wealth for the betterment of the individual and society at large.





Course Code: IT-11 Course Name: Java Programming Course Objectives	
1	To familiarize students with the concepts of OOPs.
2	To enable the students to understand the core principles of the Java Language and use AWT tools to produce well designed, effective applications.
3	Students will be able to develop server-side applications with database handling using servlets, JSP, JDBC

Course Code: IT-11 Course Name: Java Programming Course Outcomes	
CO 1	Understand Basic Concepts of OOPs, Java, Inheritance, Package. (Understand)
CO 2	Understand Exception handling, arrays and Strings and multi-threading in Java (Understand.)
CO 3	Understand collection framework (Understand)
CO 4	Develop GUI using Abstract Windows Toolkit (AWT) and event handling (Apply)
CO 5	Develop Web application using JSP and Servlet, JDBC (Apply)

Course Code: IT-11 Course Name: Java Programming Co-relation Matrix												
Program Outcomes (PO)	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12
Course Outcome (CO)												
CO 1	3	1	-	-	1	-	1	2	1	-	-	-
CO 2	3	3	-	-	1	-	1	2	1	-	-	-
CO 3	3	3	-	-	1	-	1	2	1	-	-	-
CO 4	3	1	2	1	3	2	1	3	3	2	1	2
CO 5	3	1	2	1	3	2	1	3	3	2	1	2

H: High (3), M: Medium (2) and L: Low (1)

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MCA Batch 2023-25

MCA-I, SEM-I

Subject - Java Programming

Faculty Name - Mr. Rakesh Kulkarni

Internal Evaluation Marks- Nov. 2024

Roll No	Name of Student	Evaluation Parameter					Out of 50 Marks
		CO 1	CO2	CO3	CO4	CO5	
1	Acharya Rupesh Rajendra						
2	Anpat Aniket Rajendra	2	5	2	0	0	9
3	Anpat Tejas Rajendra	6	3	0	5	8	22
4	Babar Prerana Sunil	4	0	0	3	1	8
5	Balip Arpita Narayan	0	3	3	2	1	9
6	Bhapkar Kajal Bharat	5	3	0	2	6	16
7	Bhapkar Shamal Pandurang	2	5	6	4	4	21
8	Bhong Dhanika Devidas	1	1	2	4	4	12
9	Bhosale Radhika sandip	1	2	2	3	1	9
10	Bhujbal Divya Satish	0	0	0	0	0	0
11	Bichakule Rohit Sanjay	8	3	6	1	4	22
12	Dalvi Ritesh Rakesh	6	4	5	4	0	19
13	Danke Shaunak Milind	6	6	2	5	3	22
14	Darekar Pranali Pandurang	5	4	6	4	3	22
15	Dhumal Vitthal Tanaji	1	2	0	1	0	4
16	Gadave Gaytri Dattatray	0	0	0	0	0	0
17	Gaikwad Namita Vilas	2	3	2	0	3	10
		4	4		6	7	23



Roll No	Name of Student	Evaluation Parameter					Out of 50 Marks
		CO 1	CO2	CO3	CO4	CO5	
18	Gaikwad Yogita Hanumant	3	1	0	0	0	4
19	Gandhi Siddhi Jinendra	1	4	6	0	3	14
20	Gawade Sakshi Sukumar	2	2	2	2	2	10
21	Ghorapade Vrushali Hindurav	4	3	4	0	6	17
22	Girme Sayali Rajendra	2	1	3	0	2	8
23	Hol Gaurav Ananta	8	7	7	0	4	26
24	Jadhav Akanksha Shrirang	1	1	1	0	1	4
25	Jadhav Pritam Digambar	2	2	4	2	2	12
26	Jadhav Shruti Deepak	6	1	0	3	6	16
27	Jadhav Soham Chandrakant	1	0	0	0	0	1
28	Jagtap Sarita Prashant	2	1	1	1	5	10
29	Jagtap Snehal Yuvraj	1	3	2	1	0	7
30	Jarad Dhanshree Arvind	1	2	2	1	3	9
31	Jawale Anushka Suresh	0	2	0	0	1	3
32	Kadave Sonam Sunil	0	0	0	0	1	1
33	Kale Vaishnavi Padmakar	1	0	2	1	3	7
34	Kapase Swannali Anil	6	4	5	4	4	23
35	Kashid Kajal Laxman	3	0	0	0	0	3
36	Kolhe Reshu Anil	6	0	0	0	0	6
37	Kudale Pratik Dhananjay	0	1	2	1	0	4
38	Late Shubham Vilas	1	2	2	0	0	5
39	Lokhande Vijay Hanumant	AB	AB	AB	AB	AB	AB
40	Mahamuni Pratik Dipak	0	0	1	0	0	1
41	Mane Aishwarya Shrimant	0	0	1	0	3	4
42	Mane Pranita Jalindhar	1	0	3	3	1	8
43	Meshram Sumit Suresh	2	0	0	0	0	2
44	Mohite Rushikesh Annasaheb	3	3	1	0	2	9
45	More Pranjali Namdev	1	0	0	1	1	3




(Handwritten signature)

Roll No	Name of Student	Evaluation Parameter					Out of 50 Marks
		CO 1	CO2	CO3	CO4	CO5	
46	Parida Meghna Dibakar						
47	Parkale Saurabh Vitthal	AB	AB	AB	AB	AB	AB
48	Patole Sohil Sanjay	3	0	1	2	3	9
49	Pawar Akshay Nitin	2	0	0	0	2	4
50	Pawar Shrikant Ramesh	6	3	5	2	0	16
51	Phadatare Sahil Balkrishna	AB	AB	AB	AB	AB	AB
52	Ranjane Pramod Dattatray	2	2	2	2	2	10
53	Salunke Pratik Ravindra	2	0	1	2	0	5
54	Salunkhe Akshaya Ramesh	2	5	2	0	5	14
55	Sapkal Sayali Vijay	2	2	3	1	1	9
56	Shahane Saurabh Sanjay	3	3	4	2	3	15
57	Shaikh Mohseena Shabbir	2	4	4	2	2	14
58	Shelke Shreyas Hemant	2	1	3	6	5	17
59	Shikilkar Dinaj Najirahmad	2	3	2	0	0	7
60	Shinde Prathmesh Mangesh	1	0	2	0	1	4
61	Sonawane Ritesh Vilas	1	0	0	0	0	1
62	Taware Sayali Santosh	6	6	4	4	0	20
63	Thorat Vaishnavi Kiran	2	1	3	3	4	13
64	Tijare Neha Pundlik	1	1	0	0	2	4
65	Ugale Mahesh Ramdas	8	0	0	2	6	16
66	Vanarase Atharva Sandip	0	0	0	0	0	0
67	Vyas Aboli Satish	2	3	0	2	4	11
68	Wable Aniket Sampat	8	2	2	3	5	20
69	Yadav Mansi Umesh	3	6	6	0	4	19
Average		3	1	2	0	0	6
		2.64	1.98	2.02	1.47	2.18	


(Handwritten Signature)



Roll No	Name of Student	Evaluation Parameter					Out of 50 Marks
		CO 1	CO2	CO3	CO4	CO5	
		24 out of 69 students	35 out of 69 students	20 out of 69 students	31 out of 69 students	28 out of 69 students	
	Percentage of students above average	36	53.0	30	45	40.58	
Attainment Level 3	Percentage of Students above Average > 77						
Attainment Level 2	Percentage of Students above Average > 50		2				
Attainment Level 1	Percentage of Students above Average > 40	1		1	1	1	


 M. Rakesh Kulkarni




Director
 Vidya Pratishthan's
 Institute of Distance Education
 Baramati, Maharashtra



Vidya Pratishthan's Institute of Informa... Technology, Baramati

Attendance Sheet - MCA : I / II, Semester I / II / III / IV

Subject : JAVASCRIPT Programming Theory/LAB

Faculty : MR. RUPESH KULKARNI

Table with columns: Roll No., Date, Name of the Student, and 20 columns for dates from 9/10 to 23/10. Rows list students like Acharya Rupesh Rajendra, Anpat Aniket Rajendra, etc., with attendance marks (X) and handwritten names.





Vidya Pratishthan's Institute of Inform. Technology, Baramati

Attendance Sheet - MCA : I / II , Semester I / II / III / IV

Subject :

Theory/LAB

Faculty :

Roll. No.	Date																					Total
	Name of the Student	21/08	21/08	23/08	23/08	24/08	24/08	24/08	25/08	26/08	28/08	29/08	1/09	5/09	6/09	6/09	11/09	12/09	13/09	12/10	25/10	
28	Jagtap Sarita Prashant	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	X	Jagtap	X	X	Jagtap	X	Jagtap	Jagtap	16
29	Jagtap Snehal Yuvraj	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	19
30	Jarad Dhanshree Arvind	X	X	Edel	Edel	Edel	Edel	Edel	Edel	Edel	Edel	Edel	Edel	Edel	Edel	Edel	Edel	Edel	Edel	Edel	Edel	18
31	Jawale Anushka Suresh	X	X	A.Farale	A.Farale	A.Farale	A.Farale	A.Farale	A.Farale	A.Farale	A.Farale	A.Farale	A.Farale	X	A.Farale	A.Farale	A.Farale	X	A.Farale	A.Farale	A.Farale	16
32	Kadave Sonam Sunil	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	10
33	Kale Vaishnavi Padmakar	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	05
34	Kapase Swapnali Anil	X	X	X	X	S.A.Kap	S.A.Kap	S.A.Kap	S.A.Kap	S.A.Kap	S.A.Kap	S.A.Kap	S.A.Kap	X	S.A.Kap	S.A.Kap	X	S.A.Kap	S.A.Kap	S.A.Kap	S.A.Kap	14
35	Kashid Kajal Laxman	X	X	X	X	Kajal	Kajal	Kajal	Kajal	Kajal	Kajal	Kajal	Kajal	X	Kajal	Kajal	Kajal	Kajal	Kajal	Kajal	Kajal	13
36	Kolhe Reshu Anil	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	09
37	Kudale Pratik Dhananjay	X	X	Pratik	Pratik	X	X	X	Pratik	X	Pratik	Pratik	Pratik	Pratik	Pratik	Pratik	Pratik	Pratik	Pratik	Pratik	Pratik	07
38	Late Shubham Vilas	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	17
39	Lokhande Vijay Hanumant	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	00
40	Mahamuni Pratik Dipak	X	X	X	X	Pratik	Pratik	Pratik	Pratik	Pratik	Pratik	Pratik	Pratik	X	Pratik	Pratik	X	Pratik	Pratik	Pratik	Pratik	10
41	Mane Aishwarya Shrimant	X	X	X	X	X	X	X	X	X	X	X	X	A.Smane	A.Smane	A.Smane	A.Smane	A.Smane	A.Smane	A.Smane	A.Smane	06
42	Mane Pranita Jalindhar	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	09
43	Meshram Sumit Suresh	X	X	Sumit	Sumit	Sumit	Sumit	Sumit	Sumit	Sumit	Sumit	Sumit	Sumit	Sumit	Sumit	Sumit	Sumit	Sumit	Sumit	Sumit	Sumit	18
44	Mohite Rushikesh Annasaheb	X	X	Rushikesh	Rushikesh	Rushikesh	Rushikesh	Rushikesh	Rushikesh	Rushikesh	Rushikesh	Rushikesh	Rushikesh	Rushikesh	Rushikesh	Rushikesh	Rushikesh	Rushikesh	Rushikesh	Rushikesh	Rushikesh	18
45	More Pranjali Namdev	Pranjali	Pranjali	Pranjali	Pranjali	Pranjali	Pranjali	Pranjali	Pranjali	Pranjali	Pranjali	Pranjali	Pranjali	Pranjali	Pranjali	Pranjali	Pranjali	Pranjali	Pranjali	Pranjali	Pranjali	19
46	Parida Meghna Dibakar	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	01
47	Parkale Saurabh Vitthal	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	05
48	Patole Sohil Sanjay	Patole	Patole	Patole	Patole	Patole	Patole	Patole	Patole	Patole	Patole	Patole	Patole	Patole	Patole	Patole	Patole	Patole	Patole	Patole	Patole	17
49	Pawar Akshay Nitin	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	17
50	Pawar Shrikant Ramesh	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	17
51	Phadatare Sahil Balkrishna	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	17
52	Ranjane Pramod Dattatray	Ranjane	Ranjane	Ranjane	Ranjane	Ranjane	Ranjane	Ranjane	Ranjane	Ranjane	Ranjane	Ranjane	Ranjane	Ranjane	Ranjane	Ranjane	Ranjane	Ranjane	Ranjane	Ranjane	Ranjane	17
53	Salunke Pratik Ravindra	PRSal	PRSal	PRSal	PRSal	PRSal	PRSal	PRSal	PRSal	PRSal	PRSal	PRSal	PRSal	PRSal	PRSal	PRSal	PRSal	PRSal	PRSal	PRSal	PRSal	20
54	Salunke Akshaya Ramesh	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	03





Vidya Pratishthan's Institute of Information Technology, Baramati

Attendance Sheet - MCA : I / II , Semester I / II / III / IV

Subject :

Theory/LAB

Faculty :

Roll. No.	Date																					Total
	Name of the Student	21/08	21/08	23/08	23/08	24/08	24/08	24/08	25/08	26/08	28/08	29/08	1/09	5/09	6/09	11/09	12/09	15/09	12/09	25/09		
55	Sapkal Sayali Vijay	X	Y	Sapkal	Sapkal	Sapkal	Sapkal	Sapkal	Sapkal	Sapkal	Sapkal	Sapkal	X	Sapkal	Sapkal	X	Sapkal	Sapkal	Sapkal	Sapkal	Sapkal	16
56	Shahane Saurabh Sanjay	Shahane	Shahane	Shahane	Shahane	Shahane	Shahane	Shahane	Shahane	X	Shahane	Shahane	Shahane	Shahane	Shahane	Shahane	Shahane	Shahane	Shahane	Shahane	Shahane	19
57	Shaikh Mohseena Shabbir	X	X	X	X	Shaikh	Shaikh	Shaikh	Shaikh	Shaikh	Shaikh	Shaikh	Shaikh	Shaikh	X	Shaikh	Shaikh	Shaikh	Shaikh	Shaikh	Shaikh	18
58	Shelke Shreyas Hemant	X	X	X	X	Shelke	Shelke	Shelke	Shelke	Shelke	Shelke	Shelke	Shelke	Shelke	Shelke	X	Shelke	Shelke	Shelke	Shelke	Shelke	14
59	Shikilkar Dinaj Najirahmad	Shikilkar	Shikilkar	Shikilkar	Shikilkar	Shikilkar	Shikilkar	Shikilkar	Shikilkar	X	Shikilkar	Shikilkar	Shikilkar	Shikilkar	X	Shikilkar	Shikilkar	Shikilkar	Shikilkar	Shikilkar	Shikilkar	18
60	Shinde Prathmesh Mangesh	X	X	X	X	X	X	Shinde	Shinde	Shinde	Shinde	Shinde	Shinde	Shinde	Shinde	Shinde	Shinde	Shinde	Shinde	Shinde	X	12
61	Sonawane Ritesh Vilas	X	X	X	X	X	X	Sonawane	Sonawane	Sonawane	Sonawane	Sonawane	Sonawane	Sonawane	Sonawane	Sonawane	Sonawane	Sonawane	Sonawane	Sonawane	Sonawane	12
62	Taware Sayali Santosh	X	X	X	X	X	X	X	X	X	X	X	X	X	Taware	X	X	X	X	X	X	01
63	Thorat Vaishnavi Kiran	X	X	X	X	Thorat	Thorat	Thorat	Thorat	Thorat	Thorat	Thorat	Thorat	Thorat	Thorat	Thorat	Thorat	Thorat	Thorat	Thorat	Thorat	14
64	Tijare Neha Pundlik	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Tijare	Tijare	Tijare	Tijare	01
65	Ugale Mahesh Ramdas	X	X	Ugale	Ugale	Ugale	Ugale	Ugale	X	Ugale	Ugale	Ugale	Ugale	Ugale	Ugale	X	X	X	Ugale	Ugale	Ugale	12
66	Vanarase Atharva Sandip	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Vanarase	Vanarase	Vanarase	Vanarase	Vanarase	X	04
67	Vyas Aboli Satish	X	X	Vyas	Vyas	Vyas	Vyas	Vyas	X	Vyas	Vyas	Vyas	X	Vyas	Vyas	X	Vyas	Vyas	Vyas	Vyas	Vyas	08
68	Wable Aniket Sampat	Wable	X	Wable	Wable	Wable	Wable	Wable	X	Wable	Wable	Wable	Wable	Wable	Wable	X	Wable	Wable	Wable	Wable	Wable	17
69	Yadav Mansi Umesh	X	X	Yadav	Yadav	Yadav	Yadav	Yadav	Yadav	Yadav	Yadav	Yadav	Yadav	Yadav	Yadav	Yadav	Yadav	Yadav	Yadav	X	Yadav	17
Total		18	21	34	34	38	38	38	43	41	50	49	49	44	58	46	34	52	57	50	45	

Subject Teacher

Name: Rakesh Kulkarni



[Signature]
HOD

Dr. Mayank R. Kothawade

[Signature]
Director
Vidya Pratishthan's
Institute of Information Technology
Vidyanagari, Baramati Dist-Pune



Vidya Pratishthan's Institute of Information Technology, Baramati

Attendance Sheet - MCA : I / II , Semester I / II / III / IV

Subject : Java Programming

Theory/LAB

Faculty :

Roll No.	Date	20/5	21/5	22/5	23/5	24/5	25/5	26/5	27/5	28/5	29/5	30/5	31/5	1/6	2/6	3/6	4/6	5/6	6/6	Total
		24/5	25/5	26/5	27/5	28/5	29/5	30/5	31/5	1/6	2/6	3/6	4/6	5/6	6/6	7/6	8/6	9/6	10/6	
1	Acharya Rupesh Rajendra	Rupesh	Rupesh	Rupesh	Rupesh	Rupesh	Rupesh	Rupesh	Rupesh	Rupesh	Rupesh	Rupesh	Rupesh	Rupesh	Rupesh	Rupesh	Rupesh	Rupesh	Rupesh	11
2	Anpat Aniket Rajendra	Anpat	Anpat	Anpat	Anpat	Anpat	Anpat	Anpat	Anpat	Anpat	Anpat	Anpat	Anpat	Anpat	Anpat	Anpat	Anpat	Anpat	Anpat	13
3	Anpat Tejas Rajendra	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	03
4	Babar Prerana Sunil	Babar	Babar	Babar	Babar	Babar	Babar	Babar	Babar	Babar	Babar	Babar	Babar	Babar	Babar	Babar	Babar	Babar	Babar	11
5	Balip Arpita Narayan	Balip	Balip	Balip	Balip	Balip	Balip	Balip	Balip	Balip	Balip	Balip	Balip	Balip	Balip	Balip	Balip	Balip	Balip	17
6	Bhapkar Kajal Bharat	Bhapkar	Bhapkar	Bhapkar	Bhapkar	Bhapkar	Bhapkar	Bhapkar	Bhapkar	Bhapkar	Bhapkar	Bhapkar	Bhapkar	Bhapkar	Bhapkar	Bhapkar	Bhapkar	Bhapkar	Bhapkar	16
7	Bhapkar Shamal Pandurang	Bhapkar	Bhapkar	Bhapkar	Bhapkar	Bhapkar	Bhapkar	Bhapkar	Bhapkar	Bhapkar	Bhapkar	Bhapkar	Bhapkar	Bhapkar	Bhapkar	Bhapkar	Bhapkar	Bhapkar	Bhapkar	11
8	Bhong Dhanika Devidas	X	Bhong	Bhong	Bhong	Bhong	Bhong	Bhong	Bhong	Bhong	Bhong	Bhong	Bhong	Bhong	Bhong	Bhong	Bhong	Bhong	Bhong	11
9	Bhosale Radhika sandip	Radhika	X	X	X	Radhika	X	Radhika	X	X	X	X	Radhika	X	X	Radhika	Radhika	Radhika	Radhika	06
10	Bhujbal Divya Satish	Bhujbal	Bhujbal	Bhujbal	Bhujbal	Bhujbal	Bhujbal	Bhujbal	Bhujbal	Bhujbal	Bhujbal	Bhujbal	Bhujbal	Bhujbal	Bhujbal	Bhujbal	Bhujbal	Bhujbal	Bhujbal	15
11	Bichakule Rohit Sanjay	Rohit	Rohit	Rohit	Rohit	Rohit	Rohit	X	X	X	X	X	X	X	X	X	X	X	X	06
12	Dalvi Ritesh Rakesh	Ritesh	Ritesh	Ritesh	Ritesh	X	Ritesh	Ritesh	Ritesh	Ritesh	Ritesh	Ritesh	Ritesh	X	X	X	Ritesh	Ritesh	Ritesh	13
13	Danke Shaunak Milind	Shaunak	Shaunak	Shaunak	Shaunak	Shaunak	Shaunak	X	Shaunak	Shaunak	Shaunak	Shaunak	Shaunak	Shaunak	Shaunak	Shaunak	Shaunak	Shaunak	Shaunak	16
14	Darekar Pranali Pandurang	Pranali	Pranali	Pranali	Pranali	X	Pranali	Pranali	Pranali	Pranali	Pranali	Pranali	Pranali	Pranali	Pranali	Pranali	Pranali	Pranali	Pranali	15
15	Dhumal Vitthal Tanaji	X	Vitthal	Vitthal	Vitthal	Vitthal	X	X	X	X	X	X	X	X	X	X	X	X	X	05
16	Gadave Gaytri Dattatray	X	Gadave	Gadave	Gadave	Gadave	Gadave	Gadave	Gadave	Gadave	Gadave	Gadave	Gadave	X	X	X	X	X	X	11
17	Gaikwad Namita Vilas	Namita	X	Namita	Namita	Namita	Namita	Namita	Namita	Namita	Namita	Namita	Namita	Namita	Namita	Namita	Namita	Namita	Namita	12
18	Gaikwad Yogita Hanumant	Yogita	Yogita	Yogita	Yogita	Yogita	Yogita	Yogita	Yogita	Yogita	Yogita	Yogita	Yogita	Yogita	Yogita	Yogita	Yogita	Yogita	Yogita	17
19	Gandhi Siddhi Jinendra	X	Siddhi	Siddhi	X	Siddhi	Siddhi	Siddhi	Siddhi	Siddhi	Siddhi	Siddhi	X	X	X	Siddhi	Siddhi	Siddhi	Siddhi	11
20	Gawade Sakshi Sukumar	Sakshi	Sakshi	Sakshi	Sakshi	Sakshi	Sakshi	Sakshi	Sakshi	Sakshi	Sakshi	Sakshi	Sakshi	Sakshi	Sakshi	Sakshi	Sakshi	Sakshi	Sakshi	17
21	Ghorapade Vrushali Hindurav	Vrushali	Vrushali	Vrushali	Vrushali	Vrushali	Vrushali	Vrushali	Vrushali	Vrushali	Vrushali	Vrushali	Vrushali	Vrushali	Vrushali	Vrushali	Vrushali	Vrushali	Vrushali	15
22	Girme Sayali Rajendra	Sayali	Sayali	Sayali	Sayali	Sayali	Sayali	Sayali	Sayali	Sayali	Sayali	Sayali	Sayali	Sayali	Sayali	Sayali	Sayali	Sayali	Sayali	17
23	Hol Gaurav Ananta	Gaurav	X	X	X	X	X	X	X	Gaurav	Gaurav	Gaurav	X	X	X	X	X	X	X	04
24	Jadhav Akanksha Shirrang	Akanksha	Akanksha	Akanksha	Akanksha	Akanksha	Akanksha	Akanksha	Akanksha	Akanksha	Akanksha	Akanksha	Akanksha	Akanksha	Akanksha	Akanksha	Akanksha	Akanksha	Akanksha	17
25	Jadhav Pritam Digambar	Pritam	Pritam	Pritam	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	08
26	Jadhav Shruti Deepak	Shruti	Shruti	Shruti	Shruti	Shruti	Shruti	Shruti	Shruti	Shruti	Shruti	Shruti	Shruti	Shruti	Shruti	Shruti	Shruti	Shruti	Shruti	15
27	Jadhav Soham Chandrakant	Soham	Soham	X	Soham	Soham	Soham	X	X	X	X	X	X	X	X	X	X	X	X	05





Vidya Pratishthan's Institute of Information Technology, Baramati

Attendance Sheet - MCA : I / II, Semester I / II / III / IV

Subject :

Theory/LAB

Faculty :

Roll. No.	Date	Name of the Student	26/9	27/9	28/9	29/9	30/9	01/10	02/10	03/10	04/10	05/10	06/10	07/10	08/10	09/10	10/10	11/10	12/10	13/10	14/10	15/10	16/10	17/10	18/10	19/10	20/10	21/10	22/10	23/10	24/10	25/10	26/10	27/10	28/10	29/10	30/10	Total		
28		Jagtap Sarita Prashant	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	17		
29		Jagtap Snehal Yuvraj	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	17	
30		Jarad Dhanshree Arvind	Jarad	Jarad	Jarad	Jarad	Jarad	Jarad	Jarad	Jarad	Jarad	Jarad	Jarad	Jarad	Jarad	Jarad	Jarad	Jarad	Jarad	Jarad	Jarad	Jarad	Jarad	Jarad	Jarad	Jarad	Jarad	Jarad	Jarad	Jarad	Jarad	Jarad	Jarad	Jarad	Jarad	Jarad	Jarad	Jarad	17	
31		Jawale Anushka Suresh	Jawale	Jawale	Jawale	Jawale	Jawale	Jawale	Jawale	Jawale	Jawale	Jawale	Jawale	Jawale	Jawale	Jawale	Jawale	Jawale	Jawale	Jawale	Jawale	Jawale	Jawale	Jawale	Jawale	Jawale	Jawale	Jawale	Jawale	Jawale	Jawale	Jawale	Jawale	Jawale	Jawale	Jawale	Jawale	Jawale	16	
32		Kadave Sonam Sunil	Kadave	Kadave	Kadave	Kadave	Kadave	Kadave	Kadave	Kadave	Kadave	Kadave	Kadave	Kadave	Kadave	Kadave	Kadave	Kadave	Kadave	Kadave	Kadave	Kadave	Kadave	Kadave	Kadave	Kadave	Kadave	Kadave	Kadave	Kadave	Kadave	Kadave	Kadave	Kadave	Kadave	Kadave	Kadave	Kadave	17	
33		Kale Vaishnavi Padmakar	Kale	Kale	Kale	Kale	Kale	Kale	Kale	Kale	Kale	Kale	Kale	Kale	Kale	Kale	Kale	Kale	Kale	Kale	Kale	Kale	Kale	Kale	Kale	Kale	Kale	Kale	Kale	Kale	Kale	Kale	Kale	Kale	Kale	Kale	Kale	Kale	17	
34		Kapase Swapnali Anil	Kapase	Kapase	Kapase	Kapase	Kapase	Kapase	Kapase	Kapase	Kapase	Kapase	Kapase	Kapase	Kapase	Kapase	Kapase	Kapase	Kapase	Kapase	Kapase	Kapase	Kapase	Kapase	Kapase	Kapase	Kapase	Kapase	Kapase	Kapase	Kapase	Kapase	Kapase	Kapase	Kapase	Kapase	Kapase	Kapase	11	
35		Kashid Kajal Laxman	Kajal	Kajal	Kajal	Kajal	Kajal	Kajal	Kajal	Kajal	Kajal	Kajal	Kajal	Kajal	Kajal	Kajal	Kajal	Kajal	Kajal	Kajal	Kajal	Kajal	Kajal	Kajal	Kajal	Kajal	Kajal	Kajal	Kajal	Kajal	Kajal	Kajal	Kajal	Kajal	Kajal	Kajal	Kajal	Kajal	11	
36		Kolhe Reshu Anil	Kolhe	Kolhe	Kolhe	Kolhe	Kolhe	Kolhe	Kolhe	Kolhe	Kolhe	Kolhe	Kolhe	Kolhe	Kolhe	Kolhe	Kolhe	Kolhe	Kolhe	Kolhe	Kolhe	Kolhe	Kolhe	Kolhe	Kolhe	Kolhe	Kolhe	Kolhe	Kolhe	Kolhe	Kolhe	Kolhe	Kolhe	Kolhe	Kolhe	Kolhe	Kolhe	Kolhe	13	
37		Kudale Pratik Dhananjay	Kudale	Kudale	Kudale	Kudale	Kudale	Kudale	Kudale	Kudale	Kudale	Kudale	Kudale	Kudale	Kudale	Kudale	Kudale	Kudale	Kudale	Kudale	Kudale	Kudale	Kudale	Kudale	Kudale	Kudale	Kudale	Kudale	Kudale	Kudale	Kudale	Kudale	Kudale	Kudale	Kudale	Kudale	Kudale	Kudale	Kudale	15
38		Late Shubham Vilas	Late	Late	Late	Late	Late	Late	Late	Late	Late	Late	Late	Late	Late	Late	Late	Late	Late	Late	Late	Late	Late	Late	Late	Late	Late	Late	Late	Late	Late	Late	Late	Late	Late	Late	Late	Late	07	
39		Lokhande Vijay Hanumant	Lokhande	Lokhande	Lokhande	Lokhande	Lokhande	Lokhande	Lokhande	Lokhande	Lokhande	Lokhande	Lokhande	Lokhande	Lokhande	Lokhande	Lokhande	Lokhande	Lokhande	Lokhande	Lokhande	Lokhande	Lokhande	Lokhande	Lokhande	Lokhande	Lokhande	Lokhande	Lokhande	Lokhande	Lokhande	Lokhande	Lokhande	Lokhande	Lokhande	Lokhande	Lokhande	Lokhande	Lokhande	09
40		Mahamuni Pratik Dipak	Mahamuni	Mahamuni	Mahamuni	Mahamuni	Mahamuni	Mahamuni	Mahamuni	Mahamuni	Mahamuni	Mahamuni	Mahamuni	Mahamuni	Mahamuni	Mahamuni	Mahamuni	Mahamuni	Mahamuni	Mahamuni	Mahamuni	Mahamuni	Mahamuni	Mahamuni	Mahamuni	Mahamuni	Mahamuni	Mahamuni	Mahamuni	Mahamuni	Mahamuni	Mahamuni	Mahamuni	Mahamuni	Mahamuni	Mahamuni	Mahamuni	Mahamuni	17	
41		Mane Aishwarya Shrimant	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	00
42		Mane Pranita Jalindhar	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	Mane	09
43		Mesram Sumit Suresh	Mesram	Mesram	Mesram	Mesram	Mesram	Mesram	Mesram	Mesram	Mesram	Mesram	Mesram	Mesram	Mesram	Mesram	Mesram	Mesram	Mesram	Mesram	Mesram	Mesram	Mesram	Mesram	Mesram	Mesram	Mesram	Mesram	Mesram	Mesram	Mesram	Mesram	Mesram	Mesram	Mesram	Mesram	Mesram	Mesram	Mesram	15
44		Mohite Rushikesh Annasaheb	Mohite	Mohite	Mohite	Mohite	Mohite	Mohite	Mohite	Mohite	Mohite	Mohite	Mohite	Mohite	Mohite	Mohite	Mohite	Mohite	Mohite	Mohite	Mohite	Mohite	Mohite	Mohite	Mohite	Mohite	Mohite	Mohite	Mohite	Mohite	Mohite	Mohite	Mohite	Mohite	Mohite	Mohite	Mohite	Mohite	07	
45		More Pranjali Namdev	More	More	More	More	More	More	More	More	More	More	More	More	More	More	More	More	More	More	More	More	More	More	More	More	More	More	More	More	More	More	More	More	More	More	More	More	17	
46		Parida Meghna Dibakar	Parida	Parida	Parida	Parida	Parida	Parida	Parida	Parida	Parida	Parida	Parida	Parida	Parida	Parida	Parida	Parida	Parida	Parida	Parida	Parida	Parida	Parida	Parida	Parida	Parida	Parida	Parida	Parida	Parida	Parida	Parida	Parida	Parida	Parida	Parida	Parida	Parida	06
47		Parkale Saurabh Vitthal	Parkale	Parkale	Parkale	Parkale	Parkale	Parkale	Parkale	Parkale	Parkale	Parkale	Parkale	Parkale	Parkale	Parkale	Parkale	Parkale	Parkale	Parkale	Parkale	Parkale	Parkale	Parkale	Parkale	Parkale	Parkale	Parkale	Parkale	Parkale	Parkale	Parkale	Parkale	Parkale	Parkale	Parkale	Parkale	Parkale	Parkale	14
48		Patole Sohil Sanjay	Patole	Patole	Patole	Patole	Patole	Patole	Patole	Patole	Patole	Patole	Patole	Patole	Patole	Patole	Patole	Patole	Patole	Patole	Patole	Patole	Patole	Patole	Patole	Patole	Patole	Patole	Patole	Patole	Patole	Patole	Patole	Patole	Patole	Patole	Patole	Patole	Patole	05
49		Pawar Akshay Nitin	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	07
50		Pawar Shrikant Ramesh	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	06
51		Phadatare Sahil Balkrishna	Phadatare	Phadatare	Phadatare	Phadatare	Phadatare	Phadatare	Phadatare	Phadatare	Phadatare	Phadatare	Phadatare	Phadatare	Phadatare	Phadatare	Phadatare	Phadatare	Phadatare	Phadatare	Phadatare	Phadatare	Phadatare	Phadatare	Phadatare	Phadatare	Phadatare	Phadatare	Phadatare	Phadatare	Phadatare	Phadatare	Phadatare	Phadatare	Phadatare	Phadatare	Phadatare	Phadatare	Phadatare	09
52		Ranjane Pramod Dattatray	Ranjane	Ranjane	Ranjane	Ranjane	Ranjane	Ranjane	Ranjane	Ranjane	Ranjane	Ranjane	Ranjane	Ranjane	Ranjane	Ranjane	Ranjane	Ranjane	Ranjane	Ranjane	Ranjane	Ranjane	Ranjane	Ranjane	Ranjane	Ranjane	Ranjane	Ranjane	Ranjane	Ranjane	Ranjane	Ranjane	Ranjane	Ranjane	Ranjane	Ranjane	Ranjane	Ranjane	Ranjane	17
53		Salunke Pratik Ravindra	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	11
54		Salunke Akshaya Ramesh	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	Salunke	11





