




Dr. Vasantodada Patil Shtekari Shikshan Mandal's  
**Padmabhooshan Vasantodada Patil Institute Of Technology,**  
**Budhgaon. (Sangli)**  
**FIRST YEAR ENGINEERING DEPARTMENT**


**NOTICE**

**Date: 23/02/2022**

All the students of First Year B. Tech are hereby informed that the Mid Term examination (SEM-I, 2021-22) will be held from 2<sup>nd</sup> March 2022 onwards according to following time table

Day and Date	Time	Division	Subject
Wednesday 02/03/2022	11:00 AM to 12:00	I,III,V	Engg. Maths-I
	11:00 AM to 12:00	II,IV,VI	Engg. Chemistry
	03:00 PM to 04:00 PM	I,III, V	Engg. Physics
	03:00 PM to 04:00 PM	II,IV,VI	Engineering Mechanics
Thursday 03/03/2022	11:00 AM to 12:00	I,III,V	Energy and Environment Engineering
	11:00 AM to 12:00	II,IV,VI	Engg. Maths-I
	03:00 PM to 04:00 PM	I,III,V	Communication Skills
	03:00 PM to 04:00 PM	II,IV,VI	Computer Programming in "C"
Friday 04/03/2022	11:00 AM to 12:30	I,III,V	Engineering Graphics

  
Exam Co-ordinator  
Mr. Amit Kumar Chavan,  
(First Year Engineering Dept.)

  
HoD,  
Dr. A. A. Patil,  
(First Year Engineering Dept.)



Dr. Vasanthaodada Patil Shtekari Shikshan Mandal's  
**Padmabhooshan Vasanthaodada Patil Institute Of Technology,**  
**Budhgaon. (Sangli)**  
**FIRST YEAR ENGINEERING DEPARTMENT**

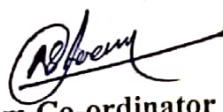
**NOTICE**


Date: 23/02/2022

All the course teachers of First Year B. Tech are hereby informed that the Mid Term examination (SEM-I, 2021-22) will be held from 2<sup>nd</sup> March 2022 onwards according to following time table. All the subject coordinators must submit question papers of their respective subject uniformly (*only one question paper for each subject except mathematics*) as per the DBATU format (indicating CO's & PO's) with Modal answer paper upto 25<sup>th</sup> Feb.2022 to undersigned.

Day and Date	Time	Division	Subject
Wednesday 02/03/2022	11:00 AM to 12:00	I,III,V	Engg. Maths-I
	11:00 AM to 12:00	II,IV,VI	Engg. Chemistry
	03:00 PM to 04:00 PM	I,III, V	Engg. Physics
	03:00 PM to 04:00 PM	II,IV,VI	Engineering Mechanics
Thursday 03/03/2022	11:00 AM to 12:00	I,III,V	Energy and Environment Engineering
	11:00 AM to 12:00	II,IV,VI	Engg. Maths-I
	03:00 PM to 04:00 PM	I,III,V	Communication Skills
	03:00 PM to 04:00 PM	II,IV,VI	Computer Programming in "C"
Friday 04/03/2022	11:00 AM to 12:30	I,III,V	Engineering Graphics

*Note: Course coordinators shall submit soft copy of Question paper and Modal answer paper to HoD through E-mail and submit the hard copy (sealed) to exam coordinator before due date.*


  
Exam Co-ordinator  
Mr.Amit Kumar Chavan,  
(First Year Engineering Dept.)

  
HoD,  
Dr. A. A. Patil,  
(First Year Engineering Dept.)



Padmabhooshan Vasantraodada Patil Institute of Technology, Budhgaon  
First Year Engineering Department  
A.Y. 2021-21 SEM I  
Mid Term Exam Marks