Vidya Pratishthan's Institute of Information Technology, Baramati

Attendance Sheet - MCA : I / II, Semester I / II / III / IV

Subject :

Theory/LAB

Faculty :

Roll No.	Date																				Total
	Name of the Student	26/10	31/10	5/11	6/11	9/11	10/11	13/11	23/11	30/11	31/11	3/12	6/12	7/12	17/12	24/12	30/12	31/12			
55	Sapkal Sayali Vijay	Sapkal	Sapkal	Sapkal	Sapkal	Sapkal	Sapkal	Sapkal	Sapkal	Sapkal	Sapkal	Sapkal	Sapkal	Sapkal	Sapkal	Sapkal	Sapkal	Sapkal			17
56	Shahane Saurabh Sanjay	X	Shahane	Shahane	Shahane	Shahane	Shahane	Shahane	Shahane	Shahane	Shahane	X	X	X	X	X	Shahane	Shahane			11
57	Shaikh Mohseena Shabbir	Shaikh	Shaikh	Shaikh	Shaikh	Shaikh	Shaikh	Shaikh	Shaikh	Shaikh	Shaikh	Shaikh	Shaikh	Shaikh	Shaikh	Shaikh	Shaikh	Shaikh			17
58	Shelke Shreyas Hemant	Shelke	Shelke	Shelke	Shelke	Shelke	Shelke	Shelke	Shelke	Shelke	Shelke	Shelke	Shelke	Shelke	Shelke	Shelke	Shelke	Shelke			17
59	Shikilkar Dinaj Najirahmad	Shikilkar	Shikilkar	Shikilkar	Shikilkar	Shikilkar	Shikilkar	Shikilkar	Shikilkar	X	X	X	X	X	X	X	X	X			08
60	Shinde Prathmesh Mangesh	Shinde	Shinde	Shinde	Shinde	Shinde	Shinde	Shinde	Shinde	X	Shinde	Shinde	Shinde	Shinde	Shinde	Shinde	Shinde	Shinde			16
61	Sonawane Ritesh Vilas	Sonawane	Sonawane	Sonawane	Sonawane	Sonawane	Sonawane	X	X	X	X	X	X	X	X	X	X	X			06
62	Taware Sayali Santosh	Taware	Taware	Taware	Taware	Taware	Taware	Taware	Taware	Taware	Taware	Taware	Taware	Taware	Taware	Taware	Taware	Taware			13
63	Thorat Vaishnavi Kiran	Thorat	Thorat	Thorat	Thorat	Thorat	Thorat	Thorat	X	X	X	X	X	X	X	X	X	X			07
64	Tijare Neha Pundlik	Tijare	Tijare	Tijare	Tijare	X	Tijare	Tijare	Tijare	X	X	X	X	X	X	X	Tijare	Tijare			09
65	Ugale Mahesh Ramdas	Ugale	Ugale	Ugale	X	X	X	Ugale	X	X	X	X	X	X	X	X	X	X			09
66	Vanarase Atharva Sandip	Vanarase	Vanarase	Vanarase	X	X	X	X	X	X	X	X	X	X	X	X	X	X			03
67	Vyas Aboli Satish	Vyas	X	Vyas	Vyas	Vyas	Vyas	Vyas	Vyas	Vyas	Vyas	Vyas	Vyas	Vyas	Vyas	Vyas	Vyas	Vyas			12
68	Wable Aniket Sampat	Wable	Wable	Wable	Wable	Wable	Wable	X	X	X	X	X	X	X	X	X	X	X			06
69	Yadav Mansi Umesh	Yadav	Yadav	Yadav	Yadav	Yadav	Yadav	Yadav	X	X	Yadav	Yadav	Yadav	Yadav	Yadav	Yadav	Yadav	Yadav			15
Total		62	59	63	56	58	60	54	46	49	46	40	34	35	28	26	34	34			

Subject Teacher

Name: M. E. Rakesh Kulkarni



[Signature]

HOD

Dr. Mayank R. Kothawade

D. Deshmukh
Director
 Vidya Pratishthan's
 Institute of Information Technology
 Vidyanagari, Baramati Dist-Pune



LECTURE RECORD

CLASS MCA - I, II SEMESTER I, II, III, IV
SUBJECT Java Programming THEORY/LAB TEACHER Ms. Kulkarni Rakesh R

SR. No.	DATE	TOPICS COVERED	TIME		No. PRESENT	SIGNATURE		
			START	END		STUDENT	FACULTY	HOD
1	21/08/2023	Introduction to Java syllabus, course objectives & course outcomes.	9:00	10:00	18	Rupesh	Kulkarni	
2	21/08/2023	Discussion about pre-re knowledge of Java	12:30	1:30	21	Rupesh	Kulkarni	
3	23/08/2023	Unit 1 - About Java, Flavours of Java	9:00	10:00	34	J.P.	Kulkarni	
4	23/08/2023	Discussion about decision flows, loops.	12:30	1:30	34	Rupesh	Kulkarni	
5	24/08/2023	Java Installation process demonstrated	10:30	11:30	38	SMB	Kulkarni	
6	24/08/2023	} in lab.	11:30	12:30	38	Rupesh	Kulkarni	
7	24/08/2023	Simple program demonstration & explanation using eclipse.	12:30	1:30	38	Rupesh	Kulkarni	
8	25/08/2023	Java program development env.	9:00	10:00	43	Rupesh	Kulkarni	
9	26/08/2023	Unit 1 Revision.	10:30	11:30	41	Rupesh	Kulkarni	
10	28/08/2023	Unit 2 - class fundamentals, obj & object & obj. reference, obj. life time & garbage collection	10:30	11:30	50	Rupesh	Kulkarni	
11	29/08/2023	creating & operating objects, constructor & initialization blocks. Access control and modifiers.	9:00	10:00	49	Rupesh	Kulkarni	
12	1/09/2023	Nested inner class & Anonymous class, Abstract class & interfaces.	12:30	12:30	49	Rupesh	Kulkarni	


Signature of Teacher




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Vidyanagari, Baramati Dist-Pune



LECTURE RECORD

CLASS MCA - I, II SEMESTER I, II, III, IV
SUBJECT Java Programming THEORY/LAB TEACHER Ms. Kulkarni Rakesh R

SR. No.	DATE	TOPICS COVERED	TIME		No. PRESENT	SIGNATURE		
			START	END		STUDENT	FACULTY	HOD
13	09/09/23	Methods, Defining Methods, argument passing, method recursion, dealing with static method & finalizer method	9:00	10:00	44	[Signature]	[Signature]	}
14	15/09/23	use of this key. Design of Accessor & Mutator Methods.	9:00	10:00	44	[Signature]	[Signature]	
15	18/09/23	Cloning objects, Shallow & Deep cloning.	9:00	10:00	58	[Signature]	[Signature]	
16	18/09/23	Generic class Types. & Revision of unit 2	11:30	12:30	58	[Signature]	[Signature]	
17	18/09/23	Unit 3 - Extending classes & Inheritance. use of & Benefits of inheritance in oop.	9:00	10:00	34	[Signature]	[Signature]	
18	18/09/23	Types of Inheritance in java. Inheriting data members & methods	9:00	10:00	34	[Signature]	[Signature]	
19	22/09/23	Role of constructor in inheritance. use of super.	9:00	10:00	58	[Signature]	[Signature]	
20	23/09/23	Polymorphism in inheritance, Type compatibility & conversion.	9:00	10:00	57	[Signature]	[Signature]	
21	23/09/23	Implementing Interfaces. Unit 3 Revision.	9:00	10:00	57	[Signature]	[Signature]	
22	23/09/23	Unit 4 Package - organizing classes & interfaces in packages.	10:30	11:30	50	[Signature]	[Signature]	
23	25/09/23	Package as Access Protection, Define package.	10:30	11:30	45	[Signature]	[Signature]	
24	3/10/23	classpath setting making jar	9:30	10:00	59	[Signature]	[Signature]	

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Signature of Teacher

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Vidyanagari, Baramati Dist-Pune

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LECTURE RECORD

CLASS MCA - I, II SEMESTER I, II, III, IV
SUBJECT Java Programming THEORY/LAB TEACHER Mrs. Kulkareshi Rakesh R.

SR. No.	DATE	TOPICS COVERED	TIME		No. PRESENT	SIGNATURE				
			START	END		STUDENT	FACULTY	HOD		
25	31/10/23	import & static import, Naming Conventions on packages	9:00	10:00	59	<i>[Signature]</i>	<i>[Signature]</i>	}		
26	31/10/23	Unit 4 revision.	}	}	}	<i>[Signature]</i>	<i>[Signature]</i>			
27	31/10/23	Unit 5 introduction:- The idea behind exception handling				10:30	11:30	<i>[Signature]</i>	<i>[Signature]</i>	
28	31/10/23	Exception & errors, Types of exceptions				<i>[Signature]</i>	<i>[Signature]</i>			
29	6/11/23	Try & catch, finally, throw, throws in F.H.	9:00	10:30	56	<i>[Signature]</i>	<i>[Signature]</i>	}		
30	6/11/23	in built & user defined exceptions, checked & unchecked exceptions	<i>[Signature]</i>	<i>[Signature]</i>						
31	9/11/23	Unit 5:- Revision. Unit 6:- Introduction.	}	}	}	<i>[Signature]</i>	<i>[Signature]</i>			
32	9/11/23	Defining array, initializing & accessing array				10:30	11:30	<i>[Signature]</i>	<i>[Signature]</i>	
33	9/11/23	Multi-dimensional array, addition & Multiplication of Matrix.				<i>[Signature]</i>	<i>[Signature]</i>			
34	10/11/23	operations on string:- Mutable & Immutable string.	}	}	}	<i>[Signature]</i>	<i>[Signature]</i>	}		
35	10/11/23	String collection, loop for string, tokenizing string.				9:00	10:00		<i>[Signature]</i>	<i>[Signature]</i>
36	10/11/23	String creation using String Builder/Buffer.				<i>[Signature]</i>	<i>[Signature]</i>			

[Signature]
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[Signature]
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LECTURE RECORD

CLASS MCA - I, II SEMESTER I, II, III, IV
 SUBJECT Java Programming THEORY/LAB THEORY TEACHER Mr. Kulkarni Rakesh R.

SR. No.	DATE	TOPICS COVERED	TIME		No. PRESENT	SIGNATURE		
			START	END		STUDENT	FACULTY	HOD
37	13/10/23	Unit 6: Revision; -unit 7 introduction: understanding threads, Need of Multithread	9:00	10:00	41	SMP	[Signature]	[Signature]
38	13/10/23	-thread life cycle; thread priorities, synchronization in thread.				[Signature]	[Signature]	
39	23/10/23	inter communication of threads, Dead lock. unit 7 revision				SMP	[Signature]	
40	23/10/23	Unit 12: Introduction:- JDBC Drivers, & Architecture	11:30	12:30	46	Rajase	[Signature]	
41	23/10/23	conn operation using JDBC				[Signature]	[Signature]	
42	30/10/23	Connection to non conventional DBS Unit 12 - revision	9:00	10:00	43	[Signature]	[Signature]	[Signature]
43	30/10/23	Unit 8 - utility Methods of Arrays, observable & observable objects.				[Signature]	[Signature]	
44	31/10/23	Date time, using Scanner, Regx, I/O operations in java	9:00	10:00	46	[Signature]	[Signature]	[Signature]
45	31/11/23	Streams & the new I/O capabilities. Working with files, serializing obj.	9:00	10:00	40	SMP	[Signature]	
46	6/11/23	Unit 9: UI Programming. Designing GUI	9:00	10:00	34	[Signature]	[Signature]	
47	6/11/23	components & containers, Basics of components, using containers, Layout Manager				[Signature]	[Signature]	
48	7/11/23	AWT components, Adding Menu, Extending GUI features using Swing	10:30	11:30	35	Rajase	[Signature]	

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LECTURE RECORD

CLASS MCA - I, II SEMESTER I, II, III, IV
SUBJECT Java Programming THEORY/LAB TEACHER Ms. Rakesh Pawar

SR. No.	DATE	TOPICS COVERED	TIME		No. PRESENT	SIGNATURE		
			START	END		STUDENT	FACULTY	HOD
49	7/11/23	Unit 10:- Event Handling in java, Process	10:30	11:30	25	<i>[Signature]</i>	<i>[Signature]</i>	}
50	7/11/23	Event Handling Mechanism, Delegation Model.				<i>[Signature]</i>	<i>[Signature]</i>	
51	17/11/23	Event classes, sources, Listeners, Adapter classes or helper classes in E.H.	10:30	11:30	28	<i>[Signature]</i>	<i>[Signature]</i>	}
52	17/11/23	Unit 11:- The collection Framework.				<i>[Signature]</i>	<i>[Signature]</i>	
53	24/11/23	introduction, Objects, Types, sets, seasons	11:30	12:30	26	<i>[Signature]</i>	<i>[Signature]</i>	}
54	24/11/23	Map, understanding Hashing use of ArrayList & vectors, Java utilities.				<i>[Signature]</i>	<i>[Signature]</i>	
55	24/11/23	Unit: 13 - Java server Technologies.	11:30	12:30	34	<i>[Signature]</i>	<i>[Signature]</i>	}
56	30/11/23	Servlet web Application Basics, Architecture & challenges of web APP				<i>[Signature]</i>	<i>[Signature]</i>	
57	30/11/23	introduction to servlet, JSP, servlet life cycle	12:30	1:30	36	<i>[Signature]</i>	<i>[Signature]</i>	}
58	30/11/23	Developing & Deploying servlets				<i>[Signature]</i>	<i>[Signature]</i>	
59	30/11/23	Handling Request & Response.				<i>[Signature]</i>	<i>[Signature]</i>	

[Signature]
Signature of Teacher

[Signature]
Director
Vidya Pratishthan's
Institute of Information Technology
Vidyanagari, Baramati Dist-Pune



[Signature]
Signature of HOD



Preliminary Examination- November 2023

Date:	20/11/2023	Time:	02: 30 Hours
Class:	MCA I	Max. Marks	50
Subject:	JAVA PROGRAMMING		

Instructions:


- i) All questions are compulsory.
- ii) All questions carry equal marks (10).

	Applicable CO						Questions	Mar
	CO1	CO2	CO3	CO4	CO5	CO6		
Action Verb	Remembering	Understand	Applying	Analyzing	Evaluating	Creating		
Q.1	✓	✓	✓				A. Explain method overloading with example B. What is Package? Write down all the steps for package creation.	10
OR								
Q.2	✓	✓	✓	✓		✓	A. What is finalize () method? How it Works? B. What is Jar file? How to create jar file? A. design a form to get Placement Details of Alumni, collect Name, Mobile Number, Email, Passing Year, Company Name, Job Title, Placement Date, Salary. Design user interface using awt components and handle respective events. B. What is the process of Event Handling?	10
OR								
							A. Design a traffic signal using AWT componants handle events. B. Explain adapter class and give example.	



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Q.3	✓	✓	✓	✓	✓	<p>A. Your College is organizing cultural events, create a simple application using AWT to collect information like name, class, gender in which activity he is interested to participate and store this data in database.</p> <p>B. Explain prepared statement.</p>	10
OR							
						<p>A. Design UI to read roll number of students using AWT/SWING and display his/her all information like name, class marks, age and gender by fetching it from data base.</p> <p>B. Explain Applet life cycle</p>	
Q.4	✓	✓	✓			<p>A. Explain Date class with example</p> <p>B. Differentiate between sleep() and interrupt() method</p>	10
OR							
						<p>A. Describe different stream types</p> <p>B. What is Deadlock ? how to resolve it ?</p>	
Q.5	✓	✓	✓			<p>A. Explain super keyword with example</p> <p>B. Explain synchronized keyword with example.</p>	10
OR							
						<p>A. Explain different types of access control available in Java.</p> <p>B. Differentiate character stream and ByteStream.</p>	


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Vidyanagar, Baramati Dist. Pune.





Preliminary Examination Nov. 2023 : Attendance Sheet (A.Y. 2023-24)

Class: MCA - I	Semester: I
Date: 20/11/2023	Time: 2:30 Hours
Subject: Java Programming	

Roll No.	Name of Student	Marks	Student Sign	Ans. Book Received
1	Acharya Rupesh Rajendra	09	Rupesh	
2	Anpat Aniket Rajendra	22	An	
3	Anpat Tejas Rajendra	08	Anpat	
4	Babar Prerana Sunil	09	Babar	
5	Balip Arpita Narayan	16	A.N. Balip	
6	Bhapkar Kajal Bharat	21	Bhapkar	
7	Bhapkar Shamal Pandurang	12	Bhapkar	
8	Bhong Dhanika Devidas	09	Bhong	
9	Bhosale Radhika sandip	00	Radhika	
10	Bhujbal Divya Satish	22	Bhujbal	
11	Bichakule Rohit Sanjay	19	Rohit	
12	Dalvi Ritesh Rakesh	22	R Dalvi	
13	Danke Shaunak Milind	22	SND	
14	Darekar Pranali Pandurang	09	Pranali	
15	Dhumal Vitthal Tanaji	00	Vitthal	
16	Gadave Gaytri Dattatray	10	Gadave	
17	Gaikwad Namita Vilas	21	Gaikwad	
18	Gaikwad Yogita Hanumant	09	Gaikwad	
19	Gandhi Siddhi Jinendra	19	Siddhi	
20	Gawade Sakshi Sukumar	10	Gawade	
21	Ghorapade Vrushali Hindurav	17	Ghorapade	
22	Girme Sayali Rajendra	08	Girme	
23	Hol Gaurav Ananta	26	Hol	
24	Jadhav Akanksha Smitrang	6	Jadhav	



Total Present	Total Absent	Total Students	Name and Signature of Supervisor
24	0	24	Director Anuradha Kadam



Preliminary Examination Nov. 2023 : Attendance Sheet (A.Y. 2023-24)

Class: MCA - I	Semester: I
Date: 20/11/2023	Time: 2:30 Hours
Subject: Java Programming	

Roll No.	Name of Student	Marks	Student Sign	Ans. Book Received
25	Jadhav Pritam Digambar	12	<i>Pritam</i>	
26	Jadhav Shruti Deepak	16	<i>Shruti</i>	
27	Jadhav Soham Chandrakant	18	<i>Soham</i>	
28	Jagtap Sarita Prashant	10	<i>Jagtap</i>	
29	Jagtap Snehal Yuvraj	07	<i>Snehal</i>	
30	Jarad Dhanshree Arvind	09	<i>Jarad</i>	
31	Jawale Anushka Suresh	03	<i>Anushka</i>	
32	Kadave Sonam Sunil	01	<i>Sonam</i>	
33	Kale Vaishnavi Padmakar	07	<i>Kale</i>	
34	Kapase Swapnali Anil	03	<i>S.A. Kapase</i>	
35	Kashid Kajal Laxman	03	<i>Kajal</i>	
36	Kolhe Reshu Anil	06	<i>Reshu</i>	
37	Kudale Pratik Dhananjay	04	<i>Pratik</i>	
38	Late Shubham Vilas	05	<i>Shubham</i>	
39	Lokhande Vijay Hanumant		AB	
40	Mahamuni Pratik Dipak	01	<i>Pratik</i>	
41	Mane Aishwarya Shrimant	04	<i>A.S. Mane</i>	
42	Mane Pranita Jalindhar	08	<i>Pranita</i>	
43	Meshram Sumit Suresh	02	<i>Sumit</i>	
44	Mohite Rushikesh Annasaheb	04	<i>Rushikesh</i>	
45	More Pranjali Namdev	03	<i>Pranjali</i>	
46	Parida Meghna Dibakar		AB	
47	Parkale Saurabh Vitthal	09	<i>S.Parkale</i>	
48	Patole Sohil Sanjay	04	<i>Sohil</i>	



Total Present	Total Absent	Total Students	Name and Signature of Supervisor
22	02	24	<i>Rakesh</i> <i>Patil</i>



Preliminary Examination Nov. 2023 : Attendance Sheet (A.Y. 2023-24)

Class: MCA - I

Semester: I

Date: 20/11/23

Time: 2.5 Hours

Subject: Java Programming

Roll No.	Name of Student	Marks	Student Sign	Ans. Book Received
49	Pawar Akshay Nitin	16		
50	Pawar Shrikant Ramesh	10		
51	Phadatare Sahil Balkrishna	10		
52	Ranjane Pramod Dattatray	05		
53	Salunke Pratik Ravindra	14		
54	Salunkhe Akshaya Ramesh	09		
55	Sapkal Sayali Vijay	15		
56	Shahane Saurabh Sanjay	14		
57	Shaikh Mohseena Shabbir	17		
58	Shelke Shreyas Hemant	07		
59	Shikilkar Dinaj Najirahmad	04		
60	Shinde Prathmesh Mangesh	01		
61	Sonawane Ritesh Vilas	20		
62	Taware Sayali Santosh	13		
63	Thorat Vaishnavi Kiran	04		
64	Tijare Neha Pundlik	16		
65	Ugale Mahesh Ramdas	00		
66	Vanarase Atharva Sandip	11		
67	Vyas Aboli Satish	20		
68	Wable Aniket Sampat	14		
69	Yadav Mansi Umesh	04		

Total Present	Total Absent	Total Students	Name and Signature of Supervisor
20	01		Dr. Santosh

Java Assignments

Assignment 1

Each Question will carry 5 marks

Q1: What are the steps involved in installing the Java Development Kit (JDK) on a Windows operating system?

Q2: What is a constructor in Java, and how does it differ from a regular method?

Q3: What are generic class types in Java, and why are they used?

Q4: What is inheritance in Java, and why is it important in object-oriented programming?

Assignment 2

Each Question will carry 5 marks (Write following programs with output)

Q1. Your Collage is conducting a blood donation camp, so organizer wants to know how many students are interested in blood donation, therefore design a form to get details of the students like name, age, blood group, last donation data and whether they are ready to donate or not. Design user interface using awt components and handle respective events

Q2. Design a traffic signal using AWT components handle events.

Q3. Your College is organizing cultural events, create a simple application using servlet to collect information like name, class, gender in which activity he is interested to participate and store this data is database.

Q4. Design UI to read roll number of students using AWT/SWING and display his/her all information like name, class marks, age and gender by fetching it from data base. (use servlet and jdbc)



MCA I Sem I
Internal Evaluation Sheet A.Y. 2023-24

Subject: Java Programming

Ro II No -	Name of student	Attendance	Assignments	Prelim Exam	Viva	Total	Signature
		5 Marks	5 Marks	10 Marks	5 Marks	25 Marks	
1	Acharya Rupesh Rajendra	5	5 ✓	6	4	20	Rupesh
2	Anpat Aniket Rajendra	5	5 ✓	8	5	23	Anpat
3	Anpat Tejas Rajendra	5	5 ✓	6	4	20	Tejas
4	Babar Prerana Sunil	5	5 ✓	4	4	20	Babar
5	Balip Arpita Narayan	5	5 ✓	8	4	22	Arpita
6	Bhapkar Kajal Bharat	5	5 ✓	8	5	23	Bhapkar
7	Bhapkar Shamal Pandurang	5	5 ✓	7	4	21	Bhapkar
8	Bhong Dhanika Devidas	5	5 ✓	6	4	20	Bhong
9	Bhosale Radhika sandip	5	5 ✓	6	3	19	Radhika
10	Bhujbal Divya Satish	5	5 ✓	8	5	23	Divya D.
11	Bichakule Rohit Sanjay	5	5 ✓	8	5	23	Rohit
12	Dalvi Ritesh Rakesh	5	5 ✓	8	5	23	
13	Danke Shaunak Milind	5	5 ✓	8	5	23	SM
14	Darekar Pranali Pandurang	5	5 ✓	4	4	20	Pranali
15	Dhumal Vitthal Tanaji	5	5 ✓	6	3	19	Vitthal
16	Gadave Gaytri Dattatray	5	5 ✓	6	4	20	Gadave
17	Gaikwad Namita Vilas	5	5 ✓	8	5	23	Namita
18	Gaikwad Yogita Hanumant	5	5 ✓	6	4	20	Yogita
19	Gandhi Siddhi Jinendra	5	5 ✓	7	4	21	Siddhi
20	Gawade Sakshi Sukumar	5	5 ✓	6	4	20	Sakshi
21	Ghorapade Vrushali Hindurav	5	5 ✓	7	4	21	Vrushali

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MCA I Sem I
Internal Evaluation Sheet A.Y. 2023-24

Subject: Java Programming

Roll No.	Name of student	Attendance	Assignments	Prelim Exam	Viva	Total	Signature
		5 Marks	5 Marks	10 Marks	5 Marks	25 Marks	
22	Girme Sayali Rajendra	5	5 ✓	4	4	20	<i>Girme</i>
23	Hol Gaurav Ananta	5	5 ✓	8	5	23	<i>Hol</i>
24	Jadhav Akanksha Shirang	5	5 ✓	6	4	20	<i>Akanksha</i>
25	Jadhav Pritam Digambar	5	5 ✓	7	4	21	<i>Pritam</i>
26	Jadhav Shruti Deepak	5	5 ✓	7	4	21	<i>Shruti</i>
27	Jadhav Soham Chandrakant	5	5 ✓	6	4	20	<i>Soham</i>
28	Jagtap Sarita Prashant	5	5 ✓	6	4	20	<i>Sarita</i>
29	Jagtap Snehal Yuvraj	5	5 ✓	6	4	20	<i>Jagtap</i>
30	Jarad Dhanshree Arvind	5	5 ✓	6	4	20	<i>Jarad</i>
31	Jawale Anushka Suresh	5	5 ✓	6	4	20	<i>Anushka</i>
32	Kadave Sonam Sunil	5	5 ✓	6	4	20	<i>Sonam</i>
33	Kale Vaishnavi Padmakar	5	5 ✓	6	4	20	<i>Vaishnavi</i>
34	Kapase Swapnali Anil	5	5 ✓	8	5	23	<i>Swapnali</i>
35	Kashid Kajal Laxman	5	5 ✓	6	4	20	<i>Kajal</i>
36	Kolhe Reshu Anil	5	5 ✓	6	4	20	<i>Reshu</i>
37	Kudale Pratik Dhananjay	5	5 ✓	6	4	20	<i>Pratik</i>
38	Late Shubham Vilas	5	5 ✓	6	4	20	<i>Shubham</i>
39	Lokhande Vijay Hanumant	5	5	—	—	0	
40	Mahamuni Pratik Dipak	5	5 ✓	6	4	20	<i>Pratik</i>
41	Mane Aishwarya Shrimant	5	5 ✓	6	4	20	<i>Aishwarya</i>
42	Mane Pranita Jalindhar	5	5 ✓	6	4	20	<i>Pranita</i>
43	Meshram Sumit Suresh	5	5 ✓	6	4	20	<i>Sumit</i>



MCA I Sem I
Internal Evaluation Sheet A.Y. 2023-24

Subject: Java Programming

Roll No.	Name of student	Attendance	Assignments	Prelim Exam	Viva	Total	Signature
		5 Marks	5 Marks	10 Marks	5 Marks	25 Marks	
44	Mohite Rushikesh Annasaheb	5	5 ✓	4	4	20	<i>Rushikesh</i>
45	More Pranjali Namdev	5	5 ✓	6	4	20	
46	Parida Meghna Dibakar	5	5 ✓	3	2	15	<i>Meghna</i>
47	Parkale Saurabh Vitthal	5	5 ✓	6	4	20	<i>Saurabh</i>
48	Patole Sohil Sanjay	5	5 ✓	6	4	20	
49	Pawar Akshay Nitin	5	5 ✓	8	5	23	<i>Akshay</i>
50	Pawar Shrikant Ramesh	5	5 ✓	6	4	20	<i>Shrikant</i>
51	Phadatare Sahil Balkrishna	5	5 ✓	7	4	21	
52	Ranjane Pramod Dattatray	5	5 ✓	6	4	20	
53	Salunke Pratik Ravindra	5	5 ✓	8	4	22	
54	Salunkhe Akshaya Ramesh	5	5 ✓	6	4	20	
55	Sapkal Sayali Vijay	5	5 ✓	7	4	21	<i>Sapkal</i>
56	Shahane Saurabh Sanjay	5	5 ✓	7	4	21	
57	Shaikh Mohseena Shabbir	5	5 ✓	8	4	22	<i>Mohseena</i>
58	Shelke Shreyas Hemant	5	5 ✓	6	4	20	<i>Shreyas</i>
59	Shikilkar Dinaj Najirahmad	5	5 ✓	6	4	20	<i>Dinaj</i>
60	Shinde Prathmesh Mangesh	5	5 ✓	6	3	19	<i>Prathmesh</i>
61	Sonawane Ritesh Vilas	5	5 ✓	8	5	23	<i>Ritesh</i>
62	Taware Sayali Santosh	5	5 ✓	7	4	21	<i>Sayali</i>
63	Thorat Vaishnavi Kiran	5	5 ✓	6	4	20	<i>Vaishnavi</i>
64	Tijare Neha Pundlik	5	5 ✓	8	4	22	
65	Ugale Mahesh Ramdas	5	5 ✓	6	3	19	



MCA I Sem I
Internal Evaluation Sheet A.Y. 2023-24

Subject: Java Programming

Roll No.	Name of student	Attendance	Assignments	Prelim Exam	Viva	Total	Signature
		5 Marks	5 Marks	10 Marks	5 Marks	25 Marks	
66	Vanarase Atharva Sandip	5	5 ✓	6	4	20	Vanarase
67	Vyas Aboli Satish	5	5 ✓	8	5	23	Satish
68	Wable Aniket Sampat	5	5 ✓	8	5	23	Aniket
69	Yadav Mansi Umesh	5	5 ✓	6	4	20	Mansi

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M.E. Rakesh Kulkarni



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Director

Vidya Pratishthan's
Institute of Information Technology
Vidyanagari, Baramati Dist-Pune

Course Code: IT-11

Course Name: Java Programming

Question Bank

Faculty Name: Rakesh Kulkarni

1. Introduction

- a. Explain the evolution of Java and its importance in modern software development.
- b. Describe the structure of a basic Java program and the process of compilation and execution.
- c. Discuss the various data types in Java and how they are used in programming.
- d. Explain the concept of Java Virtual Machine (JVM) and its role in Java's platform independence.
- e. Discuss the differences between Java and other programming languages such as C++ and Python.

2. Object-Oriented Programming

- a. Define the four principles of Object-Oriented Programming (OOP) and provide examples of each.
- b. Discuss the concept of classes and objects in Java with examples.
- c. Explain the significance of encapsulation and how it is achieved in Java.
- d. Describe the concept of inheritance and how it promotes code reusability in Java.
- e. Discuss polymorphism in Java and provide examples to illustrate its implementation.

3. Extending Classes and Inheritance

- a. Explain the process of extending classes in Java and provide an example.
- b. Discuss the concept of method overriding and its importance in Java.
- c. Explain the significance of the super keyword in Java inheritance.
- d. Describe the different types of inheritance in Java and provide examples of each.
- e. Discuss the concept of abstract classes and methods in Java and their usage.

4. Package

- a. Explain the concept of packages in Java and their significance in organizing code.
- b. Discuss the process of creating and using packages in Java with examples.
- c. Describe the differences between built-in and user-defined packages in Java.
- d. Explain the access control mechanisms provided by Java packages.
- e. Discuss the use of the import statement and how it facilitates code reuse in Java.

5. Exception Handling

- a. Explain the concept of exception handling in Java and its importance in robust programming.
- b. Discuss the different types of exceptions in Java and how they are handled.
- c. Describe the try-catch-finally block with examples.



- d. Explain the concept of custom exceptions and how they are created and used in Java.
- e. Discuss the propagation of exceptions and the use of the throws keyword in Java.

6. Array & String

- a. Explain the concept of arrays in Java and how they are used to store data.
- b. Discuss the various operations that can be performed on arrays in Java with examples.
- c. Describe the significance of strings in Java and how they differ from arrays.
- d. Explain the different methods provided by the String class in Java for string manipulation.
- e. Discuss the concept of mutable and immutable strings in Java and their implications.

7. Thread

- a. Explain the concept of multithreading in Java and its importance in concurrent programming.
- b. Discuss the lifecycle of a thread in Java and the different states it can be in.
- c. Describe the process of creating and starting threads in Java with examples.
- d. Explain the significance of synchronization in Java multithreading and how it is achieved.
- e. Discuss the different methods provided by the Thread class in Java and their usage.

8. A Collection of Useful Classes

- a. Discuss the utility of the java.util package and the types of classes it provides.
- b. Explain the purpose and usage of the Date and Calendar classes in Java.
- c. Describe the functionality of the Random class and its use in generating random numbers.
- d. Explain the role of the Scanner class in Java and how it is used for input handling.
- e. Discuss the Formatter and StringTokenizer classes and their applications in Java programming.

9. UI Programming

- a. Explain the basics of Java UI programming and the significance of the Abstract Window Toolkit (AWT).
- b. Discuss the components and containers provided by AWT and their usage.
- c. Describe the process of creating a simple graphical user interface (GUI) in Java.
- d. Explain the concept of layout managers in Java and how they help in arranging components.
- e. Discuss the event-driven programming model in Java UI programming and its importance.

10. Event Handling

- a. Explain the concept of event handling in Java and its significance in interactive applications.
- b. Discuss the event delegation model and how events are processed in Java.
- c. Describe the different types of event listeners in Java and their usage.



- d. Explain the process of implementing event handling in a Java program with examples.
- e. Discuss the significance of the ActionEvent and MouseEvent classes in Java event handling.

11. The Collection Framework

- a. Explain the Java Collection Framework and its importance in data structure management.
- b. Discuss the different interfaces provided by the Collection Framework and their hierarchy.
- c. Describe the List, Set, and Map interfaces and their implementations in Java.
- d. Explain the significance of generics in the Java Collection Framework and how they enhance type safety.
- e. Discuss the different algorithms provided by the Collections class and their applications.

12. Database Programming using JDBC

- a. Explain the concept of JDBC and its role in Java database connectivity.
- b. Discuss the steps involved in establishing a connection to a database using JDBC.
- c. Describe the process of executing SQL queries using JDBC and handling the results.
- d. Explain the significance of prepared statements in JDBC and how they prevent SQL injection.
- e. Discuss the transaction management capabilities provided by JDBC and their importance.

13. Java Server Technologies

- a. Explain the basics of Java Servlets and their role in web application development.
- b. Discuss the lifecycle of a servlet and the methods provided by the HttpServlet class.
- c. Describe the concept of JavaServer Pages (JSP) and how they facilitate dynamic web content generation.
- d. Explain the Model-View-Controller (MVC) architecture and its implementation using Servlets and JSP.
- e. Discuss the significance of JavaBeans in Java Server Technologies and their usage in web applications.



Total No. of Questions : 5]

SEAT No. :

P6978

[5865] - 101

[Total No. of Pages : 4

First Year M.C.A. (Management)
IT11-JAVA PROGRAMMING
(2020 Pattern) (Semester - I)

Time : 2½ Hours]

[Max. Marks : 50

Instructions to the candidates:

- 1) *All Questions are compulsory.*
- 2) *Figures to right indicate full marks.*

Q1) Attempt the following multiple choice questions. Each questions carries half mark. **[10]**

- i) Java Source code is compiled into _____.
 - a) Obj
 - b) Source Code
 - c) Byte Code
 - d) Exe
- ii) Full Form of J2EE
 - a) Java 2 Enterprise Edition
 - b) Java 2 Express Edition
 - c) Java 2 Expert Edition
 - d) Java 2 Enterprise Environment
- iii) _____ is used to Find and Fix bugs in the java programs.
 - a) JVM
 - b) JRE
 - c) JDK
 - d) JDB
- iv) Which of these access specifiers can be used for a class so that its members can be accessed by a different class in the different package?
 - a) Protected
 - b) Public
 - c) Private
 - d) No modifier
- v) Which of the following is the correct way of importing an entire package 'Pkg' ?
 - a) Import pkg
 - b) Import Pkg.
 - c) Import Pkg.*
 - d) Import Pkg.*.*



P.T.O.

- vi) Which of the following is an incorrect statement about packages?
- a) Package defines a namespace in which classes are stored.
 - b) A package can contain other package within it.
 - c) Java uses file system directories to store packages.
 - d) A package can be renamed without renaming the directory in which the classes are stored.
- vii) Exception is a class/interface/abstract class/other.
- a) class
 - b) interface
 - c) abstract class
 - d) other
- viii) In which of the following package Exception class exist?
- a) Java.io
 - b) Java.lang
 - c) Java.util
 - d) Java.exception
- ix) Which keyword is used to explicitly throw an exception?
- a) try
 - b) catch
 - c) throw
 - d) throws
- x) Which of the following handles the exception when a catch is not used?
- a) finally
 - b) throw handler
 - c) default handler
 - d) java runtime system
- xi) Which of these keywords must be used to monitor for exceptions?
- a) try
 - b) catch
 - c) throw
 - d) Finally
- xii) What exception thrown by parse Int() method?
- a) Null Pointer Exception
 - b) Arithmetic Exception
 - c) ClassNot Found Exception
 - d) Number format Exception
- xiii) Which of these method of string class is used to obtain character at specified index?
- a) char()
 - b) Charat()
 - c) charat()
 - d) charAt()
- xiv) At time of array initialization which is necessary to specify?
- a) Row
 - b) Column
 - c) Row and Column
 - d) None
- xv) String class implements_____.
- a) Serializable
 - b) Comparable
 - c) Char Sequence
 - d) All of the above



- xvi) Intern() method of string class used for
- a) Returns the canonical representation for the string object.
 - b) Removes whitespace from both ends of string
 - c) Returns a formatted string using the specified format string
 - d) Splits a string into an array of substrings.
- xvii) Which is not a layout manager?
- a) Flow Layout
 - b) Border Layout
 - c) Card Layout
 - d) Gridbox Layout
- xviii) Which of these events generated when the size of an control is changed?
- a) Component Event
 - b) Container Event
 - c) Focus Event
 - d) Size Event
- xix) Which of the following are the components of the JDBC model.
- 1) Java application
 - 2) JDBC Driver
 - 3) Database
- a) (1) and (2) only
 - b) (2) and (3) only
 - c) (1) and (3) only
 - d) All (1), (2) and (3)
- xx) A Servlet maintain session in
- a) Servlet container
 - b) Servlet context
 - c) Servlet request
 - d) Servlet response

Q2) a) Your Collage is conducting a blood donation camp, so organiser wants to know how many students are interested in blood donation, therefore design a form to get details of the students like name, age, blood group, last donation data and whether they are ready to donate or not.

Design user inteface using awt componants and handle respective events. [6]

b) Explain adapter class and give example. [4]

OR

a) Design a traffic signal using AWT componants handle events. [6]

b) Explain list collection with example. [4]



- Q3) a) Your College is organizing cultural events, create a simple application using servlet to collect information like name, class, gender in which activity he is interested to participate and store this data in database. [8]
b) Explain prepared statement. [4]

OR

- a) Design UI to read roll number of students using AWT/SWING and display his/her all information like name, class marks, age and gender by fetching it from database.
(use servlet and jdbc) [8]
b) Explain servlet life cycle. [4]

- Q4) a) Differentiate arraylist and vector. [5]
b) Explain runtime polymorphism. [3]

OR

- a) Explain TreeSet with example. [5]
b) Explain super keyword. [3]

- Q5) a) Explain different types of access control available in Java. [4]
b) Explain different types of constructor available in Thread class. [3]
c) Differentiate character stream and ByteStream. [3]

OR

- a) Explain nested classes. [4]
b) Explain synchronized keyword. [3]
c) Explain scanner. [3]





ACADEMIC FILE - SUMMARY SHEET

Class	MCA - II	Semester	III
Subject Code & Name	IT-32. Data Warehousing & Data Mining.	Faculty	Ms. Rakesh Kulkarni

1. Time Table
2. Syllabus
3. Teaching Plan
4. Program Outcomes, Course Objectives and Course Outcomes
5. Program Outcome and Course Outcome Correlation Matrix
6. Course Outcome Attainment
7. Attendance sheet
8. Lecture Record
9. Unit test paper
10. Mark-sheet of unit test
11. Prelim Exam paper
12. Mark-sheet of prelim exam
13. Assignment
14. Internal performance of the student
15. Question Bank
16. Other, if any (Pl. specify)

Subject Teacher



Dr. Santosh Parakh

Director
Vidya Pratishthan's
Institute of Information Technology
Vidyanagari, Baramati Dist-Pune




Time Table Semester – III (AY: 2023-2024, Term - I)

MCA II (Batch : 2023-25)						
Timetable w.e.f. 21 st August 2023, Monday						
Class room : C5, LAB-4						
Time/Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
9.00 am to 10.00 am	MAD LAB	MAD	MAD	MAD	MAD LAB	SS-III
Tea						
10.30 am to 11.30 am	MAD LAB	CC	CC	CC	MAD LAB	Student Driven Activities/ Guest Sessions
11.30 am to 12.30 pm	OC-5	DWDM	STQA	STQA	SD-1	
12.30 pm to 1.30 pm	KRAI	STQA	SD-1	DWDM	DWDM	
Lunch						
2.30 pm to 3.30 pm	Mini Proj	KRAI	KRAI	IS-III	IOC	Sports
3.30 pm to 4.30 pm		OC-6	Training & Placement		IOC	
4.30 pm to 5.00 pm		Mini Proj			-	

Sr. No.	Course Title	Course Code	CP	EXT	INT	Faculty
1	Mobile Application Development	IT31	3	50	25	Mr. Rahul Shah
2	Data Warehousing and Data Mining	IT32	3	50	25	Mr. Rakesh Kulkarni
3	Soft. Testing and Quality Assurance	IT33	3	50	25	Dr. Mayank Kothawade
4	Knowledge Representation & Artificial Intelligence - ML, DL	IT34	3	50	25	Mrs. Komal Jadhav
5	Cloud Computing	IT35	3	50	25	Dr. Santosh Parakh
6	Open Course 5	OC31	1	-	25	Dr. Santosh Parakh
7	Open Course 6	OC32	1	-	25	Dr. Mayank Kothawade
* Practical's						
8	Practical	IT31L	3	50	75	Mr. Rahul Shah
9	Mini Project	ITC31	5	50	75	Dr. Mayank Kothawade Dr. Santosh Parakh
* Soft Skills						
10	Soft Skills- III	SS31	1	-	25	Mr. Ajit Adsul
			28	350	350	
11	Information Security-III	IS-III	-	-	25	Dr. Santosh Parakh
12	Skill Development-I	SD-1	2	-	50	Mr. Ajit Adsul
13	Introduction to Constitution	IOC	2	-	50	Mr. Rakesh Kulkarni
14	Training & Placement	-	-	-	-	Mr. Rakesh Kulkarni


Dr. Mayank R. Kothawade
HOD, MCA


Dr. A. A. Deshmukh
Director



Course Code: IT-32

Course Name: Data Warehousing and Data Mining

Credit Scheme			Evaluation Scheme				
Lecture	Practical	Credit	Internal			External	Total
			Written	Practical	Tutorial		
3 Hrs./Week	-	3	10	10	5	50	75

Course Description:

Course Objectives:

1. To introduce the concepts, techniques and applications of data warehousing and data mining.
2. To understand how to Preprocess, understand and analyze various kinds of data
3. To Study data warehouse Concepts, architectures, OLAP and the project planning aspects in building a data warehouse
4. To enable students to understand and implement various techniques of association, classification and clustering in data mining
5. To enable students to understand and implement the concepts of Web mining and Text Mining in data mining

Course Outcomes:

Student will be able to

- CO1: Understand Data warehouse concepts, architecture and models (Understand)
CO2: Learn and understand techniques of preprocessing on various kinds of data (Understand)
CO3: Apply association Mining and Classification Techniques on Data Sets (Apply)
CO4: Apply Clustering Techniques and Web Mining on Data Sets (Apply)
CO5: Understand other approaches of Data mining (Understand)

Course Structure:

Unit No.	Topics Details	Weightage in %	No of Sessions
1	1. Data Warehouse Fundamentals 1.1. Introduction to Data Warehouse, OLTP Systems; Differences between OLTP Systems and Data Warehouse: 1.2. Characteristics of Data Warehouse; Functionality of Data Warehouse: 1.3. Advantages and Applications of Data Warehouse; Top- Down and Bottom-Up Development Methodology: 1.4. Tools for Data warehouse development: Data	15	6



	<p>Warehouse Types</p> <p>1.5. Planning and Project Management in constructing Data warehouse: Data Warehouse Project;</p> <p>1.6. Data Warehouse development Life Cycle, Kimball Lifecycle Diagram</p>		
2	<p>2. Data Warehouse Architecture</p> <p>2.1. Introductions, Components of Data warehouse Architecture</p> <p>2.2. Technical Architectures; Federated Data Warehouse Architecture: Tool selection;</p> <p>2.3. Dimensional Modeling: E-R Modeling VS Dimensional Modeling</p> <p>2.4. Data Warehouse Schemas; Star Schema, Inside Dimensional Table, Inside Fact Table, Fact Less Fact Table, Granularity, Star Schema Keys: Snowflake Schema, Fact Constellation Schema</p> <p>2.5. Introduction to Metadata : Categorizing Metadata:</p> <p>2.6. Metadata management in practice; Meta data requirements gathering, Metadata classification, Meta data collection strategies, Tools for Metadata Management</p>	15	6
3	<p>3. Data Preprocessing and ETL</p> <p>3.1. Data Pre-processing: Data Cleaning tasks</p> <p>3.2. Data Integration and Data Reduction</p> <p>3.3. Discretization and Concept Hierarchy Generation</p> <p>3.4. Data Transformation; Basic Tasks in Transformation, Major Data Transformation Types</p> <p>3.5. Introduction to ETL(Extract, Transform and Load)</p> <p>3.6. ETL requirements and steps: Data Extraction; Extraction Methods, Logical Extraction Methods, Physical Extraction Methods</p> <p>3.7. Data loading; Data Loading Techniques, ETL Tools</p>	20	7
4	<p>4. Data Warehouse & OLAP:</p> <p>4.1. Introduction: What is OLAP?; Characteristics of OLAP,</p> <p>4.2. Steps in the OLAP Creation Process, OLAP operations, Advantages of OLAP: Multidimensional Data:</p> <p>4.3. OLAP Architectures; MOLAP, ROLAP, HOLAP:</p> <p>4.4. Data Warehouse and OLAP: Hypercube & Multicubes</p>	10	5
5	<p>5. Introduction to Data Mining:</p> <p>5.1. Introduction and Scope of Data Mining</p> <p>5.2. How does Data Mining Works, Predictive Modeling</p> <p>5.3. Data Mining and Data Warehousing</p> <p>5.4. Architecture for Data Mining</p>	5	4

	5.5. Profitable Applications: Data Mining Tools:		
6	6. Data Mining Techniques 6.1. An Overview: Introduction, Data Mining, Data Mining Versus Database Management System, 6.2. Data Mining Techniques- Association rules(Apriori, FP Tree algorithms) 6.3. Classification (Decision Tree induction, Bayesian classification, SVM, KNN) 6.4. Clustering, Neural networks. 6.5. Evaluating Association rules , Classification model	15	6
7	7. Clustering 7.1. Introduction to Clustering, Cluster Analysis 7.2. Clustering Methods- K means, Hierarchical clustering, Agglomerative clustering, Divisive clustering, 7.3. clustering and segmentation software 7.4. Evaluating clusters 7.5. Data Mining trends and Applications	10	5
8	8. Web Mining 8.1. Introduction, Terminologies 8.2. Categories of Web Mining: Web Content Mining, Web Structure Mining, Web Usage Mining 8.3. Applications of Web Mining, and Agent based and Database approaches, Web mining Software/Tools. 8.4. Text Mining: process and types, steps in Text Mining, applications and tools of Text Mining 8.5. Data visualization, Dashboard- KPI, Business Intelligence and its future.	10	6
Total:		100	45

List of Practicals (if any)

1. Creating a simple data warehouse & performing OLAP operations using simple tools
2. Extracting data from any Operational database (ETL) and performing pre-processing tasks
3. Performing association mining on large data sets and extracting best possible rules / a case study
4. Performing classification and evaluating the efficient model / a case study
5. A case study on finding efficient Clusters on very large set of documents data
6. A case study on Web mining and Text mining using software tools

Students may practice or implement Data warehouse, ETL & Data mining concepts on the following software/ tools (Students versions) at on premise / Cloud based platform



- 1) Data warehouse - My-SQL, MongoDB / Google BigQuery / Amazon Redshift / Talend
- 2) ETL Tools : Pentaho Kettle / Talend-Open Studio / Apache Kafka / Informatica Power Center
- 3) BI and Analytics tools : Python / XL-Miner, R-Studio / Rapid-Miner Studio
- 4) Visualization Tools : Tableau / Power-BI / Qlick sense

Course References:

Recommended Books:

Text Books:

1. Data Mining: Introductory and Advanced Topics, by Margaret Dunham, Pearson Education
2. Data Mining by Arun K. Pujari – University Press.

Reference Books:

1. DATAWAREHOUSING FUNDAMENTALS: A COMPREHENSIVE GUIDE FOR IT PROFESSIONALS, by Paulraj Pooniah, Latest Edition
2. Building the Data Warehouse, 3rd edition by W. H. Inmon
3. Data Mining concepts and Techniques by Jiawei Han, Micheline Kamber –Elsevier.
4. Data Mining practical Machine Learning Tools and Techniques by Ian H. Witten Eibe Frank Mark Hall - Elsevier publication
5. Introduction to Data Mining with Case Studies by G. K. Gupta, Prentice Hall

Web Reference:

1. www.ibm.com/in/en/
2. www.pentaho.com/
3. www.jaspersoft.com/
4. www.amazon.com/Data-Mining-Business-Intelligence-Applications
5. www.ibm.com/insights/in
6. www.sas.com
7. Weka– Data Mining with Open Source Machine Learning Software, www.cs.waikato.ac.nz/ml/weka.
8. <https://cloud.google.com/bigquery/>
9. <https://www.rstudio.com/> 10. <https://aws.amazon.com/redshift/>



Deeshmukh
Director
Vidya Pratishthan's
Institute of Information Technology
Vidyanagari, Baramati Dist-Pune



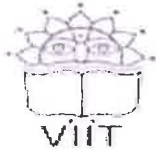
TEACHING PLAN

CLASS	MCA II	SEMESTER	III
SUBJECT & CODE	DATA WAREHOUSING AND DATA MINING -IT 32	TEACHER	RAKESH R. KULKARNI

Objective: 1.To introduce the concepts, techniques and applications of data warehousing and data mining. 2. To understand how to preprocess, understand and analyze various kinds of data 3. To Study data warehouse Concepts, architectures, OLAP and the project planning aspects in building a data warehouse 4. To enable students to understand and implement various techniques of association, classification and clustering in data mining 5. To enable students to understand and implement the concepts of Web mining and Text Mining in data mining

SR. No.	CHAPTER	TOPICS	TEACHING METHODOLOGY	NO. OF SESSIONS
1	Data Warehouse Fundamentals	1.1. Introduction to Data Warehouse, OLTP Systems; Differences between OLTP Systems and Data Warehouse: 1.2. Characteristics of Data Warehouse; Functionality of Data Warehouse: 1.3. Advantages and Applications of Data Warehouse; Top-Down and Bottom-Up Development Methodology: 1.4. Tools for Data warehouse development: Data Warehouse Types 1.5. Planning and Project Management in constructing Data warehouse: Data Warehouse Project; 1.6. Data Warehouse development Life Cycle, Kimball Lifecycle Diagram	Chalk, Board, Presentation, Case studies,	6
2	Data Warehouse Architecture	2.1. Introductions, Components of Data warehouse Architecture 2.2. Technical Architectures; Federated Data Warehouse Architecture: Tool selection; 2.3. Dimensional Modeling: E-R Modeling VS Dimensional Modeling 2.4. Data Warehouse Schemas; Star Schema, Inside Dimensional Table, Inside Fact Table, Fact Less Fact Table, Granularity Star Schema Keys: Snowflake Schema Fact	Chalk, Board, Presentation, Case studies,	6





		Constellation Schema 2.5. Introduction to Metadata : Categorizing Metadata: 2.6. Metadata management in practice; Meta data requirements gathering, Metadata classification, Meta data collection strategies, Tools for Metadata Management		
3	Data Preprocessing and ETL	3.1. Data Pre-processing: Data Cleaning tasks 3.2. Data Integration and Data Reduction 3.3. Discretization and Concept Hierarchy Generation 3.4. Data Transformation; Basic Tasks in Transformation, Major Data Transformation Types 3.5. Introduction to ETL(Extract, Transform and Load) 3.6. ETL requirements and steps: Data Extraction; Extraction Methods, Logical Extraction Methods, Physical Extraction Methods 3.7. Data loading; Data Loading Techniques, ETL Tools	Chalk, Board, Presentation, Case studies,	7
4	Data Warehouse & OLAP:	4.1. Introduction: What is OLAP?; Characteristics of OLAP, 4.2. Steps in the OLAP Creation Process, OLAP operations, Advantages of OLAP: Multidimensional Data: 4.3. OLAP Architectures; MOLAP, ROLAP, HOLAP: 4.4. Data Warehouse and OLAP: Hypercube & Multicubes	Chalk, Board, Presentation, Case studies,	5
5	Introduction to Data Mining:	5.1. Introduction and Scope of Data Mining 5.2. How does Data Mining Works, Predictive Modeling 5.3. Data Mining and Data Warehousing 5.4. Architecture for Data Mining 5.5. Profitable Applications: Data Mining Tools:	Chalk, Board, Presentation, Case studies,	4
6	Data Mining Techniques	6.1. An Overview: Introduction, Data Mining, Data Mining Versus Database Management System, 6.2. Data Mining Techniques- Association rules(Apriori, FP Tree algorithms) 6.3. Classification (Decision Tree induction, Bayesian classification, SVM, KNN) 6.4. Clustering, Neural networks. 6.5. Evaluation of Association rules , Classification model	Chalk, Board, Presentation, Case studies,	6





7	Clustering	7.1. Introduction to Clustering, Cluster Analysis 7.2. Clustering Methods- K means, Hierarchical clustering, Agglomerative clustering, Divisive clustering, 7.3. clustering and segmentation software 7.4. Evaluating clusters 7.5. Data Mining trends and Applications	Chalk, Board, Presentation, Case studies,	5
8	Web Mining	8.1. Introduction, Terminologies 8.2. Categories of Web Mining: Web Content Mining, Web Structure Mining, Web Usage Mining 8.3. Applications of Web Mining, and Agent based and Database approaches, Web mining Software/Tools. 8.4. Text Mining: process and types, steps in Text Mining, applications and tools of Text Mining 8.5. Data visualization, Dashboard- KPI, Business Intelligence and its future.	Chalk, Board, Presentation, Case studies,	6
<p>Reference Books:</p> <ol style="list-style-type: none"> 1. DATA WAREHOUSING FUNDAMENTALS: A COMPREHENSIVE GUIDE FOR IT PROFESSIONALS, by Paulraj Pooniah, Latest Edition 2. Building the Data Warehouse, 3rd edition by W. H. Inmon 3. Data Mining concepts and Techniques by Jiawei Han, Micheline Kamber –Elsevier. 4. Data Mining practical Machine Learning Tools and Techniques by Ian H. Witten Eibe Frank Mark Hall - Elsevier publication 5. Introduction to Data Mining with Case Studies by G. K. Gupta, Prentice Hall 			<p>Int. Marks Breakup (out of 25):</p> <p>5 Marks : Attendance 5 Marks : Assignments 5 Marks : Unit Test 5 Marks : Prelim 5 Marks : Seminar/GD/Oral/ Presentation</p>	

Signature of Teacher



Director

Signature of HOD

Vidya Pratishthan's
Institute of Information Technology
Vidyanagari, Baramati Dist-Pune



ACADEMIC YEAR 2023- 2024

Course Code: IT-32

Course Name: Data Warehousing and Data Mining

MCA Program Outcomes (PO's)

MCA Programme Outcomes (POs): At the end of the MCA programme the learner will possess the following Program Outcome:

PO1	Apply knowledge of computing fundamentals, computing specialization, mathematics, and domain knowledge appropriate for the computing specialization to the abstraction and conceptualization of computing models from defined problems and requirements.
PO2	Identify, formulate, research literature, and solve complex Computing problems reaching substantiated conclusions using fundamental principles of Mathematics, Computing sciences, and relevant domain disciplines.
PO3	Design and evaluate solutions for complex computing problems, and design and evaluate systems, components, or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations.
PO4	Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of information to provide valid conclusions.
PO5	Create, select, adapt and apply appropriate techniques, resources, and modern computing tools to complex computing activities, with an understanding of the limitations.
PO6	Understand and commit to professional ethics and cyber regulations, responsibilities, and norms of professional computing practice.
PO7	Recognize the need, and have the ability, to engage in independent learning for continual development as a Computing professional.
PO8	Demonstrate knowledge and understanding of computing and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
PO9	Communicate effectively with the computing community, and with society at large, about complex computing activities by being able to comprehend and write effective reports, design documentation, make effective presentations, and give and understand clear instructions.
PO10	Understand and assess societal, environmental, health, safety, legal, and cultural issues within local and global contexts, and the consequential responsibilities relevant to professional computing practice.
PO 11	Function effectively as an individual and as a member or leader in diverse teams and in multidisciplinary environments.
PO 12	Identify a timely opportunity and using innovation to pursue that opportunity to create value and wealth for the betterment of the individual and society at large.