Div. FE-I	Subjects					Total	%
Branch: Civil, Instru and Ch	BS101	BS102	ES103	HM104	ES105		
Name of Faculty	RUY	MRW	/APL	SEN	PBD		
Date							
Out of Marks	20	20	20	20	20	100	
Roll No.							
1101	3	3	11	4	5	26	26.00
1102	14	9	11	6	9	49	49.00
1103	9	7	16	7	5	44	44.00
1104	1	8	10	7	5	31	31.00
1105	5	6	8	13	10	42	42.00
1106	5	3	10	12	5	35	35.00
1107	5	8	15	10	9	47	47.00
1108	8	7	16	13	13	57	57.00
1109	4	5	9	7	9	34	34.00
1110	4	5	13	8	5	35	35.00
1111	6	8	16	12	6	48	48.00
1112	10	8	17	19	12	66	66.00
1113	9	8	17	18	16	68	68.00
1114	7	13	15	13	5	53	53.00
1115	9	7	16	14	15	61	61.00
1116	6	9	16	16	17	64	64.00
1117	9	11	12	16	3	51	51.00
1118	8	12	19	14	9	62	62.00
1119	12	15	13	19	14	73	73.00
1120	0	14	17	12	11	54	54.00
1121	3	6	9	8	5	31	31.00
1122	3	6	12	7	6	34	34.00
1123	3	6	11	10	5	35	35.00
1124	AB	A	Ab	AB	ab	0	0.00
1125	4	4	18	7	5	38	38.00
1126	4	5	16	9	9	43	43.00
1127	AB	A	Ab	AB	ab	0	0.00
1128	1	3	5	AB	6	15	15.00
1129	1	3	6	17	17	44	44.00
1130	2	3	5	7	3	20	20.00
1131	11	11	14	14	16	66	66.00
1132	15	15	18	19	19	86	86.00
1133	13	18	20	19	18	88	88.00
1134	15	17	18	19	12	81	81.00
1135	9	10	18	13	14	64	64.00
1136	9	10	18	10	13	60	60.00
1137	5	8	8	12	8	41	41.00
1138	14	18	19	15	16	82	82.00
1139	8	16	19	19	18	80	80.00
1140	AB	A	Ab	AB	ab	0	0.00
1141	2	9	13	15	13	52	52.00
1142	2	8	13	8	14	45	45.00
1143	8	11	17	15	14	65	65.00
1144	12	14	18	15	14	73	73.00
1145	8	8	7	11	13	47	47.00
1146	5	10	13	7	11	46	46.00
1147	8	10	10	10	10	48	48.00
1148	3	11	17	13	10	54	54.00
1149	12	16	19	7	10	64	64.00
1150	5	9	17	7	12	50	50.00
1151	11	17	18	18	17	81	81.00
1152	10	15	15	17	16	73	73.00
Total							

  
 Dr. Mrs. A. A. Patil

Class Teacher  
Mr.R.U.Yadav

Padmakhooshen Vasantnandada Patil Institute of Technology, Budhgaon  
First Year Engineering Department  
A.Y. 2021-21 SEM I  
Mid Term Exam Marks

Div. FE-I	Subjects				Total	%
Branch: CEE	BS101	BS102	ES103	ES104		
Name of Faculty	/AAP	VJB	/TTS	/NRC		
Date	3/3/2022	02/03/2022	02/03/2022	3/3/2022	80	
Out of Marks	20	20	20	20		
Roll No.						
1201	13	15	18	17	63	78.8
1202	6	11	18	11	46	57.5
1203	15	17	20	20	72	90.0
1204	9	13	15	16	53	66.3
1205	3	8	14	7	32	40.0
1206	9	11	20	10	50	62.5
1207	10	16	20	13	59	73.8
1208	12	14	18	17	61	76.3
1209	8	16	16	15	55	68.8
1210	17	13	16	13	61	76.3
1211	14	20	18	17	69	86.3
1212	4	9	15	7	35	43.8
1213	15	13	17	17	62	77.5
1214	1	9	14	5	29	36.3
1215	11	13	18	17	59	73.8
1216	3	9	16	14	42	52.5
1217	8	10	18	11	47	58.8
1218	6	16	18	12	52	65.0
1219	11	14	18	14	57	71.3
1220	12	15	16	18	61	76.3
1221	11	9	14	8	42	52.5
1222	3	6	12	6	27	33.8
1223	17	14	17	13	61	76.3
1224	17	17	17	12	63	78.8
1225	7	13	16	12	48	60.0
1226	18	19	18	20	75	93.8
1227	7	13	18	20	58	72.5
1228	10	13	17	15	55	68.8
1229	16	13	18	14	61	76.3
1230	16	18	18	18	70	87.5
1231	15	11	13	12	51	63.8
1232	20	20	20	19	79	98.8
1233	10	10	13	8	41	51.3
1234	10	11	13	8	42	52.5
1235	3	13	9	7	32	40.0
1236	4	8	13	7	32	40.0
1237	10	14	14	5	43	53.8
1238	10	8	15	7	40	50.0
1239	20	19	18	19	76	95.0
1240	15	10	18	16	59	73.8
1241	17	14	13	11	55	68.8
1242	11	10	14	13	48	60.0
1243	11	9	13	11	44	55.0
1244	10	8	11	14	43	53.8
1245	7	14	15	13	49	61.3
1246	11	10	10	6	37	46.3
1247	11	8	9	6	34	42.5
1248	4	10	10	4	28	35.0
1249	9	13	17	12	51	63.8
1250	6	16	15	11	48	60.0
1251	9	8	13	15	45	56.3
1252	9	12	14	11	46	57.5
1253	3	11	13	10	37	46.3
1254	5	10	15	13	43	53.8
1255	3	6	8	5	22	27.5
1256	5	7	10	7	29	36.3
1257	19	8	16	9	52	65.0
1258	17	12	18	14	61	76.3
1259	11	12	9	4	36	45.0
1260	4	5	6	5	20	25.0
1261	AB	AB	AB	AB	0	0.0
1262	14	13	16	16	59	73.8
1263	13	16	13	15	57	71.3
1264	11	9	13	13	46	57.5
1265	18	12	15	17	62	77.5
1266	7	10	10	17	44	55.0
1267	6	6	8	10	30	37.5
Total						