Course Code: IT-32 Course Name: Data Warehousing and Data Mining Course Objectives	
1	To introduce the concepts, techniques and applications of data warehousing and data mining.
2	To understand how to Preprocess, understand and analyze various kinds of data .
3	To Study data warehouse Concepts, architectures, OLAP and the project planning aspects in building a data warehouse
4	To enable students to understand and implement various techniques of association, classification and clustering in data mining
5	To enable students to understand and implement the concepts of Web mining and Text Mining in data mining

Course Code: IT-32 Course Name: Data Warehousing and Data Mining Course Outcomes	
CO 1	Understand Data warehouse concepts, architecture and models (Understand)
CO 2	Learn and understand techniques of preprocessing on various kinds of data (Understand)
CO 3	Apply association Mining and Classification Techniques on Data Sets (Apply)
CO 4	Apply Clustering Techniques and Web Mining on Data Sets (Apply)
CO 5	Understand other approaches of Data mining (Understand)

Course Code: IT-32 Course Name: Data Warehousing and Data Mining Co-relation Matrix												
Program Outcomes (PO)	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12
Course Outcome (CO)												
CO 1	3	3	-	-	1	1	1	2	1	-	-	-
CO 2	3	3	-	-	1	1	1	2	1	-	-	-
CO 3	3	3	3	3	3	1	1	2	3	2	1	1
CO 4	3	3	3	3	3	1	1	3	3	2	1	1
CO 5	3	3	-	-	1	1	1	3	1	-	-	-

H: High (3), M: Medium (2) and L: Low (1)

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Director
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Vidyanagari, Baramati Dist-Pune

Vidya Pratishthan's
Institute of Information Technology, Baramati.

MCA Batch 2023-25

MCA-II, SEM-III

Subject - Data Warehousing and Data Mining

Faculty Name - Mr. Rakesh Kulkarni

Internal Evaluation Marks- Nov. 2024

Roll No	Name of Student	Evaluation Parameter					Out of 50 Marks
		CO 1	CO2	CO3	CO4	CO5	
1		AB	AB	AB	AB	AB	0
2	Asalkar Ankita Hanumant	6	2	2	4	1	15
3	Bagade Saurav Manik	3	1	0	0	0	4
4		AB	AB	AB	AB	AB	0
5	Bhalerao Pooja Gautam	5	3	4	6	7	25
6	Bhure Adhiraj Hanmant	3	3	3	8	1	18
7	Chavan Sourabh Mohanrao	6	5	5	8	5	29
8	Chepurwar Komal Ramdas	5	5	2	8	8	28
9	Chitalkar Pooja Sanjay	3	2	0	4	0	9
10	Dagade Amruta Pandurang	7	6	5	8	4	30
11	Dandawate Shrikrishna Sushilkumar	5	5	4	4	0	18
12	Dhayagude Tejaswee Dattatray	8	8	7	3	2	28
13	Doshi Sakshi Satish	6	3	2	7	3	21
14	Gavade Prashant Ananda	6	5	0	0	2	13
15	Giramkar Tanuja Santosh	7	2	0	7	3	19
16	Gondage Anup Ravindra	3	3	0	5	0	11
17	Hadke Shraddha Ranjit	3	2	2	4	1	12

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Roll No	Name of Student	Evaluation Parameter					Out of 50 Marks
		CO 1	CO2	CO3	CO4	CO5	
18	Ifinge Suchit Sandip	0	0	0	0	0	0
19	Idawate Sushant Dattatry	1	0	0	0	0	1
20	Jadhav Neha Appasaheb	4	2	1	4	3	14
21	Jadhav Suraj Mahendra	3	0	0	2	2	7
22	Jagdale Renuka Lalaso	8	5	2	5	1	21
23	Kabadi Avishkar Balasaheb	8	4	4	3	5	24
24	Kamble Asawari Ajit	7	3	2	2	2	16
25	Kamble Kshitij Banaji	2	0	0	0	0	2
26	Kanase Shradha Ramchandra	8	0	0	4	1	13
27	Kasare Prathmesh Balasaheb	0	0	0	0	0	0
28	Kulkarni Vinay Vivek	2	5	0	2	0	9
29	Kumar Gautam	3	2	2	0	0	7
30	Kumbhar Mayuri Hanumant	7	6	3	8	4	28
31	Kumbhar Pooja Adinath	6	0	0	2	1	9
32	Kumbhar Prasad Dnyandeo	1	0	0	0	3	4
33	Kumbhar Trupti Bhimrao	3	2	3	1	2	11
34	Lende Anjali Santosh	3	1	0	0	0	4
35	Mali Vinayak Balkrushna	0	0	0	0	0	0
36	Mergal Avinash Dadaso	3	5	0	8	0	16
37	More Sonali Haridas	6	3	3	0	0	12
38	Mulik Ganesh Prabhakar	3	2	0	0	0	5
39	Nagar Keshav Sanjay	2	0	0	0	0	2
40	Nagawade Vaishnavi Kalyan	3	0	0	4	1	8
41	Nage Dhanashri Santosh	3	0	0	0	1	4
42	Nandni Raj	7	7	6	8	6	34
43	Nikam Rutuja Lalasaheb	0	0	0	0	3	3
44	Patil Madhuri Deepak	6	0	2	0	1	9
45	Paul Yogita Dilip	4	3	1	0	2	10



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Roll No	Name of Student	Evaluation Parameter					Out of 50 Marks
		CO 1	CO2	CO3	CO4	CO5	
46	Pawar Sakshi Raghunath	0	0	0	4	0	4
47	Rajguru Mrudula Pravin	8	5	6	8	0	27
48	Rajpure Vrushali Vasant	4	0	4	0	4	12
49	Rajput Surbhi	6	6	4	4	4	24
50	Ranaware Sonali Prashant	4	2	2	5	0	13
51	Rasal Sayali Dilip	1	2	0	4	4	11
52	Raut Abhishek Baliram	1	1	0	1	0	3
53	Salunkhe Gitanjali Arun	1	0	0	5	0	6
54	Samant Sangita Shakti	7	3	0	7	0	17
55	Shaikh Saniya Jilani	5	1	3	4	0	13
56	Shelke Ashwini Balaso	4	1	2	3	0	10
57	Shelke Nutan Vinayak	6	2	2	6	6	22
58	Shende Mallika Yashwant	3	3	2	7	0	15
59	Shinde Pradnya Suresh	AB	AB	AB	AB	AB	0
60	Shivam Ghanshyam Rane	5	2	0	0	0	7
61	Shivanand Bhausaheb Wakale	1	0	0	0	0	1
62	Sonawane Nihar Netaji	2	0	0	0	0	2
63	Sulakhe Suraj Popat	3	3	0	2	0	8
64	Tambe Aditya Arun	2	1	2	1	2	8
65	Taware Komal Sanjay	6	3	5	5	0	19
66	Tupkar Shashikant Laxmikant	2	1	0	0	0	3
67	Vyavahare Manju Haridas	8	7	5	8	6	34
Average		4.03	2.31	1.59	3.17	1.58	

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Roll No	Name of Student	Evaluation Parameter					Out of 50 Marks
		CO 1	CO2	CO3	CO4	CO5	
		27 out of 64 students	35 out of 64 students	30 out of 64 students	31 out of 64 students	24 out of 64 students	
	Percentage of students above average	42	40.6	47	48	37.50	
Attainment Level 3	Percentage of Students above Average > 77						
Attainment Level 2	Percentage of Students above Average > 50						
Attainment Level 1	Percentage of Students above Average > 40	1	1	1	1	1	

(Signature)
 Mr. Rakesh Kulkarni



(Signature)
 Director
 Vidya Pratishthan's
 Institute of Information Technology
 Vidyanagari, Baramati Dist-Pune

Attendance Sheet



Vidya Pratishthan's
Institute of Information Technology
We Shape Tomorrow's Today



NAAC
B GRADE

Class - MCA : I / II

Semester I / II / III / IV

Subject : Data Warehousing & Data Mining Theory/LAB

Faculty : Rakesh Kulkarni

Roll No.	Date	2023																				Total	
	Name of the Student	22/8	29/8	30/8	31/8	1/9	6/9	7/9	11/9	12/9	13/9	18/9	15/9	26/9	30/9	3/10	6/10	10/10	12/10	15/10	21/10		
1	Adagale Swamini Dhanaji	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	00	
2	Asalkar Ankita Hanumant	X	X	X	Amika	Amika	Amika	Amika	Amika	Amika	Amika	Amika	Amika	Amika	Amika	Amika	Amika	Amika	Amika	Amika	Amika	Amika	16
3	Bagade Saurav Manik	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	11
4	Bhalerao Mahima Satish	X	X	X	X	X	Mahima	Mahima	Mahima	Mahima	Mahima	Mahima	Mahima	Mahima	Mahima	Mahima	Mahima	Mahima	Mahima	Mahima	Mahima	Mahima	13
5	Bhalerao Pooja Gautam	X	X	X	X	X	Pooja	Pooja	Pooja	Pooja	Pooja	Pooja	Pooja	Pooja	Pooja	Pooja	Pooja	Pooja	Pooja	Pooja	Pooja	Pooja	10
6	Bhure Adhiraj Hanmant	Adhiraj	Adhiraj	Adhiraj	Adhiraj	Adhiraj	Adhiraj	Adhiraj	Adhiraj	Adhiraj	Adhiraj	Adhiraj	Adhiraj	Adhiraj	Adhiraj	Adhiraj	Adhiraj	Adhiraj	Adhiraj	Adhiraj	Adhiraj	Adhiraj	11
7	Chavan Sourabh Mohanrao	X	X	X	Sourabh	Sourabh	Sourabh	Sourabh	Sourabh	Sourabh	Sourabh	Sourabh	Sourabh	Sourabh	Sourabh	Sourabh	Sourabh	Sourabh	Sourabh	Sourabh	Sourabh	Sourabh	06
8	Chepurwar Komal Ramdas	X	X	X	Komal	Komal	Komal	Komal	Komal	Komal	Komal	Komal	Komal	Komal	Komal	Komal	Komal	Komal	Komal	Komal	Komal	Komal	16
9	Chitalkar Pooja Sanjay	X	X	X	Pooja	Pooja	Pooja	Pooja	Pooja	Pooja	Pooja	Pooja	Pooja	Pooja	Pooja	Pooja	Pooja	Pooja	Pooja	Pooja	Pooja	Pooja	15
10	Dagade Anruta Pandurang	X	X	X	Anruta	Anruta	Anruta	Anruta	Anruta	Anruta	Anruta	Anruta	Anruta	Anruta	Anruta	Anruta	Anruta	Anruta	Anruta	Anruta	Anruta	Anruta	16
11	Dandawate Shrikrishna Sushilkumar	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	14
12	Dhayagude Tejaswee Dattatray	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	17
13	Doshi Sakshi Satish	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	20
14	Gavade Prashant Ananda	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	23
15	Giramkar Tanuja Santosh	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	12
16	Gondage Anup Ravindra	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	12
17	Hadke Shraddha Ranjit	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	17
18	Hinge Suchit Sandip	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	08
19	Idawate Sushant Dattatray	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	14
20	Jadhav Neha Appasaheb	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	09
21	Jadhav Suraj Mahendra	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	10
22	Jagdale Renuka Lalaso	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	10
23	Kabadi Avishkar Balasaheb	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	10
24	Kamble Asawari Ajit	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	10
25	Kamble Kshiti Banaji	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	14
26	Kanase Shradha Ranchorandra	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	14
27	Kasare Prathmesh Balasaheb	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	14
28	Kulkarni Vinay Vivek	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	00



Attendance Sheet



Vidya Pratishthan's
Institute of Information Technology
WISHPADA, TANDRA, TELANGANA



NAAC

B⁺
GRADE

Class - MCA : I / II

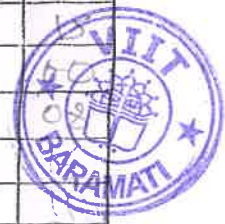
Semester I / II / III / IV

Subject :

Theory/LAB

Faculty :

Roll. No.	Date																			Total		
	Name of the Student	24/8	29/8	30/08	31/08	1/09	6/09	7/09	11/09	12/9	13/9	13/9	15/9	26/9	30/9	31/10	6/10	10/10	12/10		13/10	31/10
29	Kumar Gautam	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	00
30	Kumbhar Mayuri Hanumant	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	17
31	Kumbhar Pooja Adinath	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	14
32	Kumbhar Prasad Dnyandeo	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	13
33	Kumbhar Trupti Bhimrao	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	16
34	Lende Anjali Santosh	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	14
35	Mali Vinayak Balkrushna	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	06
36	Mergal Avinash Dadaso	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	15
37	More Sonali Haridas	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	15
38	Mulik Ganesh Prabhakar	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	00
39	Nagar Keshav Sanjay	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	12
40	Nagawade Vaishnavi Kalyan	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	14
41	Nage Dhanashri Santosh	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	13
42	Nandni Raj	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	10
43	Nikam Rutuja Lalasaheb	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	16
44	Patil Madhuri Deepak	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	14
45	Paul Yogita Dilip	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	16
46	Pawar Sakshi Raghunath	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	15
47	Rajguru Pruduka Pravin	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	12
48	Rajpure Vrushali Vasant	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	16
49	Rajput Surbhi	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	17
50	Ranaware Sonali Prashant	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	16
51	Rasal Sayali Dilip	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	16
52	Raut Abhishek Baliram	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	16
53	Salunkhe Gitanjali Arun	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	16
54	Samant Sangita Shakti	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	16
55	Shaikh Saniya Jilani	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	16
56	Shelke Ashwini Balaso	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	16



Attendance Sheet



Vidya Pratishthan's
Institute of Information Technology
We Shape Tomorrow... Today



NAAC

B⁺
GRADE

Class - MCA : I / II

Semester I / II / III / IV

Subject :

Theory/LAB

Faculty :

Roll. No.	Date																					Total		
	Name of the Student	28/8	29/8	30/8	31/8	1/09	6/09	7/09	11/09	12/09	13/9	13/9	15/9	26/9	30/9	31/9	6/10	10/10	12/10	13/10	31/10			
57	Shelke Nutan Vinayak	X	X	X	X	Nutan	Nutan	Nutan	Nutan	Nutan	Nutan	Nutan	Nutan	Nutan	Nutan	Nutan	Nutan	Nutan	Nutan	Nutan	Nutan	15		
58	Shende Mallika Yashwant	X	X	X	X	Shende	Shende	Shende	Shende	Shende	Shende	Shende	Shende	Shende	Shende	Shende	Shende	Shende	Shende	Shende	Shende	X	14	
59	Shinde Pradnya Suresh	X	X	X	X	Shinde	Shinde	Shinde	Shinde	Shinde	Shinde	Shinde	Shinde	Shinde	Shinde	Shinde	Shinde	Shinde	Shinde	Shinde	Shinde	Shinde	X	15
60	Shivam Ghanshyam Rane	X	X	X	X	Shivam	Shivam	Shivam	Shivam	Shivam	Shivam	Shivam	Shivam	Shivam	Shivam	Shivam	Shivam	Shivam	Shivam	Shivam	Shivam	Shivam	X	07
61	Shivanand Bhausahab Wakale	X	X	X	X	Shivanand	Shivanand	Shivanand	Shivanand	Shivanand	Shivanand	Shivanand	Shivanand	Shivanand	Shivanand	Shivanand	Shivanand	Shivanand	Shivanand	Shivanand	Shivanand	Shivanand	X	14
62	Sonawane Nihar Netaji	X	X	X	X	Sonawane	Sonawane	Sonawane	Sonawane	Sonawane	Sonawane	Sonawane	Sonawane	Sonawane	Sonawane	Sonawane	Sonawane	Sonawane	Sonawane	Sonawane	Sonawane	Sonawane	X	11
63	Sulakhe Suraj Popat	X	X	X	X	Sulakhe	Sulakhe	Sulakhe	Sulakhe	Sulakhe	Sulakhe	Sulakhe	Sulakhe	Sulakhe	Sulakhe	Sulakhe	Sulakhe	Sulakhe	Sulakhe	Sulakhe	Sulakhe	Sulakhe	X	00
64	Tambe Aditya Arun	X	X	X	X	Tambe	Tambe	Tambe	Tambe	Tambe	Tambe	Tambe	Tambe	Tambe	Tambe	Tambe	Tambe	Tambe	Tambe	Tambe	Tambe	Tambe	X	08
65	Taware Komal Sanjay	X	X	X	X	Taware	Taware	Taware	Taware	Taware	Taware	Taware	Taware	Taware	Taware	Taware	Taware	Taware	Taware	Taware	Taware	Taware	X	13
66	Tupkar Shashikant Laxmikant	X	X	X	X	Tupkar	Tupkar	Tupkar	Tupkar	Tupkar	Tupkar	Tupkar	Tupkar	Tupkar	Tupkar	Tupkar	Tupkar	Tupkar	Tupkar	Tupkar	Tupkar	Tupkar	X	15
67	Vyavahare Manju Haridas	X	X	X	X	Vyavahare	Vyavahare	Vyavahare	Vyavahare	Vyavahare	Vyavahare	Vyavahare	Vyavahare	Vyavahare	Vyavahare	Vyavahare	Vyavahare	Vyavahare	Vyavahare	Vyavahare	Vyavahare	Vyavahare	X	14
Total		09	15	14	22	27	48	54	54	50	45	44	57	54	54	56	51	51	45	37	16			

Subject Teacher
Name: Mr. Rakesh Kulkarni



Dr. Mayank R. Kothawade
HOD
Dr. Mayank R. Kothawade

Dr. Maheshwari
Director
Vidya Pratishthan's
Institute of Information Technology
Vidyanagari, Baramati Dist-Pune

Attendance Sheet



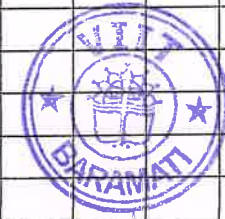
Class - MCA : I / II

Semester I / II / III / IV

Subject : Data warehousing & D.M., Theory/LAB

Faculty : Mr. Rakesh R. Kulkarni

Roll. No.	Date																	Total
	2023			11:30	01:30													
	Name of the Student	1/11	2/11	3/11	3/11	7/11	16/11	17/11	24/11									
1	Adagale Swamini Dhanaji	X	X	X	X	X	X	X	X									9
2	Asalkar Ankita Hanumant	Ankita	Ankita	Ankita	Ankita	X	X	X	X									9
3	Bagade Saurav Manik	X	X	X	X	X	X	X	X									9
4	Bhalerao Mahima Satish	X	X	X	X	X	X	X	X									9
5	Bhalerao Pooja Gautam	Pooja	Pooja	Pooja	Pooja	Pooja	Pooja	X	Pooja									9
6	Bhure Adhiraj Hanmant	X	X	X	Adhiraj	X	X	X	X									9
7	Chavan Sourabh Mohanrao	X	X	X	X	X	X	X	X									9
8	Chepurwar Komal Ramdas	Komal	Komal	Komal	Komal	X	X	X	X									9
9	Chitalkar Pooja Sanjay	Pooja	Pooja	Pooja	Pooja	X	X	X	X									9
10	Dagade Amruta Pandurang	Amruta	Amruta	Amruta	Amruta	X	X	X	X									9
11	Dandawate Shrikrishna Sushilkumar	Sushil	Sushil	Sushil	Sushil	X	X	X	X									9
12	Dhayagude Tejaswee Dattatray	Tejaswee	Tejaswee	Tejaswee	Tejaswee	X	X	X	X									9
13	Doshi Sakshi Satish	Sakshi	Sakshi	Sakshi	Sakshi	X	X	X	X									9
14	Gavade Prashant Ananda	Prashant	Prashant	Prashant	Prashant	X	X	X	X									9
15	Giramkar Tanuja Santosh	Tanuja	Tanuja	Tanuja	Tanuja	X	X	X	X									9
16	Gondage Anup Ravindra	Anup	X	Anup	Anup	Anup	X	X	Anup									9
17	Hadke Shraddha Ranjit	Shraddha	Shraddha	Shraddha	Shraddha	X	X	X	X									9
18	Hinge Suchit Sandip	Suchit	Suchit	X	Suchit	Suchit	X	X	X									9
19	Idawate Sushant Dattatry	Sushant	Sushant	Sushant	Sushant	X	X	X	X									9
20	Jadhav Neha Appasaheb	Neha	Neha	Neha	Neha	X	X	X	X									9
21	Jadhav Suraj Mahendra	X	X	X	X	X	X	X	X									9
22	Jagdale Renuka Lafaso	Renuka	Renuka	Renuka	Renuka	X	X	X	X									9
23	Kabadi Avishkar Balasaheb	Avishkar	X	X	Avishkar	X	X	X	Avishkar									9
24	Kamble Asawari Ajit	Asawari	Asawari	Asawari	Asawari	X	X	X	X									9
25	Kamble Kshiti Banaji	Kshiti	Kshiti	Kshiti	Kshiti	Kshiti	X	X	Kshiti									9
26	Kanase Shradha Ramchandra	SRK	SRK	SRK	SRK	X	X	X	X									9
27	Kasare Prathmesh Balasaheb	X	X	X	X	X	X	X	X									9
28	Kulkarni Vinay Vivek	X	X	X	X	X	X	X	Vinay									9



Attendance Sheet



Class - MCA : I / II

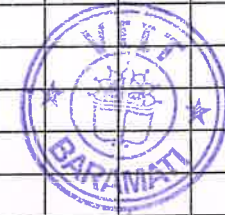
Semester I / II / III / IV

Subject :

Theory/LAB

Faculty :

Roll. No.	Date	1/11	2/11	3/11	8/11	7/11	16/11	17/11	24/11	Total
29	Kumar Gautam	X	X	X	X	X	X	X	X	0
30	Kumbhar Mayuri Hanumant	X	X	X	X	X	X	X	X	4
31	Kumbhar Pooja Adinath	X	X	X	X	X	X	X	X	2
32	Kumbhar Prasad Dnyandeo	X	X	X	X	X	X	X	X	2
33	Kumbhar Trupti Bhimrao	X	X	X	X	X	X	X	X	4
34	Lende Anjali Santosh	X	X	X	X	X	X	X	X	4
35	Mali Vinayak Balkrushna	X	X	X	X	X	X	X	X	5
36	Mergal Avinash Dadaso	X	X	X	X	X	X	X	X	5
37	More Sonali Haridas	X	X	X	X	X	X	X	X	4
38	Mulik Ganesh Prabhakar	X	X	X	X	X	X	X	X	5
39	Nagar Keshav Sanjay	X	X	X	X	X	X	X	X	5
40	Nagawade Vaishnavi Kalyan	X	X	X	X	X	X	X	X	4
41	Nage Dhanashri Santosh	X	X	X	X	X	X	X	X	4
42	Nandni Raj	X	X	X	X	X	X	X	X	4
43	Nikam Rutuja Lalasaheb	X	X	X	X	X	X	X	X	2
44	Patil Madhuri Deepak	X	X	X	X	X	X	X	X	4
45	Paul Yogita Dilip	X	X	X	X	X	X	X	X	4
46	Pawar Sakshi Raghunath	X	X	X	X	X	X	X	X	4
47	Rajguru Prudula Pravin	X	X	X	X	X	X	X	X	4
48	Rajpure Vrushali Vasant	X	X	X	X	X	X	X	X	4
49	Rajput Surbhi	X	X	X	X	X	X	X	X	0
50	Ranaware Sonali Prashant	X	X	X	X	X	X	X	X	4
51	Rasal Sayali Dilip	X	X	X	X	X	X	X	X	4
52	Raut Abhishek Baliram	X	X	X	X	X	X	X	X	0
53	Salunkhe Gitanjali Arun	X	X	X	X	X	X	X	X	4
54	Samant Sangita Shakti	X	X	X	X	X	X	X	X	4
55	Shaikh Saniya Jilani	X	X	X	X	X	X	X	X	0
56	Shelke Ashwini Balasa	X	X	X	X	X	X	X	X	2



Attendance Sheet



Vidya Pratishthan's
Institute of Information Technology
We Shape Tomorrow...Today



NAAC

'B' GRADE

Class - MCA : I / II

Semester I / II / III / IV

Subject :

Theory/LAB

Faculty :

Roll. No.	Date			11:30	1:30														Total
	Name of the Student	1/11	2/11	3/11	3/11	7/11	16/11	17/11	24/11										
57	Shelke Nutan Vinayak	Present	Present	Present	Present	X	X	X	X										4
58	Shende Mallika Yashwant	Present	Present	Present	Present	X	X	X	X										4
59	Shinde Pradnya Suresh	Present	Present	Present	Present	X	X	X	X										4
60	Shivam Ghanshyam Rane	Present	Present	Present	Present	Present	X	Present	Present										7
61	Shivanand Bhausaheb Wakale	Present	Present	Present	Present	X	X	X	X										4
62	Sonawane Nihar Netaji	NNS	NNS	NNS	NNS	NNS	X	X	X										5
63	Sulakhe Suraj Popat	X	X	X	X	X	X	X	X										0
64	Tambe Aditya Arun	Present	Present	Present	Present	X	X	X	X										4
65	Taware Komal Sanjay	X	X	Present	Present	X	X	X	X										2
66	Tupkar Shashikant Laxmikant	Present	Present	Present	Present	X	X	X	X										4
67	Vyavahare Manju Haridas	Present	Present	Present	Present	X	Present	X	X										5
Total		51	49	50	50	68	69	61	67										

Subject Teacher
Name: Ms. Rakesh R. Kulkarni



Dr. Mayank R. Kothawade
HOD
Dr. Mayank R. Kothawade

Deekshant
Director
Vidya Pratishthan's
Institute of Information Technology
Vidyanagari, Baramati Dist-Pune



LECTURE RECORD

CLASS MCA - I, II SEMESTER I, II, III, IV
SUBJECT Data Warehousing & Mining THEORY/LAB TEACHER MR. Rakesh R. Kulkarni

SR. No.	DATE	TOPICS COVERED	TIME		No. PRESENT	SIGNATURE		
			START	END		STUDENT	FACULTY	HOD
1)	28/08/23	Data warehouse Fundamentals, introduction	9:00	10:00	9	[Signature]	[Signature]	[Signature]
2)	29/08/23	OLTP systems Difference - OLTP system & Data warehouse	11:30	12:30	15	[Signature]	[Signature]	
3)	30/08/23	Characteristics of D.W., functionality of D.W.	12:30	1:30	14	[Signature]	[Signature]	
4)	31/08/23	Advantages & Applications of D.W.	09:00	10:00	22	[Signature]	[Signature]	
5)	1/09/23	Top-Down & Bottom-up Development Methodology	9:00	10:00	27	[Signature]	[Signature]	
6)	6/09/23	Tools for D.W. Development, D.W. Types.	10:30	11:30	48	[Signature]	[Signature]	[Signature]
7)	7/09/23	Planning & Project Management in D.W. Project Construction	10:30	11:30	54	[Signature]	[Signature]	
8)	11/09/23	D.W. development life cycle, Kimball	10:30	11:30	54	[Signature]	[Signature]	
9)	11/09/23	Life cycle Diagram. unit 2 & design.				[Signature]	[Signature]	
10)	12/09/23	Unit 2: Data warehouse Architecture. Inter. Components, of D.W. Archi.	11:30	1:30	45	[Signature]	[Signature]	
11)	12/09/23	Technical Architecture, Federated D.W. Architecture & Tool selection				[Signature]	[Signature]	[Signature]
12)	12/09/23	Dimensional Modeling - ER vs Dimensional				[Signature]	[Signature]	

[Signature]
Signature of Teacher



[Signature]
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Vidya Pratishthan's
Institute of Information Technology
Vidyanagari, Baramati Dist-Pune

[Signature]
Signature of HOD



LECTURE RECORD

CLASS MCA - I, II SEMESTER I, II, III, IV
 SUBJECT Data Warehousing & Data Mining THEORY/LAB TEACHER Mr. Rakesh R. Kulkarni