Class Teacher  
Dr. V. J. Suryavanshi

HOD  
Dr. Mrs. A. A. Patil



Padmabhooshan Vasantraodada Patil Institute of Technology, Budhgaon  
First Year Engineering Department  
A.Y. 2021-21 SEM I  
Mid Term Exam Marks

Div. FE-III	Subjects						Total	%
Branch: Chem and ETC	BS101	BS102	ES103	HM104	ES105			
Name of Faculty	/AVP	SLP	SBK	AKC	/OSK PBP			
Date								
Out of Marks	20	20	20		20			
Roll No.								
1301	7	12	13	14	14	60	60	
1302	17	17	12	19	10	75	75	
1303	18	18	17	18	14	85	85	
1304	7	18	11	15	10	61	61	
1305	5	16	11	12	8	50	50	
1306	4	15	12	13	6	50	50	
1307	9	13	13	13	9	57	57	
1308	7	10	14	10	12	59	59	
1309	7	9	7	9	3	35	35	
1310	6	7	9	13	5	40	40	
1311	3	11	10	13	9	46	46	
1312	10	16	14	18	11	69	69	
1313	14	18	16	20	13	81	81	
1314	4	11	10	15	9	49	49	
1315	11	15	11	13	12	62	62	
1316	17	17	12	18	11	75	75	
1317	8	16	14	10	9	57	57	
1318	6	9	8	14	12	49	49	
1319	6	11	16	12	10	55	55	
1320	4	11	10	16	13	54	54	
1321	6	13	12	17	9	57	57	
1322	6	12	14	10	6	48	48	
1323	9	14	17	11	13	64	64	
1324	17	18	15	16	11	77	77	
1325	9	12	15	15	8	59	59	
1326	12	16	17	18	10	73	73	
1327	10	14	13	17	11	65	65	
1328	5	11	9	11	6	42	42	
1329	5	12	10	12	12	51	51	
1330	11	13	17	16	12	69	69	
1331	11	17	18	18	14	78	78	
1332	11	19	11	16	10	67	67	
1333	11	17	17	18	11	74	74	
1334	4	8	9	16	11	48	48	
1335	2	5	11	16	8	42	42	
1336	3	6	8	16	7	40	40	
1337	3	4	8	20	10	45	45	
1338	4	8	11	17	11	51	51	
1339	6	12	14	15	9	56	56	
1340	7	15	16	18	12	68	68	
1341	8	8	14	12	11	53	53	
1342 AC	AB	A	AB	AB	AB	0	0	
1343 AC	AB	A	AB	AB	AB	0	0	
1344	AB	A	AB	AB	AB	0	0	
1345	10	11	8	13	9	51	51	
1346	16	15	14	11	7	63	63	
1347	6	10	12	8	8	44	44	
1348	4	6	10	8	4	32	32	
1349	7	11	17	12	13	60	60	
1350	4	10	11	13	7	45	45	
1351	4	9	14	14	10	51	51	
1352	9	10	13	15	10	57	57	
1353	11	14	11	11	10	57	57	
1354	4	11	8	13	9	45	45	
1355	3	7	6	10	9	35	35	
1356	5	15	8	18	12	58	58	
1357	4	6	8	8	9	35	35	
1358	15	19	19	19	17	89	89	
1359	8	17	12	13	11	61	61	
1360	16	17	15	19	13	80	80	
1361	3	1	AB	AB	AB	4	4	
1362	4	9	4	14	11	42	42	
1363	5	4	5	13	6	33	33	
1364	10	12	16	19	9	66	66	
Total								

Class Teacher  
Mr.A.K.Chavan

Dr. Mrs. A. A. Patil

Padmabhooshan Vasantraodada Patil Institute of Technology, Budhgaon  
First Year Engineering Department  
A.Y. 2021-22 SEM I  
Mid Term Exam Marks

Div. FE-VI	Subject				Total	%
	BS101	BS102	ES103	ES104		
Branch: ECS	BS101	BS102	ES103	ES104		
Name of Faculty	/SPM	/DAL	AAK	MSM		
Date						
Out of Marks	20	20	20	20	80	100
Roll No.						
1601	8	10	9	8	35	43.75
1602	14	15	17	17	63	78.75
1603	8	10	10	8	36	45.00
1604	13	13	13	8	47	58.75
1605	8	12	15	9	44	55.00
1606	11	10	17	8	46	57.50
1607	19	16	14	14	63	78.75
1608	10	19	16	11	56	70.00
1609	8	9	11	4	32	40.00
1610	8	8	14	4	34	42.50
1611	14	13	15	8	50	62.50
1612	14	15	17	12	58	72.50
1613	19	17	20	13	69	86.25
1614	8	4	8	8	28	35.00
1615	8	14	6	8	36	45.00
1616	16	15	9	12	52	65.00
1617	14	14	10	12	50	62.50
1618	8	8	8	4	28	35.00
1619	10	16	10	5	41	51.25
1620	10	8	7	3	28	35.00
1621	14	15	13	14	56	70.00
1622	9	7	10	8	34	42.50
1623	2	7	7	3	19	23.75
1624	8	8	9	9	34	42.50
1625	8	17	0	8	41	51.25
1626	9	15	9	10	43	53.75
1627	8	11	8	10	37	46.25
1628	12	19	14	12	57	71.25
1629	11	11	18	10	50	62.50
1630	12	13	17	10	52	65.00
1631	12	16	14	11	53	66.25
1632	17	11	15	13	56	70.00
1633	9	14	10	14	47	58.75
1634	8	7	9	14	38	47.50
1635	4	10	11	10	35	43.75
1636	3	11	11	10	35	43.75
1637	3	8	9	6	26	32.50
1638	8	17	13	10	48	60.00
1639	8	13	14	10	45	56.25
1640	10	13	13	11	47	58.75
1641	13	15	16	13	57	71.25
1642	8	11	12	9	40	50.00
1643	13	16	14	12	55	68.75
1644	9	16	11	11	47	58.75
1645	9	8	8	8	33	41.25
1646	15	15	16	16	62	77.50
1647	11	17	16	13	57	71.25
1648	8	8	8	5	29	36.25
1649	8	8	6	8	30	37.50
1650	8	13	11	8	40	50.00
1651	10	14	11	8	43	53.75
1652	9	18	15	8	50	62.50
1653	14	17	16	8	55	68.75
1654	17	19	15	10	61	76.25
1655	8	10	10	3	31	38.75
1656	8	9	10	8	35	43.75
1657	10	14	18	9	51	63.75
1658	3	12	11	8	34	42.50
1659	16	17	16	8	56	70.00
1660	17	12	15	11	55	68.75
1661	8	11	11	5	35	43.75
Total						

Class Teacher  
Mrs. S.P. Mandale

HOD  
Dr. Mrs. A. A. Patil



Padmabhooshan Vasantraodada Patil Institute of Technology, Budhgaon  
First Year Engineering Department  
A.Y. 2021-21 SEM I  
Mid Term Exam Marks