SR. No.	DATE	TOPICS COVERED	TIME		No. PRESENT	SIGNATURE		
			START	END		STUDENT	FACULTY	HOD
13)	13/09/2023	D.W schemas:- star, schema, inside Dimensional table. inside fact table, Fact less fact	11:30	1:30	45	<i>[Signature]</i>	<i>[Signature]</i>	
14)	13/09/2023	table, Granularity, star, schema, snowflake schema, fact constellation schema						
15)	13/09/2023	Introduction to Metadata: categorizing metadata				<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
16)	15/09/2023	Metadata management, Requirement gathering, classification, M.D collection, Tools	10:30	10:30	54	<i>[Signature]</i>	<i>[Signature]</i>	
17)	15/09/2023	Unit 2 Revision, Unit 3: Data Preprocessing				<i>[Signature]</i>	<i>[Signature]</i>	
18)	26/09/2023	Cleaning task, integration & Reduction, Discretization & concept hierarchy	12:30	1:30	54	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
19)	26/09/2023	Data Transformation Basic tasks in Transformation Major data Transformation Types				<i>[Signature]</i>	<i>[Signature]</i>	
20)	30/09/2023	Introduction to ETL, ETL environments & steps	11:30	12:30	54	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
21)	30/09/2023	Data loading :- Techniques & Tools unit 3 - revision				<i>[Signature]</i>	<i>[Signature]</i>	
22)	3/10/2023	Unit 4:- intro what is OLAP? characteristics of OLAP	11:30	12:30	56	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
23)	3/10/2023	Steps in the OLAP Creation, OLAP operation, Adv. of OLAP				<i>[Signature]</i>	<i>[Signature]</i>	
24)	6/10/2023	OLAP Architecture, MOLAP, ROLAP, HCOLAP Data W. & OLAP:- Hypercube & Multicubes	12:30	1:30	51	<i>[Signature]</i>	<i>[Signature]</i>	

[Signature]
Signature of Teacher



[Signature]
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Vidyanagari, Baramati Dist-Pune

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LECTURE RECORD

CLASS MCA - I, II SEMESTER I, II, III, IV
SUBJECT Data Warehousing & Data Mining THEORY/LAB TEACHER MR. PARESH R. KULKARNI

SR. No.	DATE	TOPICS COVERED	TIME		No. PRESENT	SIGNATURE		
			START	END		STUDENT	FACULTY	HOD
25)	6/10/2023	Unit 5: Introduction to Data Mining. Intro & scope of D.M. works parallel	12:30	1:30	51	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
26)	10/10/2023	How D.M. works, Predictive Modeling, Data Mining & D.W.	11:30	1:30	37	<i>[Signature]</i>	<i>[Signature]</i>	
27)	10/10/2023	Architecture of Data Mining.				<i>[Signature]</i>	<i>[Signature]</i>	
28)	12/10/2023	Profitable Applications, DM. Tools. Revision.	12:30	1:30	45	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
29)	12/10/2023	Unit 6: Data Mining Techniques an overview: Introduction DM Data				N.A.S.	<i>[Signature]</i>	
30)	13/10/2023	mining versus D.BMS. systems.	12:30	1:30	37	<i>[Signature]</i>	<i>[Signature]</i>	
31)	13/10/2023	DM Techniques - Association, Rules, CART, FP Tree algorithms				<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
32)	31/10/2023	Classification, CD, induction, Bayesian classification, SVM, KNN	11:30	12:30	16	<i>[Signature]</i>	<i>[Signature]</i>	
33)	3/11/2023	clustering Neural Networks, Evaluating		12:30		<i>[Signature]</i>	<i>[Signature]</i>	
34)	1/11/2023	Association Rules, classification Model.	9:00	10:00	51	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
35)	1/11/2023	Unit 7 - clustering Intro to clustering, cluster Analysis				<i>[Signature]</i>	<i>[Signature]</i>	
36)	2/11/2023	clustering Methods, K-means, Hierarchical clustering.	12:30	1:30	49	<i>[Signature]</i>	<i>[Signature]</i>	

Signature of Teacher

[Signature]
Director

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Institute of Information Technology
Vidyanagari, Baramati Dist-Pune



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LECTURE RECORD

CLASS MCA - I, II SEMESTER I, II, III, IV
SUBJECT Data ware housing & data mining THEORY/LAB TEACHER Mr. Rakesh P. Kulkarni

SR. No.	DATE	TOPICS COVERED	TIME		No. PRESENT	SIGNATURE			
			START	END		STUDENT	FACULTY	HOD	
37	2/11/2023	Agglomerative clustering, Divisive clustering.	12:30	1:30	49	[Signature]	[Signature]	}	
38	8/11/2023	clustering & segmentan s/w, evaluating clusters				[Signature]	[Signature]		
39	3/11/2023	Data mining trends & application.	11:30	1:30	50	[Signature]	[Signature]		
40	3/11/2023	8- web mining, inter. Terminologies				[Signature]	[Signature]		
41	7/11/2023	categories of web mining - web content	} 11:30 to 12:30		08	[Signature]	[Signature]	}	
42	7/11/2023	mining, web structure & web uses mining.					[Signature]		[Signature]
43	16/11/2023	Application of w.M. & agent based & 16 approaches. w.M. tools.	12:30	12:30	04	[Signature]	[Signature]		}
44	17/11/2023	Text mining: process & types, steps in text mining	12:30	12:30	04	[Signature]	[Signature]		
45	24/11/2023	Data visualization, Dashboard - KPI Business Intelligence & its future	12:30	1:30	07	[Signature]	[Signature]		

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Signature of Teacher

[Signature]
Director
Vidya Pratishthan's
Institute of Information Technology
Vidyanagari, Baramati Dist-Pune



[Signature]
Signature of HOD



Preliminary Examination- November 2023

Date: 20/11/2023 Time: 02: 30 Hours
 Class: MCA – II Max. Marks 50
 Subject: DATA WAREHOUSING AND DATA MINING

Instructions:

- i) All questions are compulsory.
- ii) All questions carry equal marks (10).

	Applicable CO						Questions	Mar
	CO1	CO2	CO3	CO4	CO5	CO6		
Action Verb	Remembering	Understand	Applying	Analyzing	Evaluating	Creating		
Q.1	✓	✓					A. What is a Data warehouse. Explain the need and characteristics of Data warehouse. B. Explain the schemas of Data warehouse.	10
OR								
Q.2	✓	✓	✓				A. Explain Kimball Life Cycle diagram in detail. B. What is a Data warehouse? Explain the properties of Data warehouse architecture.	10
OR								
Q.3	✓	✓					A. Explain ETL process with neat diagram. B. What is Multidimensional Data?	10
OR								
							A. Discuss Data mining architecture	



							B. What are different types of Classification algorithm?															
Q.4	✓	✓	✓	✓	✓		<p>A. Write difference between Data mining and Data Warehousing</p> <p>B. Apply FP Tree Algorithm to construct FP Tree and find frequent itemset for the following dataset given below Support threshold=50%, Confidence= 60%</p> <table border="1"> <thead> <tr> <th>Transaction</th> <th>List of items</th> </tr> </thead> <tbody> <tr> <td>T1</td> <td>I1,I2,I3</td> </tr> <tr> <td>T2</td> <td>I2,I3,I4</td> </tr> <tr> <td>T3</td> <td>I4,I5</td> </tr> <tr> <td>T4</td> <td>I1,I2,I4</td> </tr> <tr> <td>T5</td> <td>I1,I2,I3,I5</td> </tr> <tr> <td>T6</td> <td>I1,I2,I3,I4</td> </tr> </tbody> </table>	Transaction	List of items	T1	I1,I2,I3	T2	I2,I3,I4	T3	I4,I5	T4	I1,I2,I4	T5	I1,I2,I3,I5	T6	I1,I2,I3,I4	10
Transaction	List of items																					
T1	I1,I2,I3																					
T2	I2,I3,I4																					
T3	I4,I5																					
T4	I1,I2,I4																					
T5	I1,I2,I3,I5																					
T6	I1,I2,I3,I4																					

OR

							<p>A. Differentiate between MOLAP,ROLAP and HOLAP.</p> <p>B. Find the frequent itemsets and generate association rules on given dataset. Assume that minimum support threshold ($s = 33.33\%$) and minimum confident threshold ($c = 60\%$)</p> <table border="1"> <thead> <tr> <th>Transaction ID</th> <th>Items</th> </tr> </thead> <tbody> <tr> <td>T1</td> <td>Hot Dogs, Buns, Ketchup</td> </tr> <tr> <td>T2</td> <td>Hot Dogs, Buns</td> </tr> <tr> <td>T3</td> <td>Hot Dogs, Coke, Chips</td> </tr> <tr> <td>T4</td> <td>Chips, Coke</td> </tr> <tr> <td>T5</td> <td>Chips, Ketchup</td> </tr> <tr> <td>T6</td> <td>Hot Dogs, Coke, Chips</td> </tr> </tbody> </table>	Transaction ID	Items	T1	Hot Dogs, Buns, Ketchup	T2	Hot Dogs, Buns	T3	Hot Dogs, Coke, Chips	T4	Chips, Coke	T5	Chips, Ketchup	T6	Hot Dogs, Coke, Chips	
Transaction ID	Items																					
T1	Hot Dogs, Buns, Ketchup																					
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T3	Hot Dogs, Coke, Chips																					
T4	Chips, Coke																					
T5	Chips, Ketchup																					
T6	Hot Dogs, Coke, Chips																					

Q.5	✓	✓					<p>A. Explain Apriori algorithm with example.</p> <p>B. Write a short notes on</p> <p>1)Clustering</p> <p>2)Tools for Meta Data Management</p>	
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OR

							<p>A. What is Tree Pruning? Explain with example</p> <p>B. Write a short notes on</p> <p>1)Regression</p> <p>2)Data Mart</p>	
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Adeshwar
Director
Vidya Pratishthan's
Institute of Information Technology
Vidyanagari, Baramati Dist-Pune



Preliminary Examination Nov. 2023 : Attendance Sheet (A.Y. 2023-24)

Class: MCA – II

Semester: III

Date: 20/11/2023

Time: 2:30 Hours

Subject: DATA WAREHOUSING AND DATA MINING

Roll No.	Name of Student	Marks	Student Sign	Ans. Book Received
1	Adagale Swamini Dhanaji	—	AB	
2	Asalkar Ankita Hanumant	15	Asalkar	
3	Bagade Saurav Manik	09	Bagade	
4	Bhalerao Mahima Satish	—	AB	
5	Bhalerao Pooja Gautam	25	Pooja	
6	Bhure Adhiraj Hanmant	18	Adhiraj	
7	Chavan Sourabh Mohanrao	25	Chavan	
8	Chepurwar Komal Ramdas	28	Chepurwar	
9	Chitalkar Pooja Sanjay	09	Chitalkar	
10	Dagade Amruta Pandurang	30	Dagade	
11	Dandawate Shrikrishna Sushilkumar	18	Dandawate	
12	Dhayagude Tejaswee Dattatray	28	Dhayagude	
13	Doshi Sakshi Satish	21	Sakshi	
14	Gavade Prashant Ananda	13	Pravode	
15	Giramkar Tanuja Santosh	21	Tanuja	
16	Gondage Anup Ravindra	11	Gondage	
17	Hadke Shraddha Ranjit	12	Hadke	
18	Hinge Suchit Sandip	00	Hinge	
19	Idawate Sushant Dattatry	01	Idawate	
20	Jadhav Neha Appasaheb	14	Jadhav	
21	Jadhav Suraj Mahendra	07	Jadhav	
22	Jagdale Renuka Lalaso	21	Jagdale	
23	Kabadi Avishkar Balasaheb	19	Kabadi	
24	Kamble Asawari Ajit	16	Kamble	



Director
Vidya Pratishthan's
Institute of Information Techn
Vidyanand
Baramati Dist

Total Present	Total Absent	Total Students	Name and Signature of Supervisor
22	02	24	Aswale S Omase



Preliminary Examination Nov. 2023 : Attendance Sheet (A.Y. 2023-24)

Class: MCA - II

Semester: III

Date: 20/11/2023

Time: 2+4 Hours @ 2:30

Subject: Data Warehousing and Data Mining

Roll No.	Name of Student	Marks	Student Sign	Ans. Book Received
25	Kamble Kshitij Banaji	2	<u>KK</u>	
26	Kanase Shradha Ramchandra	13	<u>SK</u>	
27	Kasare Prathmesh Balasaheb	00	<u>PK</u>	
28	Kulkarni Vinay Vivek	09	<u>VK</u>	
29	Kumar Gautam	07	<u>GK</u>	
30	Kumbhar Mayuri Hanumant	08	<u>MK</u>	
31	Kumbhar Pooja Adinath	09	<u>PK</u>	
32	Kumbhar Prasad Dnyandeo	09	<u>PK</u>	
33	Kumbhar Trupti Bhimrao	11	<u>TK</u>	
34	Lende Anjali Santosh	09	<u>AL</u>	
35	Mali Vinayak Balkrushna	00	<u>VM</u>	
36	Mergal Avinash Dadaso	16	<u>AM</u>	
37	More Sonali Haridas	12	<u>SM</u>	
38	Mulik Ganesh Prabhakar	05	<u>MG</u>	
39	Nagar Keshav Sanjay	02	<u>NK</u>	
40	Nagawade Vaishnavi Kalyan	08	<u>NV</u>	
41	Nage Dhanashri Santosh	04	<u>ND</u>	
42	Nandni Raj	04	<u>NR</u>	
43	Nikam Rutuja Lalasaheb	03	<u>NR</u>	
44	Patil Madhuri Deepak	09	<u>PM</u>	
45	Paul Yogita Dilip	10	<u>YP</u>	
46	Pawar Sakshi Raghunath	09	<u>PS</u>	
47	Rajguru Mudula Pravin	27	<u>RP</u>	
48	Rajpure Vrushali Vasant	12	<u>RV</u>	



Deesh...
Director
Vidya Pratishthan's
Institute of Information Technology
Vidyamagari, Baramati Dist-pun

Total Present	Total Absent	Total Students	Name and Signature of Supervisor
24	00	24	Ms. Sachin T. Keskare

Sachin



Preliminary Examination Nov. 2023 : Attendance Sheet (A.Y. 2023-24)

Class: MCA - II	Semester: III
Date: 20/11/2023	Time: 2:30 Hours
Subject: <u>Data Warehousing & Data Mining</u>	

Roll No.	Name of Student	Marks	Student Sign	Ans. Book Received
49	Rajput Surbhi	24	SR	
50	Ranaware Sonali Prashant	13	Sonali	
51	Rasal Sayali Dilip	11	S.D.Rasal	
52	Raut Abhishek Baliram	03	Baut.	
53	Salunkhe Gitanjali Arun	06	Salunkhe.	
54	Samant Sangita Shakti	17	S.S. Samant	
55	Shaikh Saniya Jilani	13	S.J. Shaikh	
56	Shelke Ashwini Balaso	10	Ashwini	
57	Shelke Nutan Vinayak	22	Nutan	
58	Shende Mallika Yashwant	13	Shende	
59	Shinde Pradnya Suresh		AB	
60	Shivam Ghanshyam Rane	07	Rane	
61	Shivanand Bhausaheb Wakale	01	Shivanand	
62	Sonawane Nihar Netaji	02	Nihar	
63	Sulakhe Suraj Popat	08	Sulakhe	
64	Tambe Aditya Arun	08	A. Tambe	
65	Taware Komal Sanjay	19	K. Taware	
66	Tupkar Shashikant Laxmikant	03	Tupkar	
67	Vyavahare Manju Haridas	39	MH	



Deekshant
Director
Vidya Pratishthan's
Institute of Information Technology
Vidyanagari, Baramati Dist-Pune

Total Present	Total Absent	Total Students	Name and Signature of Supervisor
18	01	19	Rakesh Kulkarni

Data Warehousing and Data Mining Assignments

Assignment 1

Each Question Caries 5 marks

- Q1.Explain data Warehouse development life cycle with neat diagram
- Q2. Explain Snowflake schema with example
- Q3.What is data discretization ? Explain with suitable example
- Q4. What is OLAP? What are different Characteristics of OLAP?

Assignment 2

Each Question Caries 5 marks

- Q1.Explain the Process of KDD.
- Q2.How does Naive Bayes Algorithm work ?
- Q3.What are the different Types of Clustering ?
- Q4. Explain Text mining Process



MCA II Sem III
Internal Evaluation Sheet A.Y. 2023-24
Subject : DWDM

Roll No.	Name of student	Attendance	Assignments	Prelim Exam	Viva	Total	Signature
		5 Marks	5 Marks	10 Marks	5 Marks	25 Marks	
1	Adagale Swamini Dhanaji						
2	Asalkar Ankita Hanumant	5	5 ✓	8	4	22	<i>Asalkar</i>
3	Bagade Saurav Manik	5	5 ✓	7	3	20	<i>Bagade</i>
4	Bhalerao Mahima Satish						
5	Bhalerao Pooja Gautam	5	5 ✓	9	1	23	
6	Bhure Adhiraj Hanmant	5	5 ✓	7	3	20	<i>Adhiraj</i>
7	Chavan Sourabh Mohanrao	5	5 ✓	9	4	23	<i>Chavan</i>
8	Chepurwar Komal Ramdas	5	5 ✓	9	4	23	<i>Komal</i>
9	Chitalkar Pooja Sanjay	5	5 ✓	8	4	22	<i>Chitalkar</i>
10	Dagade Amruta Pandurang	5	5 ✓	9	4	23	<i>Dagade</i>
11	Dandawate Shrikrishna Sushilkumar	5	5 ✓	9	3	22	<i>Dandawate</i>
12	Dhayagude Tejaswee Dattatray	5	5 ✓	9	4	23	<i>Tejaswee</i>
13	Doshi Sakshi Satish	5	5 ✓	9	4	23	<i>Sakshi</i>
14	Gavade Prashant Ananda	2	5 ✓	8	5	20	<i>Prashant</i>
15	Giramkar Tanuja Santosh	4	5 ✓	9	4	22	<i>Giramkar</i>
16	Gondage Anup Ravindra	4	5 ✓	8	4	21	<i>Anup</i>
17	Hadke Shraddha Ranjit	4	5 ✓	7	4	20	<i>Shraddha</i>
18	Hinge Suchit Sandip	4	5 ✓	8	5	22	<i>Hinge</i>
19	Idawate Sushant Dattatry	4	5 ✓	7	5	21	<i>Sushant</i>
20	Jadhav Neha Appasaheb	4	5 ✓	8	4	21	<i>Jadhav</i>
21	Jadhav Suraj Mahendra	4	5 ✓	8	4	21	<i>Suraj</i>
22	Jagdale Renuka Lalaso	5	5 ✓	9	4	23	<i>Jagdale</i>
23	Kabadi Avishkar Balasaheb	4	5 ✓	8	4	21	<i>Avishkar</i>

(Handwritten Signature)



MCA II Sem III
Internal Evaluation Sheet A.Y. 2023-24
Subject : DWDM

Roll No.	Name of student	Attendance	Assignments	Prelim Exam	Viva	Total	Signature
		5 Marks	5 Marks	10 Marks	5 Marks	25 Marks	
24	Kamble Asawari Ajit	5	5 ✓	8	4	22	Asawari
25	Kamble Kshitij Banaji	5	5 ✓	7	4	21	Kamble
26	Kanase Shradha Ramchandra	5	5 ✓	7	4	21	Shradha
27	Kasare Prathmesh Balasaheb	4	5 ✓	8	4	21	Kasare
28	Kulkarni Vinay Vivek	4	5 ✓	8	4	21	Vivek
29	Kumar Gautam	4	5 ✓	8	5	21	Gautam
30	Kumbhar Mayuri Hanumant	5	5 ✓	9	4	23	Mayuri
31	Kumbhar Pooja Adinath	5	5 ✓	8	4	22	Pooja
32	Kumbhar Prasad Dnyandeo	5	5 ✓	8	4	22	Prasad
33	Kumbhar Trupti Bhimrao	5	5 ✓	8	4	22	Trupti
34	Lende Anjali Santosh	5	5 ✓	8	4	22	Anjali
35	Mali Vinayak Balkrushna	5	5 ✓	8	5	23	Vinayak
36	Mergal Avinash Dadaso	5	5 ✓	7	4	21	Avinash
37	More Sonali Haridas	5	5 ✓	7	4	21	Sonali
38	Mulik Ganesh Prabhakar	3	5 ✓	8	4	20	Ganesh
39	Nagar Keshav Sanjay	4	5 ✓	7	4	20	Keshav
40	Nagawade Vaishnavi Kalyan	5	5 ✓	8	4	22	Vaishnavi
41	Nage Dhanashri Santosh	5	5 ✓	8	4	22	Dhanashri
42	Nandni Raj	5	5 ✓	9	4	23	Nandni
43	Nikam Rutuja Lalasaheb	4	5 ✓	8	5	22	Rutuja
44	Patil Madhuri Deepak	5	5 ✓	7	4	21	Madhuri
45	Paul Yogita Dilip	5	5 ✓	7	4	21	Yogita
46	Pawar Sakshi Raghunath	5	5 ✓	8	4	22	Sakshi

4/12/2023



MCA II Sem III
Internal Evaluation Sheet A.Y. 2023-24
Subject : DWDM

Roll No.	Name of student	Attendance	Assignments	Prelim Exam	Viva	Total	Signature
		5 Marks	5 Marks	10 Marks	5 Marks	25 Marks	
47	Rajguru Mrudula Pravin	5	5 ✓	9	4	23	MP
48	Rajpure Vrushali Vasant	5	5 ✓	8	4	22	Rajpure
49	Rajput Surbhi	5	5 ✓	9	4	23	Surbhi
50	Ranaware Sonali Prashant	5	5 ✓	7	5	22	Sonali
51	Rasal Sayali Dilip	5	5 ✓	7	5	22	S.D. Rasal
52	Raut Abhishck Baliram	3	5 ✓	8	5	21	
53	Saunkhe Gitanjali Arun	5	5 ✓	7	4	21	Gitanjali
54	Samant Sangita Shakti	5	5 ✓	8	4	22	Sangita
55	Shaikh Saniya Jilani	5	5 ✓	7	4	21	S.Shaikh
56	Shelke Ashwini Balaso	5	5 ✓	7	4	21	Ashwini
57	Shelke Nutan Vinayak	5	5 ✓	9	4	23	Nutan
58	Shende Mallika Yashwant	5	5 ✓	8	4	22	Mallika
59	Shinde Pradnya Suresh	5	5 ✓	7	4	21	Pradnya
60	Shivam Ghanshyam Rane	5	5 ✓	7	4	21	Shivam
61	Shivanand Bhausaheb Wakale	4	5 ✓	8	5	22	Shivanand
62	Sonawane Nihar Netaji	4	5 ✓	8	5	22	Nihar
63	Sulakhe Suraj Popat	4	5 ✓	8	5	23	Suraj
64	Tambe Aditya Arun	4	5 ✓	8	5	22	Aditya
65	Taware Komal Sanjay	5	5 ✓	7	4	21	Komal
66	Tupkar Shashikant Laxmikant	5	5 ✓	7	4	21	Shashikant
67	Vyavahare Manju Haridas	5	5 ✓	9	4	23	Manju

M. Rakesh Kulkarni

M. Rakesh Kulkarni



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Vidya Pratishthan's
Institute of Information Technology
Vidyanagari, Baramati Dist-Pune

Course Code: IT-32
Course Name: Data Warehousing and Data Mining
Question Bank

Faculty Name: Rakesh Kulkarni

1. Data Warehouse Fundamentals

- a. Explain the concept of a data warehouse and discuss the key characteristics that distinguish it from operational databases.
- b. Discuss the role of a data warehouse in decision support systems and how it enhances business intelligence.
- c. Describe the different types of data warehouses (enterprise, data mart, virtual warehouse) and their respective use cases.
- d. Explain the ETL (Extract, Transform, Load) process in the context of data warehousing. Discuss each phase in detail.
- e. Discuss the significance of data warehousing in the context of big data. How do modern data warehouses handle the challenges posed by big data?

2. Data Warehouse Architecture

- a. Describe the three-tier architecture of a data warehouse. What are the key components of each tier?
- b. Explain the differences between centralized and decentralized data warehouse architectures. What are the advantages and disadvantages of each?
- c. Discuss the role of metadata in data warehouse architecture. How is metadata managed and used?
- d. Explain the concept of a star schema and a snowflake schema in data warehouse design. What are the advantages and disadvantages of each?
- e. Discuss the role of data warehouse architecture in ensuring data quality and integrity. How are issues such as data consistency and redundancy handled?

3. Data Preprocessing and ETL

- a. Explain the importance of data preprocessing in the ETL process. What are the common preprocessing techniques used?
- b. Discuss the challenges faced during the data extraction phase of ETL. How can these challenges be mitigated?
- c. Explain the data transformation phase in ETL. What types of transformations are typically performed, and why are they necessary?
- d. Discuss the issues involved in the data loading phase of ETL. How can the performance of data loading be optimized?
- e. Describe the role of data cleaning in the ETL process. What are the common data cleaning techniques, and how do they improve data quality?

4. Data Warehouse & OLAP

- a. Explain the concept of Online Analytical Processing (OLAP) and its significance in data warehousing.



- b. Discuss the differences between OLAP and OLTP (Online Transaction Processing) systems. How do their architectures and purposes differ?
- c. Describe the different types of OLAP systems (ROLAP, MOLAP, HOLAP). What are their respective advantages and disadvantages?
- d. Explain the concept of a data cube in OLAP. How is it used to facilitate multidimensional analysis?
- c. Discuss the role of OLAP in business intelligence. How do OLAP tools support complex analytical queries and reporting?

5. Introduction to Data Mining

- a. Define data mining and discuss its importance in extracting valuable insights from large datasets.
- b. Explain the different stages of the data mining process. What are the key activities performed in each stage?
- c. Discuss the role of data mining in predictive analytics. How does it help in forecasting future trends and behaviors?
- d. Describe the ethical considerations and potential privacy issues associated with data mining. How can these concerns be addressed?
- e. Explain the difference between supervised and unsupervised learning in the context of data mining. Provide examples of techniques used in each approach.

6. Data Mining Techniques

- a. Discuss the decision tree algorithm as a data mining technique. How is it used for classification tasks?
- b. Explain the concept of association rule mining. How are algorithms like Apriori and FP-Growth used to discover associations in data?
- c. Describe the k-means clustering algorithm. What are its key features, and how is it used in data mining?
- d. Discuss the role of neural networks in data mining. How do they differ from traditional data mining techniques?
- e. Explain the concept of anomaly detection in data mining. What techniques are commonly used to identify anomalies in data?

7. Clustering

- a. Define clustering and discuss its importance in data analysis. What are the main applications of clustering?
- b. Explain the hierarchical clustering algorithm. How does it differ from partitioning clustering methods?
- c. Discuss the challenges and limitations of clustering algorithms. How can these challenges be addressed?
- d. Describe the DBSCAN (Density-Based Spatial Clustering of Applications with Noise) algorithm. What makes it suitable for certain types of data?
- e. Explain how cluster evaluation metrics (e.g., silhouette score, Davies-Bouldin index) are used to assess the quality of clustering results.

8. Web Mining



- a. Define web mining and discuss its significance in extracting information from the web.
- b. Explain the different types of web mining (web content mining, web structure mining, web usage mining). What are the key techniques used in each type?
- c. Discuss the role of web mining in e-commerce and online marketing. How does it help businesses understand customer behavior?
- d. Describe the challenges associated with web mining, such as data heterogeneity and privacy concerns. How can these challenges be mitigated?
- e. Explain how sentiment analysis is performed in the context of web mining. What techniques are used to analyze and interpret user opinions from online content?



Total No. of Questions : 5]

SEAT No. :

P6989

[5865] - 302

[Total No. of Pages : 5

M.C.A. (Management)

**IT 32: DATA WAREHOUSING AND DATA MINING
(2020 Pattern) (Semester - III)**

Time : 2½ Hours]

[Max. Marks : 50

Instructions to the candidates:

- 1) *All questions are compulsory.*
- 2) *Draw neat & labelled diagram wherever necessary.*

Q1) Answer the following multiple choice questions.

[20×½=10]

- i) Find the wrong statement of the K-means clustering.
 - a) K-means clustering is a method of vector quantization.
 - b) K-means neighbour is same as K-nearest.
 - c) K-means clustering aims to partition 'n' observations into K clusters.
 - d) K-means clustering produces the final estimate of cluster centroids.

- ii) How many tier data warehouse architecture?
 - a) 2
 - b) 1
 - c) 3
 - d) 4

- iii) _____ is an intermediate storage area used for data processing in ETL process of data warehousing.
 - a) Buffer
 - b) Virtual memory
 - c) Staging area
 - d) Inter storage area

- iv) _____ is a good alternative to the star schema.
 - a) Star schema
 - b) Snowflake schema
 - c) Fact constellation
 - d) Star-snowflake schema

- v) In a snowflake schema which of the following types of tables are considered?
 - a) Fact
 - b) Dimension
 - c) Both fact and dimension
 - d) None of the mentioned

P.T.O.



- vi) The role of ETL is to _____.
- a) Find erroneous data
 - b) Fix erroneous data
 - c) Both finding and fixing erroneous data
 - d) Filtering of the data source
- vii) _____ is a data transformation process.
- a) Comparison
 - b) Projection
 - c) Selection
 - d) Filtering
- viii) OLTP stands for _____.
- a) Online Transaction Protocol
 - b) Online Transaction Processing
 - c) Online Terminal Protocol
 - d) Online Terminal Processing
- ix) An approach in which the aggregated totals are stored in a multidimensional database while the detailed data is stored in the relational database is a _____.
- a) MOLAP
 - b) ROLAP
 - c) HOLAP
 - d) OLAP
- x) Summary of data from an OLAP can be presented in _____.
- a) Normalization
 - b) Primary keys
 - c) Pivot Table
 - d) Foreign keys
- xi) Efficiency and scalability of data mining algorithm is related to _____.
- a) Mining methodology
 - b) User interaction
 - c) Diverse data types
 - d) None of the mentioned
- xii) Strategic value of data mining is _____.
- a) Cost sensitive
 - b) Work sensitive
 - c) Time-sensitive
 - d) Technical-sensitive
- xiii) If the ETL process fetches the data separately from the host server during the automatic load to the data warehouse, one of the challenge involved is _____.
- a) the associated network may be down
 - b) it may end up pulling the incomplete /incorrect file.
 - c) it may end up connecting to an incorrect host server.
 - d) None



- xiv) Webmining helps to improve the power of web search engine by identifying _____
- a) Web pages and classifying the web documents
 - b) XML documents
 - c) Text documents
 - d) Database
- xv) _____ is achieved by splitting the text into white spaces.
- a) Text cleanup
 - b) Tokenization
 - c) Speech tagging
 - d) Text transformation
- xvi) Assigning data to one of the clusters and recompute the centroid are the steps in which algorithm.
- a) Apriori algorithm
 - b) Bayesian classification
 - c) FP tree algorithm
 - d) K-mean
- xvii) A disadvantage of KNN algorithm is, it takes _____
- a) More time for training
 - b) More time for testing
 - c) Equal time for training
 - d) Equal time for testing
- xviii) Which is not a characteristics of Data warehouse?
- a) Volatile
 - b) Subject oriented
 - c) Non volatile
 - d) Time variant
- xix) What is the first stage of Kimball Life Cycle diagram.
- a) Requirement Definition
 - b) Dimensional Modelling
 - c) ETL Design Development
 - d) Maintenance
- xx) A connected region of a multidimensional space with a comparatively high density objects.
- a) Clustering
 - b) Association
 - c) Classification
 - d) Subset



Q2) a) What is a Data warehouse. Explain the need and characteristics of Data warehouse. [5]

b) Explain the schemas of Data warehouse. [5]

OR

a) Explain Kimball Life Cycle diagram in detail. [5]

b) What is a Data warehouse? Explain the properties of Data warehouse architecture. [5]

Q3) a) What is ETL? Explain data preprocessing techniques in detail. [6]

b) What is OLAP? Describe the characteristics of OLAP. [4]

OR

a) Describe ETL. What are the tasks to be performed during data transformation. [6]

b) What are the basic operations of OLAP? [4]

Q4) a) What is Data mining? Explain the architecture of Data mining. [3]

b) Apply FP Tree Algorithm to construct FP Tree and find frequent itemset for the following dataset given below (minimum support = 30%) [7]

Transaction ID	List of Products
1	Apple, Berries, Coconut
2	Berries, Coconut, Dates
3	Coconut, Dates
4	Berries, Dates
5	Apple, Coconut
6	Apple, Coconut, Dates

OR



- a) Explain data mining techniques in brief. [3]
- b) How does the KNN algorithm works? [7]

Apply KNN classification algorithm for the given dataset and predict the class for $X(P_1 = 3, P_2 = 7)$ ($K = 3$)

P_1	P_2	Class
7	7	False
7	4	False
3	4	True
1	4	True

- Q5) a)** What is text mining? Explain the process of text mining. [4]
- b) Explain K-means algorithm. Apply K-means algorithm for group of visitors to a website into two groups using their age as follows:
15, 16, 19, 20, 21, 28, 35, 40, 42, 44, 60, 65
(Consider initial centroid 16 and 28 of two groups) [6]

OR

- a) Apply K-means algorithm for the given data set where K is the cluster number $D = \{2, 3, 4, 10, 11, 12, 20, 25, 30\}$, $K = 2$. [6]
- b) What are the different types of web mining? [4]





ACADEMIC FILE - SUMMARY SHEET

Class	MBA-I	Semester	II
Subject Code and Name	206 HRM - ERLL	Faculty	Ms. Nilophar S. Khan

Respected Sir,

Please find enclosed here with following documents for your verification and approval.

1. Time Table
2. Syllabus
3. Teaching Plan
4. Program Outcomes, Course Objectives and Course Outcomes
5. Program Outcome and Course Outcome Correlation Matrix
6. Course Outcome Attainment Level (Table and Histogram)
7. Attendance sheet
8. Lecture Record
9. Unit Test Question paper
10. Mark-sheet of unit test
11. Prelim Exam Question paper
12. Mark-sheet of prelim exam
13. Assignment
14. Internal performance of the student
15. Student wise course outcome attainment
16. Question Bank
17. Study Material / Notes
18. Other, if any (Pl. specify)

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Deohant
[Director]

[Signature]
[Head of the Department]

[Signature]
[Subject Teacher]



Vidya Pratishthan's
INSTITUTE OF INFORMATION TECHNOLOGY, BARAMATI
(ACCREDITED BY NAAC WITH "B" GRADE)

Time Table: Jan 2024 to May 2024

MBA-I & II , SEM II & IV

Time	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
9.00-10.00	EPM		EPM		EPM	SD-II
10.00-10.30	Tea Break					
10.30-11.30			CSRS	CSRS		
11.30-12.30						
12.30-1.30					ERLL	HR-II
1.30-2.30	Lunch Break					
2.30 -3.30	PFP	DT	DT	ERLL	PFP	Sports (All Faculty)
3.30-4.30	SD-II	Mentoring Activity	ERLL	PFP	Mentoring Activity	
4.30-5.00	-					

Sagar

HOD

Dr. Sagar Nimbalkar



Anand

Director

Dr. Anand Deshmukh

Anand

Director

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Vidyanagari, Baramati Dist-Pune

Subject Core (SC) Courses - Semester II
Specialization: Human Resource Management

Semester II		205HRM: Competency Based Human Resource Management System
3 Credits	LTP: 2:1:1	Subject Core (SC) Course – Human Resource Management

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO205HRM.1	REMEMBERING	DEFINE the key terms related to performance management and competency development.
CO205HRM.2	UNDERSTANDING	EXPLAIN various models of competency development.
CO205HRM.3	APPLYING	PRACTICE competency mapping.
CO205HRM.4	ANALYSING	ANALYSE competencies required for present and potential future job roles at various levels and across variety of organizations.
CO205HRM.5	EVALUATING	DESIGN and MAP their own competency and plan better and appropriate career for themselves.
CO205HRM.6	CREATING	DEVELOP a customized competency model in accordance with the corporate requirements.

- Performance Management System:** Introduction of PMS-Definition, Scope, Importance, Performance Planning – Individual Goal Setting, Linking individual goals to Organization goals, Performance Coaching- Identification of Training Needs- Job Specification, Identify the Performance Gap, Training Specification, Choose appropriate training module, Counselling for Better Performance, Feedback Mechanism in Organization. (6+3)
- Introduction to Competency:** Definition and History of Competency, Basic Components of Competency(Knowledge(K),Skill(S), Attitude(A)), Performance Vs Competency, Difference between Competence and Competency, Type of Competency- Generic Vs Key Competency, Functional and Technical Competency, Leadership and managerial Competency, Need for Competency Framework, Limitation and Learning from Competency Framework, Myth about Competency(6+3)
- Competency Development & its Models:** Need and Importance of Competency Development, Stages in developing Competency Model, Types of Competency Model – Core/Generic, Job Specific, Managerial/Leadership, Custom, Development of Personnel Competency Framework – Lancaster Model of Competency.(5+3)
- Competency Mapping:** Procedures/Steps-Determining objectives and Scope, clarifying implementation goals and standards, create an action plan, define competency based performance effectiveness (Key Result Area (KRA) & Key Performance Indicators(KPI)), tools for data collection, data analysis, validating competency model, mapping future jobs and single incumbent jobs, using competency profile in HR decisions, Mapping Competency for Recruitment and Selection, Training and Development, Performance and Compensation. (7+3)
- Competency Driven Career and Culture:** Role of Competency in Career Progression - Transactional Competency, Tradition Competency and Transformational Competency, Evaluation of Career through KSA (Knowledge, Skill and Attitude) Competency based Succession and Career planning, Corporate Competency driven Culture. (6+3)

Suggested Text Books:

- Competency based HRM, Ganesh Shermon, Tata Mc Graw Hill Publishing
- The handbook of Competency Mapping: Understanding, Designing and Implementing Competency Models in Organizations, Seema Sanghi, Sage Publication Inc

Suggested Reference Books:

- Human Capital Measurement: An Introduction, K Sangeetha ICFAI University
- Competency Mapping, R K Sahu
- Competency Study: Mapping the Future, Paul R Bernthal, ASTD Press
- Human resource Management, K Ashwathappa
- Human Resource Management, L M Prasad
- Human Resource Management, Gary Dessler

Semester II		206HRM: Employee Relations and Labour Legislations
3 Credits	LTP: 2:1:1	Subject Core (SC) Course – Human Resource Management

Course Outcomes: On successful completion of the course the learner will be able to

CO#	COGNITIVE ABILITIES	COURSE OUTCOMES
CO206HRM.1	REMEMBERING	SHOW awareness of important and critical issues in Employee Relations



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Institute of Information Technology, Baramati

Teaching Plan

Class	MBA I	Semester	II
Subject Code & Subject	206HRM: Employee Relations and Labour Legislations	Teacher	Ms.Nilophar S.Khan
Course Outcomes:	<p>SHOW awareness of important and critical issues in Employee Relations.</p> <p>INTERPRET and relate legislations governing employee relations.</p> <p>DEMONSTRATE an understanding of legislations relating to working environment.</p> <p>OUTLINE the role of government, society and trade union in ER.</p> <p>EXPLAIN aspects of collective bargaining and grievance handling.</p> <p>DISCUSS the relevant provisions of various Labour Legislations.</p>		


Chapter No.	Contents	Teaching Methodology	No. of Sessions required
1. Introduction :	Background of Employee Relations, Concept, definition, scope, objectives	Board & Chalk	8
	factors, participants&importance of ER, Approaches to employee relations – The Dunlop's approach	Board & Chalk	
	The Social Action Approach, The Human Relations Approach	Board & Chalk	
	The Gandhian Approach, Labour policies	Board & Chalk	
	role of ILO and its influence on legislation in India	Board & Chalk	
2.Mechanism for harmonious ER:	Collective bargaining - definition, meaning, nature, essential conditions	Board & Chalk	8
	functions and importance, process and its implementation	Board & Chalk	
	Workers participation in management& Problem solving attitude	Board & Chalk	
	Grievance,meaning and forms, sources, approaches, procedures	PPT	



5. Legislation governing working environment:	opening and closing hours, hours of work, interval for rest, spread over, wages for overtime and weekly off, leave with pay and payment of wages and welfare provisions	Board & Chalk	8
	offences and penalties, Maternity benefit Act, 1961 – Entire Act and latest amendment	Board & Chalk	
	The Sexual harassment of women at workplace (Prevention, prohibition and Redressal) Act, 2013 – Definitions of sexual harassment	Board & Chalk	
	employee, workplace, complaints committee, complaint mechanism, Aggrieved Woman, Chairperson	PPT	
	Constitution of Internal Complaints Committee, Complaint, Inquiry into complaint, duties of employer	PPT	

Reference Books:

- 1 Elements of Mercantile Law, N. D. Kapoor, Sultan Chand
- 2 Introduction of Labour and Industrial Laws, Avatar Singh


Signature of Teacher




Signature of Director


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ACADEMIC YEAR 2023-25

206 HRM - Employee Relation & Labour Legislation

MBA Program Outcomes (PO's)	
By the culmination of this program, the post graduate acquires the ability	
PO1	Generic and Domain Knowledge - Ability to articulate, illustrate, analyze, synthesize and apply the knowledge of principles and frameworks of management and allied domains to the solutions of real-world complex business issues
PO2	Problem Solving & Innovation - Ability to Identify, formulate and provide innovative solution frameworks to real world complex business and social problems by systematically applying modern quantitative and qualitative problem solving tools and techniques.
PO3	Critical Thinking - Ability to conduct investigation of multidimensional business problems using research based knowledge and research methods to arrive at data driven decisions
PO4	Effective Communication - Ability to effectively communicate in cross-cultural settings, in technology mediated environments, especially in the business context and with society at large
PO5	Leadership and Team Work - Ability to collaborate in an organizational context and across organizational boundaries and lead themselves and others in the achievement of organizational goals and optimize outcomes for all stakeholders.
PO6	Global Orientation and Cross-Cultural Appreciation: Ability to approach any relevant business issues from a global perspective and exhibit an appreciation of Cross Cultural aspects of business and management.
PO7	Entrepreneurship - Ability to identify entrepreneurial opportunities and leverage managerial & leadership skills for founding, leading & managing start-ups as well as professionalizing and growing family businesses.
PO8	Environment and Sustainability - Ability to demonstrate knowledge of and need for sustainable development and assess the impact of managerial decisions and business priorities on the societal, economic and environmental aspects.
PO9	Social Responsiveness and Ethics - Ability to exhibit a broad appreciation of the ethical and value underpinnings of managerial choices in a political, cross-cultural, globalized, digitized, socio-economic environment and distinguish between ethical and unethical behaviours & act with integrity.
PO10	Lifelong Learning – Ability to operate independently in new environment, acquire new knowledge and skills and assimilate them into the internalized knowledge and skills.

206 HRM - Employee Relation & Labour Legislation	
CO 1	SHOW awareness of important and critical issues in Employee Relations.
CO 2	INTERPRET and relate legislations governing employee relations.
CO 3	DEMONSTRATE an understanding of legislations relating to working environment.
CO 4	OUTLINE the role of government, society and trade union in ER.
CO 5	EXPLAIN aspects of collective bargaining and grievance handling.
CO 6	DISCUSS the relevant provisions of various Labour Legislations.





206 HRM ERL: CO PO Mapping										
Program Outcomes (PO)	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10
Course Outcome (CO)										
CO 1	1	2	3	3		3			2	
CO 2			1		1			2		
CO 3	2	1	3	3		1	1		2	
CO 4		1	2	2	2		1		1	
CO 5	2		1		2	1		2	2	
CO 6	3	2		3		3	2		1	

H: High (3), M: Medium (2) and L: Low (1)

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Vidya Pratishthan's INSTITUTE OF INFORMATION TECHNOLOGY, BARAMATI

MBA I Semester II – Attendance Sheet (Jan. 2024 to May. 2023)

Faculty: Ms. Nilphor S. Khan Sub Code: 006 HRM Subject: ERLL Month: _____

Roll No	Lecture Date →	Date																			Total	Percent	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19			20
1	Ahiwale Rutuja Sudhir	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	20	
3	Autade Komal Navnath	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	20	
6	Bhapkar Archana Dnyandev	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	20	
9	Bhojane Vaishnavi Manoj	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	20	
14	Darade Shraddha Vijay	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	20	
17	Dhakane Sonali Madhukar	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	20	
18	Dhawade Rutuja Sunil	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	20	
19	Dhaware Diksha Hanumant	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	20	
28	Jagtap Pranjal Ashok	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	20	
40	Londhe Pramod Rahul	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	20	
42	Malshikare Shrivani Satish	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	20	
46	More Neha Jaypal	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	20	
54	Sakhare Sandhya Namdev	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	20	
58	Shende Ankita Balasaheb	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	20	
62	Suryawanshi Omkar Satish	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	20	
66	Zagade Tanisha Sachin	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	20	
Total Students Present		01	10	11	09	09	11	10	10	10	09	10	10	09	11	07	08	11	07	08	08	200	
Signature												HOD											



Deekshant
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 Vidyanagari, Baramati Dist-Pune



LECTURE RECORD

CLASS MBA - I SEMESTER II
SUBJECT Employee Relation & Labour Legislation TEACHER Ms. Nilphar S. Khan

SR. No.	DATE	TOPICS COVERED	TIME		NO. PRESENT	SIGNATURE		
			START	END		STUDENT	FACULTY	HOD
1]	04/01/24	Syllabus Discussion	2.30	3.30	01	Autade	Rhos	
2]	09/01/24	Employee Relations - Basic concept, Definition & Importance	2.30	3.30	10	Resdher	Rhos	
3]	10/01/24	Approaches in Employee Relations	3.30	4.30	11	Vishu	Rhos	
4]	11/01/24	Dunlop's Approach, Human Relation Approach	2.30	3.30	09	Londoner	Rhos	
5]	12/01/24	Social Action Approach, The Gandhian Approach	3.30	4.30	09	Londoner	Rhos	
6]	17/01/24	Role of ILO - (International Labour Org.)	3.30	4.30	09	Autade	Rhos	
7]	18/01/24	Collective Bargaining - Def, meaning nature, function & Importance	2.30	3.30	10	Satkar	Rhos	
8]	24/01/24	Workers participation in mgmt, Grievance - meaning & forms	3.30	4.30	13	Vishu	Rhos	
9]	25/01/24	The Industrial Dispute Act, 1987. Procedure, powers & duties	2.30	3.30	10	Londoner	Rhos	
10]	13/03/24	Stricks, Lockouts, & Lay off, The contract Labour Act, 1970.	3.30	4.30	09	Satkar	Rhos	
11]	14/03/24	Advisory Boards, registration of establishment, Licencing & Contractors	2.30	3.30	13	Vishu	Rhos	
12]	21/03/24	PPF Presentation - The Trade Union Act, 1926.	2.30	3.30	13	Londoner	Rhos	





Vidya Pratishthan's
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NAAC
NATIONAL ASSESSMENT AND
ACCREDITATION COUNCIL

"B"
Grade
CYCLE II

LECTURE RECORD

CLASS MBA -I SEMESTER II
SUBJECT Employee Relation & Labour Legislation TEACHER Ms. Nilophar G. Khan

SR. No.	DATE	TOPICS COVERED	TIME		NO. PRESENT	SIGNATURE		
			START	END		STUDENT	FACULTY	HOD
13]	28/03/24	Formation & Reg. of Trade Unions, Minimum Wages Act., 1948.	2:30	3:30	09	Autade	Phos	}
14]	08/04/24	The factories Act.-1948, Def. of Factory, Working hours, Annual leave	2:30	3:30	09	Phos	Phos	
15]	05/04/24	Maharashtra Shops & Establishment Act, 2017 - Scope, Reg. of Est.	12:30	1:30	11	Phos	Phos	
16]	08/04/24	Maternity benefit Act, 1961, The Sexual harassment Act, 2013	3:30	4:30	07	Phos	Phos	
17]	25/04/24	Revision.	2:30	3:30	08	Phos	Phos	

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Vidyanagari, Baramati Dist-Pune





Preliminary Examination- April 2024

Date: 15/04/2024 **Time:** 02: 00 Hours
Class: MBA – I **Max. Marks** 50
Subject: 206(HR)—EMPLOYEE RELATIONS AND LABOUR LEGISLATION

Instructions:

- i) All questions are compulsory.
- ii) All questions carry 10 marks.

	Questions	Mar
Q.1	Answer the following. (Any 5 out of 7) (2 marks each): a) Define Employee Relation. b) Define Collective Bargaining. c) What is the meaning of Grievance? d) List any one Act that govern employee relations and define employee relations? e) Mention two legislations governing Union and Wages. f) Define strike under Industrial Disputes Act, 1947? g) Describe the Opening and Closing hours under Maharashtra shops and Establishment (Regulation of Employment and conditions of Service) Act, 2017?	10
Q.2	Attempt any 2 questions (5 marks each) a) Explain in detail "The Dunlop's Approach" b) Explain ILO with objectives of ILO c) Explain in detail- Human Relations Approach.	10
Q.3	a) Schematically explain the model grievance procedure. Or b) "India has been one of the founder members of the ILO and has been taking	10



	<p>advice part in its deliberations". Explain the statement with impact of Indian Labour Organization.</p>	
Q.4	<p>a) Describe the procedure of appointment of Inspectors under the Factories Act, 1948. What are their duties and powers ?</p> <p style="text-align: center;">Or</p> <p>b) Explain in detail regarding the Trade Union Act 1926- Formation and registration of Trade Unions.</p>	1
Q.5	<p>a) You are appointed as 'HR manager legal compliance' of a leading MNC. What are the care you will take while framing policies related to health and Welfare provisions of the Factories Act 1948.</p> <p style="text-align: center;">Or</p> <p>b) If you are HR manager, how will you tackle the conflict pertaining to Leave travel allowance through collective bargaining, justify your answer with meaning, scope, and nature of collective bargaining.</p>	1



Deshramteb
Director
Vidya Pratishthan's
Institute of Information Technology
Vidyanagari, Baramati, Dist-Pune



Preliminary Examination – April 2024

Class: MBA I Date: 15/04/2024 Time: 2:30 hours
Subject: 206(CHP) Employee Relations & Labour Legislation

Roll No.	Student Name	Sign	Marks	Ans. Book Received
1	Ahiwale Rutuja Sudhir	<u>Rutuja</u>	11	
3	Autade Komal Navnath	<u>Autade</u>	37	<u>Autade</u>
6	Bhaskar Archana Dnyandev	<u>Bhaskar</u>	29	<u>Bhaskar</u>
9	Bhojane Vaishnavi Manoj	<u>Vishu</u>	44	<u>Vishu</u>
14	Darade Shraddha Vijay	<u>Shraddha</u>	28	
17	Dhakane Sonali Madhukar	<u>S.m. Dhakane</u>	28	
18	Dhawade Rutuja Sunil	<u>Rutuja</u>	17	
19	Dhaware Diksha Hanumant	<u>Dhaware</u>	21	
28	Jagtap Pranjal Ashok	<u>Jagtap</u>	28	<u>Jagtap</u>
40	Londhe Pramod Rahul	<u>P.R. Londhe</u>	28	<u>P.R. Londhe</u>
42	Malshikare Shravani Satish	<u>Satish</u>	35	<u>Satish</u>
46	More Neha Jaypal	<u>N.S. More</u>	02	
54	Sakhare Sandhya Namdev	<u>Sakhare</u>	18	
58	Shende Ankita Balasaheb	<u>Shende</u>	22	
62	Suryawanshi Omkar Satish	<u>S</u>	28	
66	Zagade Tanisha Sachin	<u>Tanisha</u>	25	

Mr. Rakesh
Kulkarni

Name and Signature of Supervisor

Class Room: C6

Total Present: 16

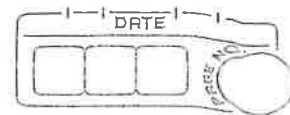
Total Absent: 00



Beshmankar
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Vidyanagari, Baramati Dist-Pune

$$05 + 05 + 05 + 05 + 05 = 25$$

Assignment No. 02



Name: Autade Komal Navnath

Roll No: 03

Class: MBA-I Sem: IInd

Subject Name and code: 206 Employee Relations
and Labour Legislations

Faculty Name: Ms. Nilophar Khan Mam

~~25~~
~~25~~ Khan

Q.1 Solve the following questions.

a) List any one act that govern Employee relations and define employee relations.

The act that govern employee relations are

i) The industrial Disputes Act, 1947.

ii) The contract labor (Regulations and Abolition) Act, 1970.

Employee relations by the institute of personnel and development i.e. IPD is defined as

"that part of personal management that enables competent managers through the development of institution producers and policies the interest of employees as the buyer of labour, services and of employees as the suppliers of the labour services."

b) Explain any four features of collective Bargaining.

i) it is a group action.

ii) It is a continuous process.

iii) it is a Bipartite process.

iv) it is flexible and mobile and not fixed.

c) What is the meaning of Grievances.

Employee grievance is an official complaint or concern that an employee experiences at the workplace or with a particular individual that includes the management.



A grievance may be defined as a written complaint filed by an employee and claiming unfair treatment.

d) Enlist the different forms of workers participation in India.

- 1) Work committee
- 2) Joint management council
- 3) Board of representation.
- 4) Participation through ownership.
- 5) Job enlargement and job enrichment.
- 6) Suggestion scheme.

e) List the name of approaches to employee relation.

- 1) System approach
- 2) Unitary approach
- 3) Pluralist approach
- 4) Marxist approach
- 5) Gandhian approach

f) Mention two legislations governing union or wages.

- 1) Payment of wages rules 1938.
- 2) Payment of wages (A.T.S) rules 1958
- 3) Payment wages (Mines) Rules, 1956

Q.2 Solve any two of the following.

a) Explain in detail "The Dunlop's Approach."

John Dunlop give theory of system approach, in 1958.

The Employee Relation system based on three sets of different variables.

1] Actors (individual)-involved in the process of developing sound employee relation.

it noted by (A)

2] Context - referred to the setup in which we performing the given task. it include market (M) Technologies (T) and Power distribution in the organisation and labour union (P).

3] Ideology - The similar ideas mentality or beliefs share by actor helps to blend to system, it can be expressed by (I).

Formula given by, Dunlop

$$R = F(A, T, M, P, I)$$

This formula represents that, ER system can be seen as join the function element above.

The Dunlop's model emphasizes the importance of understanding the power dynamics and conflicts inherent in industrial relations and the role of institutions in managing the



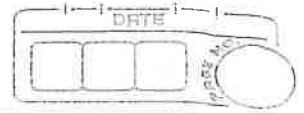
Q. 3

b) "Capital and labor should be supplement and help each other, they should be greete fair living in unity and harmony." Relate the statement to workers participation in management.

Workers participation in management involv involving employees in decision-making processes and activities traditionally reserved for management. This can include consultation, joint decision-making representation on boards, profit sharing and various forms of employees ownership.

In the context of the statement you provided, "Capital and labor should be supplement and help each other", workers participation in all activities related to the organisation. This can takes various forms: such as representative from the workforce sitting in company boards, employee councils, suggestion schemes or team based decision-making processes.

The idea is to create a collaborative environment where both management and workers contribute their perspectives, expertise and ideas to solve problems, improve processes and acheive organisat goal. By valuing the input of worker and empowering them to participate in decision



Companies can benefit from increased employ morale, productivity, innovation and ultimately better outcomes for the organisation as a whole. These approach fosters a senses of ownership and commitement among employ leading to more cohesive and harmonioi workplace culture.

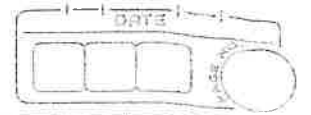
Q.4

a) Who is authorized to fix minimum wages and in what manner and explain the procedure for fixing and revising Minimum wages under the Minimum Wages Act, 1948.

In India, the authority to fix minimum wages lies with the appropriate government, which can be either the central government or the state government, depending on the industry and the scope of establishment. The Minimum Wages Act 1948, empower the government to fix and revise minimum wages to ensure fair compensation for workers.

The procedure for fixing and revising minimum wages under the minimum Act, 1948.

① Constitution of Committees: The appropriate government constitutes advisory committees consisting of representative from employer, employees and independent expert. These committees evaluate various factors such



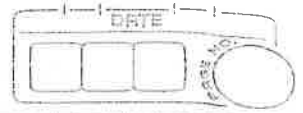
cost of living, level of skill required, prevailing wage rates and other relevant factors.

② Investigation and study: The committees conduct thorough investigations and studies to determine the minimum wages suitable for different categories of workers, such as unskilled, semi-skilled, skilled etc. They take into account regional variations in living standards and economic conditions.

③ Recommendations: Based on their investigations and studies the advisory committees make recommendations to the appropriate government regarding the fixation or revision of minimum wages for different categories of workers.

④ Publications of proposed Minimum wages: The government publishes the proposed minimum wages in the official gazette and invites objections and suggestions from the public within a specified period.

⑤ Consideration of Objections and Suggestions: The government considers any objections and suggestions received from the public and may revise the proposed minimum wages accordingly.



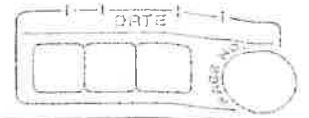
⑥ Final Notification: After considering all relevant factors and inputs, the appropriate government or government issues a final notification specifying the minimum wages for different categories of workers in the concerned industry or region.

⑦ Enforcement and compliances: Once the minimum wages are notified, employers are legally obligated to pay wages not less than the specified minimum rates to their employees. The labour department or other designated authorities monitor compliance and take enforcement action against violators.

⑧ Periodic revision: The minimum wages are subject to periodic revision to ensure that they remain fair and adequate in light of changing economic conditions, cost of living and other relevant factors. The revision process follows a similar procedure as the initial fixation.

Q. 5

a) Explain the provision related to strike and lockouts, layoff, Retrenchment and closure under the Industrial Dispute Act, 1947. The industrial dispute act, 1947 of india, outlines provisions related to strikes, lockou



layoffs, retrenchments and closure in industrial setting:

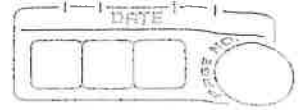
① Strike and lockouts:

- Strikes - Workers have the right to strike but they must follow legal procedure, including giving notice to employers.
- Lockouts - Employers can lockout workers but again, legal procedure must be followed including notifying authorities.

② Layoff: A layoff occurs when an employer temporarily suspends or reduce work due to various reasons like lack of demand, financial difficulties etc. The act requires employers to provide compensation to worker during layoffs.

③ Retrenchment: Retrenchment refers to the permanent termination of employees served by the employer for reason such as surplus manpower, closure of a unit, or technological changes. The act mandates certain conditions for retrenchment including prior notice and payment of compensation.

④ Closure: Closure refers to the complete shutdown of an industrial establishment. The act stipulates procedures that employer



must follow before closing a business, including providing notice to workers and authorities and paying compensation.

Overall, the Industrial Disputes Act, 1947 aims to regulate industrial disputes and protect the right of both workers and authorities and paying compensation. employers, ensuring fair practices in the resolution of conflicts in industrial settings.

2. assignment

OCT/NOV-2022

Total No. of Questions : 5]

SEAT No. :

PA-4180

[Total No. of Pages : 2

[5946]-216

F.Y. M.B.A.

206HR (SC - HRM - 02) : EMPLOYEE RELATIONS AND
LABOUR LEGISLATION

(2019 Pattern) (Semester - II)



Time : 2½ Hours]

[Max. Marks : 50

Instructions to the candidates:

- 1) All the questions carry equal marks.
- 2) Attempt all the questions.
- 3) Use flow chart wherever necessary.

Q1) Solve any five of the following:

[10]

- a) Define strike under Industrial Disputes Act, 1947?
- b) List the approaches of employee relations?
- c) What is the meaning of Grievance?
- d) Describe the 'Opening and Closing hours' under Maharashtra shops and Establishment (Regulation of Employment and conditions of Service) Act, 2017?
- e) Define the term aggrieved women as per the provision of the sexual harassment of woman at work place (Prevention, Prohibition and Redressal) Act, 2013?
- f) List any one Act that govern employee relations and define employee relations?
- g) Define the term 'Factories' under Factories Act 1948.
- h) Name three common items specified in process of collective bargaining.