Div. FE-IV	Subjects					
Branch: CSE (AI)	BS101	BS102	ES103	ES104		
Name of Faculty	PBKL	DAL & VJS	MSK	RNA	Total	%
Date						
Out of Marks	20	20	20	20	80	
Roll No.						
1401	20	20	18	18	76	95
1402	18	8	9	12	47	59
1403	13	14	13	18	58	73
1404	9	8	9	12	38	48
1405	7	4	7	9	27	34
1406	8	8	4	8	28	35
1407	19	18	11	19	67	84
1408	11	10	7	12	40	50
1409	5	6	7	5	23	29
1410	5	5	6	4	20	25
1411	12	5	8	13	38	48
1412	12	3	6	2	23	29
1413	11	18	10	17	56	70
1414	8	6	7	3	24	30
1415	9	17	10	9	45	56
1416	3	5	4	6	18	23
1417	4	4	5	2	15	19
1418	16	9	9	11	45	56
1419	20	19	19	17	75	94
1420	7	5	5	3	20	25
1421	9	9	7	9	34	43
1422	9	8	8	7	32	40
1423	12	13	9	4	38	48
1424	19	18	10	15	62	78
1425	9	10	7	6	32	40
1426	6	12	7	12	37	46
1427	5	7	6	2	20	25
1428	4	9	10	13	36	45
1429	6	6	9	5	26	33
1430	16	11	12	10	49	61
1431	17	19	11	15	62	78
1432	12	13	8	18	51	64
1433	13	3	8	11	35	44
1434	19	11	9	14	53	66
1435	19	14	9	12	54	68
1436	11	8	9	8	36	45
1437	9	12	9	14	44	55
1438	12	11	7	14	44	55
1439	13	15	9	18	55	69
1440	13	9	7	16	45	56
1441	9	9	7	12	37	46
1442	19	13	8	8	48	60
AC 1443	AB	AB	AB	AB	0	0
1444	13	12	8	12	45	56
1445	19	15	18	17	69	86
1446	19	19	16	19	73	91
1447	13	11	8	7	39	49
1448	13	11	8	16	48	60
1449	20	18	8	11	57	71
1450	10	10	9	11	40	50
1451	9	12	9	10	40	50
1452	8	7	8	5	28	35
1453	17	17	12	16	62	78
1454	15	12	11	17	55	69
1455	12	12	10	15	49	61
Total					0	0

HOD

Dr. Mrs. A. A. Patil

Class Teacher  
Ms.D.A.Lavate

**Padmabhooshan Vasantraodada Patil Institute of Technology, Budhgaon**

**First Year Engineering Department**

**A.Y. 2021-21 SEM I**

**Mid Term Exam Marks**

Div. FE-V	Subjects					Total	%
nch: Electrical /Mechan	BS101	BS102	ES103	HM104	ES105		
Name of Faculty	/AVP	MRW	CDP	AKC	/GSK		
Date							
Out of Marks	20	20	20	20	20	100	
Roll No.							
1501	4	8	11	19	11	53	53.00
1502	1	8	6	16	12	43	43.00
1503	5	16	11	18	17	67	67.00
1504	3	7	4	19	8	41	41.00
1505	2	4	7	9	4	26	26.00
1506	2	4	10	11	9	36	36.00
1507	4	12	20	19	15	70	70.00
1508	2	5	9	12	8	36	36.00
1509	2	3	9	11	7	32	32.00
1510	3	8	16	12	10	49	49.00
1511	2	11	13	19	15	60	60.00
1512	6	7	18	14	11	56	56.00
1513	5	8	13	17	7	50	50.00
1514	5	7	11	20	8	51	51.00
1515	9	7	17	8	10	51	51.00
1516	4	8	9	12	17	50	50.00
1517	6	7	10	18	16	57	57.00
1518	3	7	8	17	6	41	41.00
1519	4	8	15	10	4	41	41.00
1520	3	7	8	14	7	39	39.00
1521	2	3	7	18	10	40	40.00
1522	3	7	16	12	13	51	51.00
1523	4	1	6	3	6	20	20.00
1524	8	13	17	20	13	71	71.00
1525	8	12	17	19	15	71	71.00
1526	4	9	14	19	12	58	58.00
1527	2	5	7	12	7	33	33.00
1528	AB	A	AB	8	2	10	10.00
1529	8	8	16	16	11	59	59.00
1530	5	12	9	8	5	39	39.00
1531	4	3	5	6	4	22	22.00
1532	6	7	12	18	9	52	52.00
1533	7	7	8	18	7	47	47.00
1534	9	14	18	15	9	65	65.00
1535	4	9	12	12	10	47	47.00
1536	6	15	16	18	15	70	70.00
1537	3	7	7	8	5	30	30.00
1538	11	17	16	13	13	70	70.00
1539	5	9	9	13	12	48	48.00
1540	6	12	12	18	6	54	54.00
1541	AB	A	AB	AB	AB	0	0.00
1542	8	18	17	17	12	72	72.00
1543	11	19	18	19	13	80	80.00
1544	4	7	7	9	5	32	32.00
1545	3	13	14	15	13	58	58.00
1546	5	15	13	20	13	66	66.00
1547	3	11	12	19	15	60	60.00
1548	8	8	15	10	9	50	50.00
1549	6	8	9	13	7	43	43.00
1550	5	8	10	18	14	55	55.00
1551	5	9	7	12	10	43	43.00
1552	3	5	13	8	6	35	35.00
1553	4	11	18	15	9	57	57.00
1554	6	16	11	17	8	58	58.00
1555	8	17	12	11	10	58	58.00
1556	3	7	5	4	5	24	24.00
1557	4	7	8	6	4	29	29.00
1558	4	9	6	11	10	40	40.00
1559	8	10	13	14	11	56	56.00
AC 1560		A	AB	AB	AB	0	0.00
Total						0	0.00

Class Teacher  
Mrs.A.V.Patil

HOD  
Dr. Mrs. A. A. Patil



## Mid Semester Examination – March 2022

Course: F. Y.B. Tech (Group A) (I,III,V)

Sem: I

Subject Name: Engineering Mathematics I

Subject Code: BS101

Max Marks: 20

Date:- 02/03/2022

Time :- 11.00am – 12.00am.

## Instructions to the Students:

- 1) All questions are compulsory.
- 2) Make suitable assumptions wherever necessary and mention it clearly in answer book.
- 3) Use of nonprogrammable calculator is allowed
- 4) Figures to right indicate full marks and course outcome mapped.

## Q. 1 Attempt the following.

(1 × 6 = 6 Marks)

- |   | CO   | BL     | PO     |
|---|------|--------|--------|
| 1. If a square matrix of order n with $\rho(A) < n$ then matrix A is<br>a) Null Matrix b) Singular c) Non Singular d) As above  | CO 1 | BL_1   | PO 1,2 |
| 2. If A is a matrix of order $3 \times 4$ reduces into normal form $[I_3, 0]$ then rank of matrix A is<br>a) 3 b) 4 c) 2 d) 1   | CO 1 | BL_1   | PO 1,2 |
| 3. $X_1, X_2$ are the Eigen vectors of the matrix A then $X_1$ and $X_2$ are orthogonal if<br>a) A is symmetric c) A is non-symmetric<br>b) A is singular d) A is non-singular                      | CO 1 | BL_1   | PO 1,2 |
| 4. If $u = \tan^{-1}\left(\frac{x}{y}\right)$ , then value of $\frac{\partial u}{\partial y} =$<br>a) $\frac{x^2}{x^2+y^2}$ b) $-\frac{x}{x^2+y^2}$ c) $\frac{xy}{x^2+y^2}$ d) $\frac{-y}{x^2+y^2}$ | CO 2 | BL_1,3 | PO 1,2 |
| 5. If $u = x^3 + 2xy + y^2 + x + y$ then $x \frac{\partial u}{\partial x} + y \frac{\partial u}{\partial y}$ is equal to<br>a) u b) 2u c) 0 d) None of these  | CO 2 | BL_1,3 | PO 1,2 |
| 6. If $f(u)$ is a homogeneous function in x and y of degree n then $x \frac{\partial u}{\partial x} + y \frac{\partial u}{\partial y} =$<br>a) nu b) $n \frac{f(u)}{f'(u)}$ c) $n(n-1)$ d) $n f(u)$ | CO 2 | BL_1,3 | PO 1,2 |

## Q.2 Solve Any Two of the following.

(2 × 3 = 6 Marks)

- |  | CO   | BL   | PO     |
|--|------|------|--------|
| (A) Investigate for what values of $\lambda$ and $\mu$ the simultaneous equation<br>$x + y + z = 6$ ; $x + 2y + 3z = 10$ ; $x + 2y + \lambda z = \mu$ have i) no solution ii) a unique solution and iii) an infinite number of solution. | CO 1 | BL_1 | PO 1,2 |

- (B) Find the Eigen values and Eigen vectors of the matrices

$$\begin{bmatrix} -2 & -8 & -12 \\ 1 & 4 & 4 \\ 0 & 0 & 1 \end{bmatrix}$$

CO 1 BL\_1 PO 1,2

- (C) Use Gauss Jordan Method to find  $A^{-1}$ , where  $A = \begin{bmatrix} 2 & 1 & -1 \\ 0 & 2 & -1 \\ 5 & 2 & -3 \end{bmatrix}$