Q2) Solve any two of the following:

[10]

- a) Explain in detail- Human Relations Approach.
- b) Comment on the Provision-Annual Leave with wages under The Factories Act, 1948.
- c) Summarize licensing of contractors under the contract labour (Regulation and Abolition) Act, 1970?

R.T.O.

Q3) a) Can a women claim the maternity benefit from her employer if she works elsewhere during the period for which she has been permitted to make herself absent under the provisions of the Act? Justify the statement with the provisions of Maternity Benefit Act, 1961? [10]

OR

b) "India has been one of the founder members of the ILO and has been taking advice part in its deliberations". Explain the statement with impact of Indian Labour Organization. [10]

Q4) a) Explain in detail regarding rights of recognized union and Illegal strike and Illegal lock out under the Maharashtra recognition of trade union and prevention of Unfair Labour Practices Act 1971? [10]

OR

b) Schematically explain the model grievance procedure. Do you think it is of any value in the era of computers and intranet? Suggest an alternative grievance procedure for a modern business organization. [10]

Q5) a) You are appointed as 'HR manager legal compliance' of a leading MNC. What are the care you will take while framing policies related to health and Welfare provisions of the Factories Act 1948. [10]

OR

b) If you are IR manager, how will you tackle the conflict pertaining to Leave travel allowance through collective bargaining, justify your answer with meaning, scope, and nature of collective bargaining. [10]



Vidya Pratishthan's

Institute of Information Technology.

Name = Rutuja Ahiwale

Roll no = 01

Class = MBA - I

Subject = (206) Employee Relation and Labour
Regulation.

Sem = II (Assignment - 2)

Subject Teacher = Nilophar Mam.

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Assignment No-2

Q1) Solve the following :-

1) Define strike under Industrial dispute act 1947.
→ Strike are defines under industrial dispute act section 2(a) of the act ~~str~~ defined as a temporary cessation of work. It carried out by a group of employees belonging to the same designation and organisations.

2) List the approaches of employee relation?

→ The approaches of employee relation are -
i) The Dunlop's approach
ii) The social action approach
iii) The Human relation approach
iv) The Gandhian approach.

3) What is the meaning of Grievance?

→ A grievance is a formal complaint or feeling of resentment about something perceived as unfair or unjust. It could be related to workplace issues, personal disputes or broader societal concerns. is known as grievance.

4) Describe the 'Opening and closing hours' under Maharashtra shops and establishment (Regulation of employment and conditions of service) Act 2017

→ The Maharashtra shops and establishment Act 2017, regulates the opening and closing hours of shops and establishment in Maharashtra. The time is 9:30 am to 7:30 pm.

5) Define the term aggrieved women as per the provision of the sexual harassment of woman at work place (Prevention, prohibition and redressal, Act 2013)?

→ Under the sexual harassment of woman at workplace (Prevention, Prohibition and redressal) Act, 2013, the term 'aggrieved woman' refers to any woman who alleges to have experienced sexual harassment at the workplace.

6) List any one Act that govern employee relation and define employee relations?

→ Employee relations refer to the relationship between employers and employees within an organization. It encompasses various aspects such as communication, conflict resolution, collective bargaining, grievance handling and overall management of employer-employee create a positive and productive work.

7) Define the term 'Factories' under Factories Act 1948.

→ The term 'factories' under the factories Act, 1948 refers to any premises including the precincts the where ten or more workers are employed or were employed, on any day of the preceding twelve months and in any part of which a manufacturing process is being carried on or is ordinarily so carried, and other processes specified in the Act.

8) Name three common items specified process of collective bargaining.

→ The three common items specified in process collective bargaining are -

- i) Wages and Benefits
- ii) Working Conditions
- iii) Grievance procedures.

Q2) Solve any following.

1) Explain in detail Human Relation Approach.

→ The human relations approach to management emphasizes the importance of social processes in the workplace. It arose in the 1930s, largely in response to the limitation of the scientific management approach, which focused on efficiency and productivity without much consideration for workers' need or feelings. The human relation approach in contrast, considers the psychological and social aspects of work, recognizing that employees are not just cogs in a machine but human beings with emotions, needs and motivation.

Here are some human relations approach such as
i) Social needs and work satisfactions -

This approach recognizes that social needs are significant motivators. It suggests that work satisfaction and productivity can be enhanced by fostering a supportive work environment where employees feel valued and part of a community.

ii) Importance of Employee Morale -

According to the human relations approach, high employee morale lead to greater productivity. It posits that management practices should aim to maintain or improve morale through measures.

iii) Leadership and Management Style -

The approach advocates for a leadership style that is more participative and democratic. Leaders are encouraged to communicate openly with employees, involve them in decision-making processes and consider the feedback.

iv) Communication -

Effective communication is viewed as cornerstone of the human relations approach. Two-way communication between management and employees is believed to foster a sense of trust and cooperation.

v) Group Dynamics -

It acknowledges the significance of group and social interaction in the workplace. Informal groups, in particular, can have a strong influence on behaviour performance.

vi) Motivation -

The approach draw on theories such as

Maslow's hierarchy of need and Herzberg's motivated hygiene theory, suggesting that understanding and addressing employee's needs from the basic safety to self actualization are essent for motivation and job satisfaction.

- (a) Schematically explain the model grievance procedure
- b) Do you think it is of any value in the era computers and intranet? Suggest an alternative grievance procedure for a modern business organization.

→ The model grievance procedure is a structured process that allows employees to raise concerns, problems or complaints about their workplace, working conditions, or relationships with colleagues, which are then addressed and resolved by management. It typically follows a series of steps to ensure fairness and systematic handling. The schematic model of are

- i) Informal discussion
- ii) Formal written complaint
- iii) Meeting
- iv) Management decision
- v) Appeal
- vi) External arbitration.

Relevance in the Era of Computers and Intranet:
While the basic principles of the grievance procedure remain valuable for ensuring fair treatment and maintaining employee morale, the

Traditional model can be enhanced by leveraging modern technology. Intranet system and digital platforms can streamline the process making it more efficient and accessible. Here are alternative Grievance procedure for Modern business are -

i) Digital Submission platform -

Employees can submit grievances through an online form available on the company's intranet or a dedicated HR platform. This system should ensure privacy and confidentiality.

ii) Automated Acknowledgment and Tracking -

Upon submission, the employee receive an automated acknowledgment. The system assign unique tracking number to the grievance, allowing the employee to follow the process's progress.

iii) Digital Meeting Scheduling -

If the issue proceeds to the meeting stage, scheduling can be done through an online platform, allowing for better coordination among all parties involved, including remote employees.

iv) Virtual Meetings -

Especially relevant for remote or

geographically dispersed teams, grievances can be discussed in virtual meetings.

v) Digital Decision Communication and Documentation -
Decisions are communicated through secure digital channels and documented within the system for future reference, ensuring transparency and accountability.

vi) Feedback loop -
After the grievance is resolved, the system prompts the employee for feedback on the process, which can help in refining and improving the process procedure.

(Q5) a) You are appointed as 'HR manager legal compliance' of a leading MNC. What are the care will take while framing policies related to health and welfare provision of the factories Act 1948.

→ As an HR Manager focusing on legal compliance for a leading multinational corporation (MNC) particularly concerning health and welfare provisions under the factories Act of 1948, there are several critical considerations to ensure both adherence to legal standards and the promotion of a safe, healthy work environment. Here is how I would approach this responsibility.

1) Comprehensive Review of the Factories Act provides
Conduct a thorough review of the
factories Act, focusing on sections related to
health (sections 11 to 20) welfare (section 42 to
and any other relevant provisions to ensure a
deep understanding of the legal requirements

2) Assessment of Current Policies and Practices =
Compare current company policies and
practices against the requirements specified in
the factories Act.

3) Policy Development and Revision =
Develop or revise policies to
address any gaps identified in the compliance
assessment. Ensure that these policies not
only meet the legal.

4) Implementation and Communication =
Clearly communicate any new
or revised policies to all employees, using
multiple channels to ensure broad
awareness.

5) Monitoring and Enforcement =
Schedule regular audits to ensure
ongoing compliance with the factories Act and
internal policies.

6) Health and safety committee =

Form a health and safety comm. with representation from management and employees to oversee and advise on matters related to health and welfare provision.

7) Adaptation to local requirements =

For an MNC, ensure that health and welfare policies are adapted to meet the legal requirements in each jurisdiction where the company operates.

By taking these steps, I would aim not only to ensure compliance with the Factories Act of 1948 but also to foster a culture of health and safety within the organisation that protects and promotes employee well-being.

b) If you are IR manager, how will you tackle conflict pertaining to leave travel allowance through collective bargaining, justify your answer with meaning, scope and nature of collective bargaining.

→ An (IR) Industrial relations manager facing a conflict over Leave travel allowance (LTA) through collective bargaining. I would approach the situation with a clear strategy not the principle of collective bargaining. Collective bargaining refers to the process by which employ

Page No. _____
Date _____

groups of employees negotiate term and conditions of employment. The goal is to reach a collective agreement that governs aspects like wages, working hours, training, health & safety, and in this case benefits such as leave travel allowance - as such as -

- 1) Preparation and Research
- 2) Open and transparent Communication
- 3) Emphasize mutual benefits
- 4) Incremental Approach
- 5) Professional mediation
- 6) Documentation and Implementation.

Meaning = Collective bargaining is inherently a democratic process where negotiation and compromise are key. By engaging in open discussion and negotiations we respect the fundamental principles of collective bargaining.

Scope = The scope of collective bargaining extends beyond wages to include benefits and working conditions. Addressing the LTA issue directly falls within this scope and demonstrates a commitment to comprehensive employee welfare.

Nature = The nature of collective bargaining is collaborative rather than confrontational. By focusing on mutual benefits and consideration

alternative solutions, the approach aligns with the collaborative spirit of collective bargaining, aiming for a win-win resolution.

Total No. of Questions : 5]

SEAT No. :

P7271

[Total No. of Pages : 2

[5860]-216

F.Y. M.B.A.

**SC-HRM-02 : EMPLOYEE RELATIONS AND LABOUR
LEGISLATIONS**

(2019 Pattern) (Semester - II) (206 HR)

Time : 2½ Hours]

[Max. Marks : 50

Instructions to the candidates:

- 1) *All the questions carry equal marks.*
- 2) *Attempt all the questions.*
- 3) *Use flowchart wherever necessary.*

Q1) Solve any five of the following :

[10]

- a) List any one Act that govern Employee Relations and define Employee Relations?
- b) Explain any four features of Collective Bargaining.
- c) What is the meaning of Grievance?
- d) Describe the Opening and Closing hours under Maharashtra shops and Establishment (Regulation of Employment and conditions of Service) Act, 2017?
- e) Define the term Aggrieved Women as per the provision of The Sexual Harassment of Woman at work place (Prevention, Prohibition and Redressal) Act, 2013.
- f) Enlist different forms of Workers Participation in India.
- g) Mention two legislations governing Union and Wages.
- h) List the name of approaches to Employee relations.

Q2) Solve any two of the following :

[10]

- a) Explain in detail "The Dunlop's Approach".
- b) Comment on the Provision-Annual Leave with wages under The Factories Act, 1948.
- c) Summarize about the provisions of Licensing of Contractors under The Contract Labour (Regulation and Abolition) Act, 1970

P.T.O.

Q3) a) "India has been one of the founder members of the ILO and has been taking active part in its deliberations. Explain the statement with impact of Indian Labour Organization. [10]

OR

b) "Capital and labour should be supplement and help each other; they should be great family living in Unity and harmony"-Relate this statement to Workers Participation in Management.

Q4) a) Who is authorized to fix minimum wages and in what manner and explain the procedure for fixing and revising Minimum wages under the Minimum Wages Act, 1948? [10]

OR

b) Explain in detail regarding Rights of Recognized union and Illegal Strike and Illegal Lockout under the Maharashtra Recognition of Trade Union and Prevention of Unfair Labour Practices Act 1971.

Q5) a) Explain the provisions related to Strike and Lockouts, Layoff, Retrenchment and Closure under the Industrial Dispute Act, 1947. [10]

OR

b) Can a Women claim the maternity benefit from her employer if she works elsewhere during the period for which she has been permitted to make herself absent? Justify the statement with the provisions of Maternity Benefit Act, 1961.



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Vidya Pratishthan's Institute of Inform
Technology Baramati

Name : Bhaskar Archana Dnyandev

Roll No : 06

Class : MBA-I

Subject : Employee Relations & Labour Legisla

Submitted to : Ms. Nilopher Khan Mam.

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Vidya Pratishthan's Institute of Informa-
Technology Baramati

Name - Bhaskar Archana Dnyandeo

Roll No - 06

Class - MBA-I

Subject - Employee Relations and labour leg

Submitted to - Ms Nilopher Khan Mam.

Assignment - 2

Q.1 Solve the any five of the following (2 marks)

1) List any one Act that govern employee relation and define employee relations?

→ One act that governs employee relations is National Labour Relations Act (NLRA) in the United States.

Employee relations refers to the management and maintenance of relationship between employer and employees within an organisation encompasses aspects such as communication, conflict resolution, employee rights, and collective bargaining.

2) Explain any four features of Collective bargaining.

→ The four features of collective bargaining.

i) Negotiation process

ii) Voluntary agreement

iii) Collective representation.

iv) Legal Recognition

3) What is the meaning of Grievance?

→ Grievance refers to complaints or concerns raised by employees regarding their work environment, conditions, treatment or any other aspect related to their employment is called as grievance.

4) Describe the opening and closing hours under Maharashtra Shop and establishment (Regulation of employment and Conditions of Services) Act 2017?



Under the Maharashtra Shops and Establishments (Regulation of Employment and Conditions of Services) Act 2017 is the typical opening & closing hours for shops and establishments are regulated as follow.

opening Hours = shop and establishment are generally allowed to open for business from 7:00 am to 9:30 PM.

Closing Hours = The Act stipulates that shop and establishment must close by 9:30 PM

5) Define the term Aggrieved women per the provision of the Sexual Harassment of women at work place (prevention, prohibition and Redressal) Act 2013.

→ Under the provisions of Sexual Harassment of women at work place (prevention, prohibition & redressal) Act 2013, the term aggrieved women refer to any women who allege to have been subjected to harassment at work place.

Enlist different forms of workers participation in India.

→ Workers participation in India can take various forms, including are -

- i) Works Committees.
- ii) Joint management Councils.
- iii) Shop-floor meetings.
- iv) Labour unions.
- v) Works Councils
- vi) Employee Stock ownership plans (ESOPs)
- vii) Quality Circles

→ Mention two legislations governing union and wages in India are -

- i) Trade unions Act 1926
- ii) Minimum wages Act, 1948

2) Explain in Detail "The Dunlop's Approach"

→ John Dunlop has developed a System approach to Industrial relations

2) According to Dunlop "An individual industrial relations System at any one time in its development is regarded as Comprised of Certain actors Certain Context, an ideology which binds the industrial relations System together and a body of rules created to govern the actors at the work place and work Community."

3) Elements of System approach

1) participants in the System

The three key participants are the union management and government that interact with the Social and economic Structure and these interactions involve three main level

2) Ideological Linking -

An ideology is a set of ideas and belief commonly held by the actors that helps to build or integrate the System together as an entity.

3) Context environment -

According to Dunlop, the three types of environment are relevant to industrial relations which are as follows

1) The technological features of establishment

2) The economic & market constraints.

3) The focus & balance of people prevalent in the

Q. 9 India has been one of the founder members of the ILO and has been taking active parts in deliberation"

Explain the statement with impact of Indian labor organization

→ India is a founder member of the International Labour Organization, which came into existence in 1919. At present the ILO has 187 members. A unique feature of the ILO is its tripartite character. The membership of the ILO ensures the growth of the tripartite system in the member countries.

At every level in the organization, governments are associated with the two other social partners, namely the workers and employers.

All the three groups are represented on almost all the deliberative organs of the ILO and share responsibility in conducting its work.

The three organs of ILO are

International Labour Conference

Governing Body

International Labour Office.

b) Capital and labour should be Supplement and help each other they should be great family living in unity and harmony"
Relate this Statement to workers participation in management.

→ The 'Statement Capital & Labour should be Supplement to each other they should be great family living in unity and harmony' workers participation in management is a Concept that aims to poster this unity and Collaboration.

Worker participation encourages the involvement of workers in decision making process allowing them to contribute their ideas insight and perspective.

By working together as a great family with both Capital & labour Complementing & Supporting each other

workers participation in management create more inclusive productive work environment. it promotes a sense of ownership empowerment & mutual respect ultimately leading to improve productivity, job satisfaction & overall organization success

4a) Who is authorised to fix minimum wages & what manner & explain the procedure for fixing & revising minimum wages under the minimum wages act 1948?

→ Under the provisions of the minimum wages Act 1948, both Central, Government and appropriate government are authorised to fix, review & revise the minimum wages of the workers employed in the Schedule employments under their respective jurisdictions.

Appropriate governments have also been empowered to notify & employment in the Schedule where the number of employees is thousand or more & fix the rate of minimum wages in respect of the employees employed there in.

Procedure of fixing / revision -

In section 5 of the minimum wages Act 1948 two methods have been provided for fixation / revision of minimum wages.

They are Committee method & notification method.

1) Committee method -

Under this method Committees or Sub Committees are set up by the appropriate governments to hold enquiries & recommend with regard to fixation & revision of minimum wages, as the case may be.

2) Notification method -

In this method government proposals are published in the official gazette. For information of the persons likely to be affected their by are specify a day not less not less than 2 month of the date of notification.

Q) Explain in detail regarding the rights of recognition of union & Illegal Strike and Illegal lockout in the Maharashtra Recognition of Trade Union and Prevention of Unfair Labour Practices Act.

→ The Maharashtra Recognition of Trade Union and Prevention of Unfair Labour Practices Act 1971 was enacted for the recognition of trade unions to facilitate collective bargaining for certain undertakings to state their right and obligations to concertance power on unrecognized unions and for declaring certain strikes.

Illegal Strike -

If a strike which is common

1) Without giving to the employer notice of strike in the prescribed form or within fourteen days of the giving of such notice.

2) Where there is a recognised union without obtaining the vote of the majority of members of the union in favour of the strike before the notice of the strike is given.

3) During the pendency of an arbitration or conciliation proceeding.
Includes further scenarios specified in Sect 24(i) of the Act.

Illegal lockouts -

a) Without giving to the employee a notice of lock out in the prescribed form, or within fourteen days of the giving such notice.

b) During the pendency of Conciliation proceedings under the Bombay Act or the Central Act and 7 days after the conclusion of such proceeding in respect of matters covered by the notice of lock out.

b) During the pendency of Conciliation proceedings under the Bombay Act or the Central Act and 7 days after the conclusion of such proceeding in respect of matters.

c) Before revocation of Submission.

d) During pendency of Voluntary arbitration.

Q-5 Explain the provisions related to Strike and Lock Lay off Retrenchment and closure under the Industrial dispute Act 1947

→ Strike

According to Section 2(g) of the Industrial Dispute Act 1947 Strike means a Cessation of work by a body of persons employed in any industry acting in combination or a concerted refusal or refusal under a common understanding of any number of persons who are or have been so employed to continue to work or to accept employment.

Lockouts -

According to Section 2(i) of the Industrial Dispute Act 1947 lock out means the temporary closing of a place of employment or the suspension of work or refusal by an employer to continue to employ.

Lay off -

According to Section 2(kk) of the Industrial Dispute Act 1947 lay off means the failure or refusal or inability of an employer on account of shortage of coal power or raw materials or the accumulation.

Retrenchment -

According to section 2(oo) of the Industrial Dispute Act 1947 retrenchment means the termination by the employer of the service of a workman for any reason whatsoever otherwise than as a punishment inflicted by way of disciplinary action.

Closure -

According to section 2(cc) of the Industrial Dispute Act 1947 closure means the permanent closing down of a place of employment or part thereof.

b) Can a woman claim the maternity benefit from her employer if she works elsewhere during the period for which she was been permitted to make herself absent?

→ The Maternity Benefits Act 1961 is a legislation that protects the employment of women at the time of her maternity.

It entitles women employees of maternity benefits which is fully paid wages during the absence from work and to take care of her child.

Duration of leave -

A woman is entitled to twelve weeks of maternity leave under the terms of the Act not more than six weeks of which may come before the due date.

Job protection -

According to the guidelines of the 1961 Act it has been ruled unlawful for an employer to fire or let go of a woman at any time during or because of her absence.

Remuneration -

Women who meet the requirements for maternity leave outlined in the legislation are entitled to maternity benefits at the rate of the average daily salary for the time that they are really absent for work.

If a woman works in any establishment after she has been permitted by her employer to absent herself under the provision of Section 6 for any period during such an authorized absence she shall forfeit her claim to the maternity benefits for such period.

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Institute of Information Technology, Baramati.
MBA Batch 2023-25
MBA-I, SEM-II
Internal Evaluation Marks
Name of the Faculty - Ms. Nilophar S. Khan

Roll No.	Name of Student	206 HRM - ERLL						
	Subject Name/Code							
	Evaluation Parameter	Prelim Exam	Assignment No 1	Assignment No 2	Presentation	Attendance	Total Marks out of	Total Marks
	Total Marks	50	25	25	20	10	130	50
1	Ahiwale Rutuja Sudhir	11	20	20	16	2	69	27
3	Autade Komal Navnath	37	25	25	17	10	114	44
6	Bhapkar Archana Dnyandev	29	24	22	16	10	101	39
9	Bhojane Vaishnavi Manoj	44	25	25	18	10	122	47
14	Darade Shraddha Vijay	28	23	23	17	7	98	38
17	Dhakane Sonali Madhukar	28	23	24	17	7	99	38
18	Dhawade Rutuja Sunil	39	23	23	18	9	112	43
19	Dhaware Diksha Hanumant	21	23	21	18	7	90	35
28	Jagtap Pranjal Ashok	28	23	21	12	9	93	36
40	Londhe Pramod Rahul	28	21	24	16	10	99	38
42	Malshikare Shrivani Satish	35	23	22	19	5	104	40
46	More Neha Jaypal	2	20	21	12	5	60	23
54	Sakhare Sandhya Namdev	40	24	24	19	6	113	43
58	Shende Ankita Balasaheb	22	19	17	12	2	72	28
62	Suryawanshi Omkar Satish	28	20	15	12	3	78	30
66	Zagade Tanisha Sachin	25	22	21	16	6	90	35

Nilophar S. Khan



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Institute of Information Technology, Baramati.
MBA Batch 2023-25
MBA-I, SEM-II

Internal Evaluation Marks

Name of the Faculty - Ms. Nilophar S. Khan

Roll No.	Name of Student	Prelim Exam					
	Subject Name/Code	206 HRM - ERLI					
	Evaluation Parameter	CO 1	CO 2	CO 3	CO 4	CO 5	Total Marks
	Total Marks	10	10	10	10	10	50
1	Ahiwale Rutuja Sudhir	5	4	1	1	0	11
3	Autade Komal Navnath	8	8	9	7	5	37
6	Bhapkar Archana Dnyandev	9	4	1	7	8	29
9	Bhojane Vaishnavi Manoj	10	9	8	8	9	44
14	Darade Shraddha Vijay	10	2	7	0	9	28
17	Dhakane Sonali Madhukar	10	6	6	0	6	28
18	Dhawade Rutuja Sunil	9	2	3	0	3	17
19	Dhaware Diksha Hanumant	8	6	2	0	5	21
28	Jagtap Pranjal Ashok	10	4	2	0	2	28
40	Londhe Pramod Rahul	8	6	0	8	6	28
42	Malshikare Shravani Satish	10	8	7	3	7	35
46	More Neha Jaypal	0	0	0	0	2	2
54	Sakhare Sandhya Namdev	7	2	6	0	3	40
58	Shende Ankita Balasaheb	7	7	2	0	6	22
62	Suryawanshi Omkar Satish	10	5	4	3	6	28
66	Zagade Tanisha Sachin	8	7	4	0	6	25
	Average	8.1	5.0	3.9	2.3	5.2	
		8 out of 16 students	8 out of 16 students	8 out of 16 students	6 out of 16 students	9 out of 16 students	
	Percentage of students above average	50.00	50.00	50.00	37.50	56.25	
Attainment Level 3	Percentage of Students above Average > 77						
Attainment Level 2	Percentage of Students above Average > 50	2	2	2		2	
Attainment Level 1	Percentage of Students above Average > 40				1		

Nilophar S. Khan


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Institute of Information Technology, Baramati.
MBA Batch 2023-25
MBA-I, SEM-II

Internal Evaluation Marks

Name of the Faculty - Ms. Nilophar S. Khan

Roll No.	Name of Student	Assignment No 2					
	Subject Name/Code	206 HRM - ERLI					
	Evaluation Parameter	CO 1	CO 2	CO 3	CO 4	CO 5	Total Marks
	Total Marks	5	5	5	5	5	25
1	Ahiwale Rutuja Sudhir	4	4	4	4	4	20
3	Autade Komal Navnath	5	5	5	5	5	25
6	Bhapkar Archana Dnyandev	4	5	4	5	4	22
9	Bhojane Vaishnavi Manoj	5	5	5	5	5	25
14	Darade Shraddha Vijay	5	4	5	5	4	23
17	Dhakane Sonali Madhukar	5	4	5	4	4	24
18	Dhawade Rutuja Sunil	5	4	5	5	4	23
19	Dhaware Diksha Hanumant	4	4	4	5	4	21
28	Jagtap Pranjali Ashok	4	4	4	5	4	21
40	Londhe Pramod Rahul	5	4	5	4	4	24
42	Malshikare Shravani Satish	4	5	4	5	4	22
46	More Neha Jaypal	4	4	4	5	4	21
54	Sakhare Sandhya Namdev	5	4	5	4	4	24
58	Shende Ankita Balasaheb	3	4	4	3	3	17
62	Suryawanshi Omkar Satish	3	3	3	3	3	15
66	Zagade Tanisha Sachin	4	4	4	5	4	21
	Average	4.3	4.2	4.4	4.5	4.0	

		14 out of 16 students	15 out of 16 students	15 out of 16 students	10 out of 16 students	14 out of 16 students
	Percentage of students above average	87.50	93.75	93.75	62.50	87.50
Attainment Level 3	Percentage of Students above Average > 77	3	3	3		3
Attainment Level 2	Percentage of Students above Average > 50				2	
Attainment Level 1	Percentage of Students above Average > 40					

Flp



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Sub – Employee Relation and Labour Legislation

Question Bank

1. Explain Concept of Employee Relation
2. What are the Scope and Objectives of Employee Relation?
3. Write a short note on – The Dunlop's Approach ii) The Gandhian Approach
4. What is Collective Bargaining?
5. What is the procedure for the registration and cancellation of a trade union as per the Trade Union Act, 1926?
6. Explain the grievance handling procedure in detail
7. Explain detail the process of collective bargaining.
8. What are the provisions of the Factories Act in respect of health and safety of workers?
9. Explain in detail the need and objectives of Labour Legislation.
10. List any one Act that govern Employee Relations and define Employee Relations?
11. What is the meaning of Grievance?
12. Describe the Opening and Closing hours under Maharashtra shops and Establishment (Regulation of Employment and conditions of Service) Act, 2017?
13. Enlist different forms of Workers Participation in India.
14. Mention two legislations governing Union and Wages.
15. List the name of approaches to Employee relations.
16. Comment on the Provision-Annual Leave with wages under The Factories Act, 1948.



17. Summarize about the provisions of Licensing of Contractors under The Contract Labour (Regulation and Abolition) Act, 1970.
18. Explain the provisions related to Strike and Lockouts, Layoff, Retrenchment and Closure under the Industrial Dispute Act, 1947.
19. Explain in detail regarding Rights of Recognized union and Illegal Strike and Illegal Lockout under the Maharashtra Recognition of Trade Union and Prevention of Unfair Labour Practices Act 1971.
20. Explain Factories Act 1948 in Detail.



Vidya Pratishthan's Institute of Information Technology, Baramati

Question bank – 404 IB -Global Trade and Logistics Management

1. Discuss Mercantilism theory
2. Interpret NVOCC
3. Why do nations trade? Give three reasons
4. Define and list down INCOTERMS
5. What is role of CHA in exim operations
6. Define bill of lading and airway bill. Explain the role of Information Technology in supply chain
7. Explain different elements of logistics management
8. Discuss third party logistics
9. Summarize economic significance of trade
10. Explain principal methods of chartering
11. Distinguish between container freight station and Inland container depots
12. Explain importance economic environment and political environment in international business
13. Discuss institutional framework for export promotion
14. Discuss the significance of the absolute advantage theory and product life cycle theory
15. Give significance of foreign trade policy.
16. Discuss in detail the product life cycle theory.
17. Discuss the different import export documentation.
18. Explain bill of lading in detail.
19. Discuss the various payment methods.
20. What is consignment?
21. Discuss VTMS.
22. Discuss the harbor and terminal facility.
23. Explain the logistics process in detail.
24. What is CIF and FAO.
25. What is FIEO?
26. Which are the various export promotion council?
27. What is a multimodal transport system?
28. What is HS code?





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NAAC

NATIONAL ASSESSMENT AND
ACCREDITATION COUNCIL

"B"
Grade
CYCLE II

ACADEMIC FILE - SUMMARY SHEET

Class	MBA-II	Semester	IV
Subject Code and Name	404 IB - GTLM	Faculty	Ms. Nilophar S. Khan

Respected Sir,

Please find enclosed here with following documents for your verification and approval.

1. Time Table
2. Syllabus
3. Teaching Plan
4. Program Outcomes, Course Objectives and Course Outcomes
5. Program Outcome and Course Outcome Correlation Matrix
6. Course Outcome Attainment Level (Table and Histogram)
7. Attendance sheet
8. Lecture Record
9. Unit Test Question paper
10. Mark-sheet of unit test
11. Prelim Exam Question paper
12. Mark-sheet of prelim exam
13. Assignment
14. Internal performance of the student
15. Student wise course outcome attainment
16. Question Bank
17. Study Material / Notes
18. Other, if any (Pl. specify)

Dehru

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Dehru
[Director]

[Signature]
[Head of the Department]

[Signature]
[Subject Teacher]

- Export Import Procedures Documentation & Logistics, Abir Lal Mukherjee, Random Publications

Suggested Reference Books:

- Export Import Procedures and Documentation, Thomas Johnson, Donna Bade, Harper Collins Publisher.
- Export-Import Theory, Practices, and Procedures, Erdener Kaynak, Belay Seyoum, Routledge.
- Export Import Management, Justin Paul, Rajiv Aserkar, OUP India.
- Exporting: Regulations Documentation Procedures: International Documentation and Procedures, George P. Thompson, George W. Thompson, Catherine J. Peterson, Global Training Center

Semester: IV	Course Code: SC-IB-02	404 IB: Global Trade and Logistics Management
3 Credits	LTP: 2:1:1	Generic Core Course

Course Outcomes: On successful completion of the course the learner will be able to

CO	COGNITIVE ABILITIES	COURSE OUTCOMES
CO404IB.1	REMEMBERING	DESCRIBE THE ECONOMIC SIGNIFICANCE OF TRADE ALONG WITH THE LOGISTICS PROCESSES
CO404IB.2	UNDERSTANDING	EXPLAIN INTERNATIONAL TRADE THEORIES AND APPLICATIONS IN BUSINESS
CO404IB.3	APPLYING	IDENTIFY VARIOUS ENVIRONMENTAL FACTORS ASSOCIATED WITH INTERNATIONAL BUSINESS
CO404IB.4	ANALYSING	EXAMINE VARIOUS MODES AND PRACTICES OF INTERNATIONAL LOGISTICS
CO404IB.5	EVALUATING	EXPLAIN THE ACTIVITIES INVOLVED IN ENTIRE LOGISTICS PROCESSES IN INTERNATIONAL BUSINESS
CO404IB.6	CREATING	DEVELOP THE APPROPRIATE STRATEGY OF OPERATIONS FOR GLOBAL TRADE AND LOGISTICS

- 1. Introduction to Global Trade and Logistics Management:** Introduction to International Business - Elements of International Business – Globalization and trade - Trade and its significance - Economic significance of trade - Elements of Logistics Management – Trade and Logistics Processes. **(7+2)**
- 2. International Trade Theories and Applications:** Why do nations trade - Theories of International trade – Mercantilism - Absolute advantage - Comparative advantage - Heckscher-Ohlin, Product life cycle theory and Porter's diamond model. **(7+2)**
- 3. International Business Environment:** Economic Environment - Political Environment - Demographic environment - Legal Environment - Global sourcing - Challenges for Indian Businesses – Introduction to Foreign Trade Policy – Institutional Framework for Export Promotion – Export Incentives and Facilities. **(7+2)**
- 4. Introduction to Global Logistics:** Introduction to global logistics - Different modes of shipment – Different modes of operation of shipping - Different modes of transport - Multi modal transport system - Chartering practice - Conference system - Containerization – Concepts of FCL/LCL, CFS, ICD - Third party logistics. **(7+2)**
- 5. Global Logistics Operations:** Concepts of CHA, FFA, C&FA - Ship operating agents an process – Understanding NVOCC - Introduction to port operations - harbor facility and terminal facility - Role of VTMS - Customs bonded warehouses - Freight types, application, and consolidation - Introduction to International logistics - logistics Documentation - Understanding INCOTERM and Selection of INCOTERM - Application of information technology in global logistics. **(7+2)**

Note:

- Real world examples and cases are expected to be discussed and analyzed in the class as well as included in the examination.

Suggested Text Books:

- Logistics Management for International Business: Text and Cases, S. Sudalaimuthu, S. Anthony Raj, PHI Learning.
- Logistics Management and World Seaborne Trade, Muthiah Krishnaveni, Himalaya Publishing House
- International Trade Logistics, Ram Singh, Oxford University Press

Suggested Reference Books:



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ACADEMIC YEAR 2022-23

404 IB: Global Trade and Logistics Management

MBA Program Outcomes (PO's)

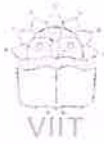
By the culmination of this program, the post graduate acquires the ability

PO1	Generic and Domain Knowledge - Ability to articulate, illustrate, analyze, synthesize and apply the knowledge of principles and frameworks of management and allied domains to the solutions of real-world complex business issues
PO2	Problem Solving & Innovation - Ability to Identify, formulate and provide innovative solution frameworks to real world complex business and social problems by systematically applying modern quantitative and qualitative problem solving tools and techniques.
PO3	Critical Thinking - Ability to conduct investigation of multidimensional business problems using research based knowledge and research methods to arrive at data driven decisions
PO4	Effective Communication - Ability to effectively communicate in cross-cultural settings, in technology mediated environments, especially in the business context and with society at large
PO5	Leadership and Team Work - Ability to collaborate in an organizational context and across organizational boundaries and lead themselves and others in the achievement of organizational goals and optimize outcomes for all stakeholders.
PO6	Global Orientation and Cross-Cultural Appreciation: Ability to approach any relevant business issues from a global perspective and exhibit an appreciation of Cross Cultural aspects of business and management.
PO7	Entrepreneurship - Ability to identify entrepreneurial opportunities and leverage managerial & leadership skills for founding, leading & managing startups as well as professionalizing and growing family businesses.
PO8	Environment and Sustainability - Ability to demonstrate knowledge of and need for sustainable development and assess the impact of managerial decisions and business priorities on the societal, economic and environmental aspects.
PO9	Social Responsiveness and Ethics - Ability to exhibit a broad appreciation of the ethical and value underpinnings of managerial choices in a political, cross-cultural, globalized, digitized, socio-economic environment and distinguish between ethical and unethical behaviors & act with integrity.
PO10	Lifelong Learning – Ability to operate independently in new environment, acquire new knowledge and skills and assimilate them into the internalized knowledge and skills.

404 IB: Global Trade and Logistics Management – Course Outcomes (CO's)

CO 1	Describe the economic significance of trade along with the logistics processes
CO 2	Explain international trade theories and applications in business
CO 3	Identify various environmental factors associated with international business
CO 4	Examine various modes and practices of international logistics
CO 5	Explain the activities involved in entire logistics process in international business
CO 6	Develop the appropriate strategy of operations for global trade and logistics





404 IB: Global Trade and Logistics Management: CO PO Mapping										
Program Outcomes (PO)	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10
Course Outcome (CO)										
CO 1										1
CO 2		1				2				
CO 3		1				1		3		
CO 4			2			2	1		1	
CO 5						2				1
CO 6		2				3		1		

H: High (3), M: Medium (2) and L: Low (1)

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Preliminary Examination- April 2024

Date: 27/04/2024

Time: 02: 30 Hours

Class: MBA – II

Max. Marks 50

Subject: IBM 02- Global Trade and Logistics Management

Instructions:

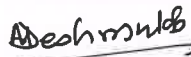
- i) All questions are compulsory.
- ii) All questions carry 10 marks.

	Questions	Marks
Q.1	Answer the following. (Any 5 out of 8) (2 marks each): a) What is full form of CHA? b) Define international trade. why does international trade exist? c) What are the freight types? d) Define and explain exworks. e) Define and explain FOB f) Define and explain FCA. g) What is INCOTERMS? h) What is logistics management?	10
Q.2	Attempt any 2 questions (5 marks each) a) Define and explain INCOTERM b) Explain Comparative Cost advantage theory c) Distinguish between FCL and LCL	10
Q.3	a) Explain Global Trade and it's significance. Or b) Explain types of warehouse used for import & export of goods.	10



Q.4	<p>a) Explain port operations in detail.</p> <p style="text-align: center;">Or</p> <p>b) Discuss the NVOCC. Explain harbor facility and terminal facility.</p>	10
Q.5	<p>a) Explain challenges for Indian Businesses for conducting international business..</p> <p style="text-align: center;">Or</p> <p>b) Anurag is selling goods to Japan. Kavita is buying goods from USA. Where as Ganesh is buying raw materials from south Africa & after processing it sells finished goods to Malaysia.</p> <p>i) Who is exporter?</p> <p>ii) Who is importer?</p> <p>iii) What is export trade? also explain answers of all above questions.</p>	10




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Preliminary Examination – April 2024

Class: MBA II Date: 27/04/2024 Time: 2:30 hours
Subject: IBM 02 - Global Trade & Logistics Management

Roll No.	Student Name	Sign	Marks	Ans. Book Received
4	Bhagwat Prathamesh Arjun	— AB —	— AB —	—
5	Bhalerao Krishna Laxman	— AB —	— AB —	—
17	Ghodake Rajnandini Bandu	— AB —	— AB —	—
25	Jagtap Shreenath Tanaji	Jagtap S.T.	23	—
30	Kekan Shweta Mahadev	— AB —	— AB —	—
31	Khatal Tejashri Shivaji	— AB —	— AB —	—
47	Phadatare Rutuja Ramdas	R.R. Phadatare	24	—
54	Shinde Digvijay Nitin	— AB —	— AB —	—
57	Shingade Pravin Ramchandra	— AB —	— AB —	—
60	Sul Vishal Vitthal	— AB —	— AB —	—
61	Suryawanshi Prasad Dadaso	— AB —	— AB —	—
64	Taware Abhishek Sandeep	— AB —	— AB —	—

MR. RAKESH
Kulkarni

Name and Signature of Supervisor

Class Room: C2

Total Present: 02

Total Absent: 10



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Global Trade and Logistics Management

Submission Due Date – 16th April , 2024

Assignment No. 1

1. Explain the trade and its significance.
2. Explain the concepts of INCOTERMS.
3. Explain the mercantile theory.
4. Explain the multimodal transport systems.
5. Explain the export incentives and facilities.

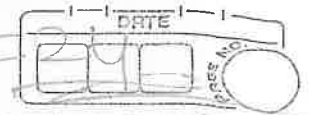
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Assignment no. 2

1. Identify the role of VTMS.
2. Examine the application of IT in global logistics.
3. Analyze the need of logistics documentation.
4. Distinguish between FCL and LCL.
5. Explain the importance of foreign trade policy.



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Name - Rutuja Ramdas Phadatar

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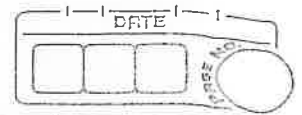
subject - Global trade & logistics Managemen

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Assignment No. - 1



Q.1) Explain the trade & its significance.

Trade plays a vital role in the global economy. It involves the buying & selling of goods & services between individuals, businesses, or countries.

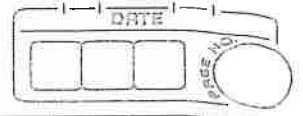
The significance of trade can be seen in several aspects -

1) Economic Growth, -

Trade allows countries to specialize in producing goods & services that they have a comparative advantages in, meaning they can produce them, more efficiently & at a lower cost. This specialization leads to increased productivity, economic growth, & higher living standards.

2) Access to Resources -

Trade enables countries to access resources that may be scarce or unavailable within their own borders. For example, a country without oil reserves can still obtain oil through trade with oil-producing nations.



3) Market Expansion -

Trade opens up new markets for businesses to sell their products & services. By reaching a larger customer base, businesses can increase their sales & profits, which in turn stimulates economic growth.

4) Cultural Exchange -

Through trade, different cultures & societies come into contact with one another. This exchange of goods & services also leads to an exchange of ideas, knowledge, & cultural practices, fostering understanding & appreciation among nations.

5) Job Creation -

Trade creates employment opportunities by supporting industries that rely on exports or imports. When businesses engage in trade, they often need workers to produce, package, transport & sell their goods or services.

6) Competitive Advantages -

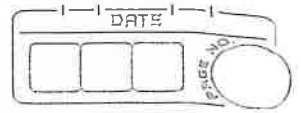
Trade encourages competition, which drives innovation & efficiency. Businesses strive to improve their products.

edge in the global market, benefiting consumers with better quality & lower prices.

7) Diplomatic Relations -

Trade can also play a role in fastening diplomatic relationship between countries. By engaging in multiple beneficial trade partnerships, nations can build trust, cooperation, & peaceful relation.

Trade is a dynamic & essential components of the global economy. It promotes economic growth, enhances living standards, & facilitates cultural exchange & cooperation among nations.



Q.2) Explains the concepts of INCOTERMS.



INCOTERMS are the language you'll use when you're trading abroad, defining the trade contract responsibilities & liabilities between a buyer & seller. They cover who is responsible for paying freight costs, insuring goods in transit & covering any import / Export duties.

Following are the examples of INCOTERMS:

1) EXW (Ex works) -

The seller makes the goods available at their own premises & designated location. The buyer is responsible for all transportation, loading, & export procedures.

2) FOB (Free on Board) -

The seller is responsible for delivering the goods to the specific port of shipment & loading them onto the vessel. The buyer takes over the responsibility & costs once the goods are on board the vessel.

3) CIF (Cost, Insurance, & freight) -

The seller is responsible for the cost, insurance, & freight of the goods until they reach the destination port. The buyer takes over the responsibility & costs from the destination port onwards.

4) DAP (Delivered at place) -

The seller is responsible for delivering the goods to the buyer at the agreed, upon destination, excluding ~~import~~ customs clearance & ~~any~~ applicable taxes or duties.

5) CIP (Carriage & Insurance paid to) -

The seller is responsible for delivering the goods to the carrier or another person nominated by the seller, & they also bear the costs of transportation & insurance to the named destination.

Q.3) Explain the mercantile theory.



The mercantile theory was prevalent in Europe during the 16th to 18th centuries & centered on the idea that a nation's wealth & power were determined by its accumulation of precious metals, particularly gold & silver. Mercantile believed in a favourable balance of trade where exports should exceed imports to bring in more bullion. They advocated for government intervention to achieve this through policies such as tariffs, subsidies, & monopolies to promote domestic industry & limit foreign competition. Additionally, colonies were seen as valuable sources of raw materials & markets for finished goods, contributing to the wealth & power of the mother country. While mercantile played a significant role in shaping early economic thought, it has been largely replaced by more liberal economic theories like capitalism & free trade.

The mercantilists theory, which emerged during the 16th to 18th centuries, was an economic doctrine that emphasized

the accumulation of wealth, particularly in the form of gold & silver, as the primary goal of a nation's economic policy.

1) Wealth Accumulation -

mercantilists believe that a nation's economic strength & power depended on its ability to amass precious metals, especially gold & silver. They saw these metals as the foundation of wealth because they could be used to purchase goods & services both domestically & internationally.

2) Favourable Balance of Trade -

mercantile advocated for policies that would promote a positive balance of trade, where the value of exports exceeds the value of imports. They believed that exporting more goods than importing would result in a net inflow of gold & silver, thus increasing a nation's wealth.

3) Government Intervention -

mercantilist policies often involved significant government intervention.

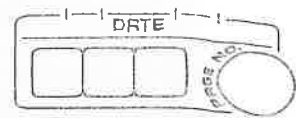
In the economy, governments implemented measures such as tariffs (taxes on imports) & subsidies to domestic industries, & the establishment of monopolies to control the production & sales of certain goods.

4) Colonialism & Imperialism -

mercantile policies also supported colonialism & imperialism. Colonies were viewed as sources of valuable raw materials & markets for finished goods. Mercantile powers sought to exploit their colonies to obtain resources & establish exclusive trading relationships that would benefit the mother country.

5) National power & security -

Mercantilists believed that economic strength was closely tied to national power & security. They argued that a wealthy & powerful nation would be better equipped to defend itself against external threats & assert its interests on the global stage.



Q4) Explain the multimodal transport systems



A multimodal transport system integrates different modes of transportation, like rail, road, air & sea, to offer efficient & seamless movement of goods or passengers from origin to destination. It optimizes logistics by using the strengths of each mode while compensating for their weaknesses. For instance, goods might travel by ship across oceans, then by rail or truck for inland transportation, ensuring cost-effectiveness, reliability & sustainability.

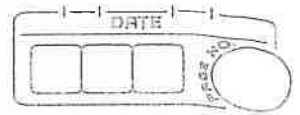
Let's dive deeper into the concept of multimodal transport.

1) Integration of modes - multimodal transport involves the coordinated use of various transportation modes, such as ships, trains, trucks, airplanes, & even pipelines. & advantages in a particular segment of the journey.

2) Seamless Transfer -

The key aspect of

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multimodal transport is the seamless transfer of goods or passengers between different modes of transportation. This requires efficient logistics planning, infrastructure, & coordination between various stakeholders.

3) Intermodal Hubs -

Intermodal hubs serve as transfer points where goods or passengers can easily switch between different modes of transportation. These hubs are strategically located to minimize transit times & optimize efficiency.

4) Cost efficiency -

By utilizing the most cost-effective modes for each segment of the journey, multimodal transport can reduce overall transport costs. For example, shipping goods over long distance by sea & then using trucks for last-mile.

Q.5) Explain the export incentives & facilities



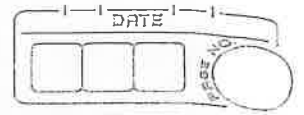
Export incentives & facilities are measures put in place by governments to promote & support the export of goods & services from a country. These incentives & facilities aim to make exporting more attractive for businesses by providing financial assistance, reducing costs, & offering various support services.

1) Export subsidies -

Governments may offer direct financial assistance or subsidies to exporters, such as cash grants, tax rebates, or low-interest loans. These subsidies help offset production or transportation costs, making exported goods more competitive in foreign markets.

2) Tax incentives -

Tax incentives, such as tax exemptions, deductions, or credits, are often provided to exporters. These incentives can include exemptions from



value-added tax (VAT) or customs duties on exported goods, reducing the overall tax burden on exporting businesses

3) Export credit & Insurance -

Government
or export credit insurance or guaranty to protect exporters against the risk of non-payment by foreign buyers.

4) Export financing -

Export financing programs, including export loans or credit facilities, are offered to exporters to support their working capital needs, product costs, or expansion into new markets. These financing options often have favorable terms & lower interest rates compared to traditional commercial loans.

5) Export promotion programs -

Governments
establish export promotion agencies or programs to provide market research, trade missions, assistance to exporters.

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Name - Prathamesh Arjun Bhagwat

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Class - MBA - II

Subject - Global trade & logistics Management

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Assignment No-2

Page No.	
Date	

Q 1) Identify the role of VIMS



following are the details about role of VIMS
VIMS or Visitor Traffic management system plays a crucial role in managing & optimizing visitor traffic within various facilities or locations.

1) Traffic monitoring -

VTMS monitoring incoming & outgoing traffic, providing real-time data on the volume, flow, & pattern of visitors. This data helps in understanding peak hours, popular routes & congestion points.

2) Optimizing Routes -

By analyzing traffic data, VTMS can suggest optimizing routes for visitors to navigate through the facility efficiently. This reduces congestion, minimizes delays & improves overall visitor experiences.

3) Enhancing security -

VTMS can integrate with security systems to monitor vehicle movements, track suspicious behaviour & ensure compliance with safety regulations. It helps in preventing unauthorized access.

access & managing emergency sitcacion effective

4) Resource Allocation -

VTMS collects & analyzes historical traffic data into ident long-term trends forecast future demands & make informed decisions regarding infrastructure improvements or expansions.

4) Data Analysis -

VTMS Based on traffic insights assists in allocating reson such as staff, parking spaces, & amenities more effectively. This ensures that the facility operates smoothly even during peak Periods.

This are the role of VTMS.

Q2) Examine the application of IT in global logistic

→

The application of IT in global logostics has revolutionized the industry, enhancing efficienc accuracy & responseceness. Through technologies like GPS traking, RFID, & advanced analystics, companies can optimize routes, manage, inventory improve supply chain visibility.

The various ways information technology (IT) is applied in global logistics -

1) Supply chain Visibility -

IT systems provides real-time visibility into the supply chain, allowing companies to track the movement of goods from suppliers to customers.

2) Inventory management -

IT systems such as warehouse management system (WMS) & Inventory management software automate inventory tracking, replacement, & order fulfillment. These systems optimize inventory levels, reduce carrying costs, & ensure product availability.

3) Transportation management -

Transportation management systems (TMS) utilize IT to optimize transportation routes, modes & carriers. They consider factors like cost, transit time, & capacity constraints to minimize shipping costs & improve delivery performance.

4) Warehouse Automation -

IT-driven automation technologies, such as robotics & automated guided vehicles (AGVs), streamline warehouse picking. These technologies increase picking accuracy,

reduce lab increa costs, & enhance through put

5) Route optimization -

GPS technology route optimization software help log is companies plan the most efficient routes for deliveries. This reduses fuel consump lowers emissions & improves overall free efficiency.

6) Predictive Analytics -

Advanced analytics & machine learning algorithms analyze identify historical data to forecast demand, identify trends & anticipate supply chain disruption.

7) RFID & Barcode Technology -

RFID tags & barcode scanners automate data capture proces improving inventory accuracy & traceability. The enable real-time tracking of assets, reducing manual errors & enhancing operational efficiency

8) Collobrative platforms -

Cloud based collabrati platforms facilitate communication & informati sharing among supply chain partners

The application of IT in global logistics drives efficiency, visibility, & agility throughout the supply chain, enabling companies to meet customer demand more effectively while reduce cost & mitigating risks.

Q 3) Analyze the need of logistics Documentation.

→ Logistics documentation serves several crucial purposes in the supply chain.

1) Legal Compliance -

Documents such as bills of lading, customs declarations, & certificates of origin are often required by law for the movement of goods across borders. Failing to provide accurate documentation can result in delays, fines or even seizures of goods.

2) Inventory management -

Documentation such as packing lists & shipping manifests helps track inventory throughout the supply chain, ensuring that the right destination

3) Risk management -

Documents such as insurance certificates & export licenses mitigate risk associated with transportation, ensuring that goods are protected & authorized for shipment.

4) Financial control -

Invoices, purchase orders, & pay receipts facilitates financial transactions between parties involved in the supply chain, ensuring transparency.

5) Communication -

Documentation serves as a means of communication between various stakeholders, including suppliers, carriers, customs authorities, customers, ensuring that everyone is informed about the status & details of shipments.

6) Quality Control -

Documents such as certificates of analysis or conformity provide assurance of product quality & compliance with standards & regulations.

7) Efficiency -

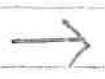
Proper documentation streamlines logistics operations by providing clear instructions & information, reducing errors, delays, & misunderstandings.

Q 4) Distinguish between FCL & LCL



FCL	LCL
1) Full container Load	1) Less than Container Load
2) Suitable for larger shipments that fill a container	2) Ideal for smaller volumes that don't occupy a full container
3) Shippers have exclusive use of the container.	3) Containers space is shared among multiple Shippers.
4) May be more cost effective for larger shipments	4) Cargo is consolidated & handled by the freight forwarder or consolidator
5) Shippers have control over packing & handling	5) Offers cost savings for smaller shipments by sharing containers space.
6) Generally faster transit times due to no consolidation or deconsolidation	6) May have longer transit times due to consolidation & deconsolidation processes

Q 5) Explain the importance of foreign of trade policy.



Trade policy, also known as inter national trade policy, Plays a pivotal role in shaping a country's economic landscape & its interaction with the global market.

details explanation if its importan

1) Economic Growth & Development -

Foreign trade policy influences a nati economic growth & develop-
nt by promoting exports, attracting foreign investment, & facilitating access to international markets.

2) Competitiveness -

An effective foreign trade policy enhances a country's competitiveness by removing barriers to trade, reducing tariffs, & implements trade facilitation measures. This allows domestic industries to access raw mater technology, & capital goods at competitive price improving their efficiency & productivity.

3) Innovation & Technology Transfer -

Trade polic can facilitate the transfer of technology & knowlec across bordores through collaboratation & investmer

4) Diversification or markets -

Trade policies help countries diversify their export markets, reducing dependency on a single market & mitigating risks associated with economic fluctuations in specific regions. By fostering trade relationships with multiple countries, nations can spread the risks & capitalize on opportunities in different markets.

5) Attracting foreign Investment -

A transparent & favorable foreign trade policy attracts foreign direct investment (FDI) by providing a stable & predictable business environment. Investors are more likely to commit capital to countries with open & liberalized trade policies.

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MBA Batch 2022-24 MBA-II, SEM-IV

Internal Evaluation Marks- Mar.2024



Name of the Faculty - Ms. Nilophar S. Khan

Subject - IBM 02-Global Trade & Logistic Management

Roll No.	Name of Students	Assignment -1	Assignment -2	Prelim Exam	Total	Total out of 50
	Total Marks	25	25	50	100	50
4	Bhagwat Prathamesh Arjun	22	20	31	73	37
5	Bhalerao Krishna Laxman				0	0
17	Ghodake Rajnandini Bandu				0	0
25	Jagtap Shreenath Tanaji	24	24	43	91	46
30	Kekan Shweta Mahadev	24	25	42	91	46
31	Khatal Tejashri Shivaji	24	24		48	24
47	Phadatare Rutuja Ramdas	24	24	35	83	42
54	Shinde Digvijay Nitin	24	24		48	24
57	Shingade Pravin Ramchandra	22	23		45	23
60	Sul Vishal Vitthal	24	24		48	24
61	Suryawanshi Prasad Dadaso				0	0
64	Taware Abhishek Sandeep				0	0

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Deshmukh

Director

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Institute of Information Technology, Baramati.

MBA Batch 2022-24 MBA-II, SEM-IV

Internal Evaluation Marks- Mar.2024

Name of the Faculty - Ms. Nilophar S. Khan

Subject - IBM 02-Global Trade & Logistic Management

Roll No.	Name of Students	Prelim Exam					Total out of 50
		CO 1	CO 2	CO 3	CO 4	CO 5	
	Total Marks	10	10	10	10	10	50
4	Bhagwat Prathamesh Arjun	8	6	7	6	4	31
5	Bhalerao Krishna Laxman	06	06	06	06	06	36
17	Ghodake Rajnandini Bandu	7	6	7	6	4	30
25	Jagtap Shreenath Tanaji	9	9	8	9	8	43
30	Kekan Shweta Mahadev	9	9	8	8	8	42
31	Khatal Tejashri Shivaji	4	4	4	4	4	20
47	Phadatare Rutuja Ramdas	9	6	8	7	5	35
54	Shinde Digvijay Nitin	8	3	4	3	2	20
57	Shingade Pravin Ramchandra	—————		AB	—————		—————
60	Sul Vishal Vitthal	—————		AB	—————		—————
61	Suryawanshi Prasad Dadaso	6	6	6	6	6	30
64	Taware Abhishek Sandeep	6	7	6	6	5	30
	Average	8.8	7.5	7.8	7.5	6.3	
		3 out of 12 students	3 out of 12 students	3 out of 12 students	2 out of 12 students	2 out of 12 students	
	Percentage of students above average	25.00	25.00	25.00	16.67	16.67	
Attainment Level 3	Percentage of Students above Average > 77						
Attainment Level 2	Percentage of Students above Average > 50						
Attainment Level 1	Percentage of Students above Average > 40	1	1	1	1	1	



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MBA Batch 2022-24 MBA-II, SEM-IV
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Roll No.	Name of Students	Assignment 1					Total out of 25
		CO 1	CO 2	CO 3	CO 4	CO 5	
	Total Marks	5	5	5	5	5	25
4	Bhagwat Prathamesh Arjun	5	4	5	3	5	22
5	Bhalerao Krishna Laxman	5	5	5	5	0	20
17	Ghodake Rajnandini Bandu	5	5	0	5	5	20
25	Jagtap Shreenath Tanaji	5	5	5	4	5	24
30	Kekan Shweta Mahadev	5	5	5	4	5	24
31	Khatal Tejashri Shivaji	5	5	5	4	5	24
47	Phadatare Rutuja Ramdas	5	5	5	4	5	24
54	Shinde Digvijay Nitin	5	5	5	4	5	24
57	Shingade Pravin Ramchandra	5	4	5	3	5	22
60	Sul Vishal Vitthal	5	5	5	4	5	24
61	Suryawanshi Prasad Dadaso						
64	Taware Abhishek Sandeep						
	Average	5.0	4.8	5.0	3.8	5.0	
		8 out of 12 students	6 out of 12 students	8 out of 12 students	6 out of 12 students	8 out of 12 students	
	Percentage of students above average	66.67	50.00	66.67	50.00	66.67	
Attainment Level 3	Percentage of Students above Average > 77						
Attainment Level 2	Percentage of Students above Average > 50	2	2	2	2	2	
Attainment Level 1	Percentage of Students above Average > 40						



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MBA Batch 2022-24 MBA-II, SEM-IV

Internal Evaluation Marks- Mar.2024

Name of the Faculty - Ms. Nilophar S. Khan

Subject - IBM 02-Global Trade & Logistic Management

Roll No.	Name of Students	Assignment 2					Total out of 25
		CO 1	CO 2	CO 3	CO 4	CO 5	
	Total Marks	5	5	5	5	5	25
4	Bhagwat Prathamesh Arjun	4	4	4	4	4	20
5	Bhalerao Krishna Laxman	4	4	4	4	4	20
17	Ghodake Rajnandini Bandu	4	4	4	4	4	20
25	Jagtap Shreenath Tanaji	5	5	5	4	5	24
30	Kekan Shweta Mahadev	5	5	5	5	5	25
31	Khatal Tejashri Shivaji	5	5	5	4	5	24
47	Phadatare Rutuja Ramdas	5	5	5	4	5	24
54	Shinde Digvijay Nitin	5	5	5	4	5	24
57	Shingade Pravin Ramchandra	5	4	4	3	5	23
60	Sul Vishal Vitthal	5	5	5	4	5	24
61	Suryawanshi Prasad Dadaso	4	4	4	4	4	20
64	Taware Abhishek Sandeep	4	4	4	4	4	20
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		8 out of 12 students	6 out of 12 students	8 out of 12 students	6 out of 12 students	8 out of 12 students	
	Percentage of students above average	66.67	50.00	66.67	50.00	66.67	
Attainment Level 3	Percentage of Students above Average > 77						
Attainment Level 2	Percentage of Students above Average > 50	2	2	2	2	2	
Attainment Level 1	Percentage of Students above Average > 40						

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