CO 1 BL\_1 PO 1,2

## Q.3 Solve Any two of the following. (2 × 4 = 8 Marks)

- |   |      |        |        |
|---|------|--------|--------|
| (A) If $u = \frac{x}{y+z} + \frac{y}{z+x} + \frac{z}{x+y}$ then prove that $x \frac{\partial u}{\partial x} + y \frac{\partial u}{\partial y} + z \frac{\partial u}{\partial z} = 0$                      | CO 2 | BL_1,3 | PO 1,2 |
| (B) If $z = \tan(y + ax) + (y - ax)^{\frac{3}{2}}$ then prove that $\frac{\partial^2 z}{\partial x^2} - a^2 \frac{\partial^2 z}{\partial y^2} = 0$  | CO 2 | BL_1,3 | PO 1,2 |
| (C) Verify Cayley-Hamilton theorem and find $A^{-1}$ , $A^2$ and $A^3$ of the matrices $\begin{bmatrix} 8 & -8 & -2 \\ 4 & -3 & -2 \\ 3 & -4 & 1 \end{bmatrix}$   | CO 1 | BL_1   | PO 1,2 |
| (D) If $u = f(r, s, t)$ and $r = \frac{x}{y}$ , $s = \frac{y}{z}$ , $t = \frac{z}{x}$ show that $x \frac{\partial u}{\partial x} + y \frac{\partial u}{\partial y} + z \frac{\partial u}{\partial z} = 0$ | CO 2 | BL_1,3 | PO 1,2 |

Dr. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

P. V. P Institute of Technology, Budhgaon, Sangli

Mid Semester Exam March, 2021-22

Course: F. Y. B. Tech (Group - B) Sem: I

Subject Name: Engineering Chemistry (EC)

Subject Code: BTBS102

Max Marks: 20

Date: 02.03.2022

Duration : 1 Hr

Instructions: 1. All questions are compulsory

CO's /  
BT Level

PO's

2. Draw the neat labeled diagrams wherever necessary.

Que. I Multiple choice questions

(1×6)

1. Hardness of water is conventionally expressed in terms of equivalent amount of .....

(CO1) /  
BT 3

PO1

a)  $H_2CO_3$

b)  $MgCO_3$

c)  $CaCO_3$

d)  $Na_2CO_3$

2. .... method is used for the determination of dissolved oxygen.

(CO1) /  
BT 1

PO1

a) Winkler method

b) EDTA method

c) Absorption method

d) Mohr's method

3. What is the unit of hardness .....

(CO1) /  
BT 1

PO1

a) ppm

b) mg/L

c) Both a & b

d) None

4. The phase rule was first discovered by.....

(CO2) /  
BT 1

PO2

a) Le Chatelier

b) Arrhenius

c) Nernst

d) J. W. Gibbs

5. What is degree of freedom when two phases of single component co-exist in equilibrium?

(CO2) /  
BT 4

PO2

a) 2

b) 3

c) 0

d) 1

6. A point at which solid, liquid and vapor phase of a particular Substance coexist in equilibrium that point is known as.....

(CO2) /  
BT 2

PO2

a) Eutectic point

b) Triple point

c) Equivalent point

d) None of above

Que. II Attempt any TWO of the following

(2×3)

(A) Draw and explain the phase diagram of sulphur system.

(CO1) /  
BT 2

PO1

(B) Explain Zeolite process for softening of water?

(CO1) /  
BT 2

PO1

(C) What is Gibb's phase rule? Explain phase with example.

(CO2) /  
BT 1

PO2

Que. III Attempt any ONE of the following

(1×8)

(A) i) What is hard water? How does the hardness of water determined by EDTA complexometric method?

(CO1) /  
BT 2

PO1

ii) Draw and explain the phase diagram of ice-water-water vapour system.

(CO2) /  
BT 2

PO2

(B) Explain hot lime soda process in brief.

(CO2) /  
BT 2

PO1

--§§-- END --§§--



Mid Test – MARCH 2022

Course: F. Y.B. Tech (Group A)  
Subject Name: Engineering Physics  
Max Marks: 20

Sem: I  
Subject Code: BS-202  
Date:- 02/03/2022 Time :- 03:00 pm to 04:00 pm

Instructions to the Students:

- 1) All questions are compulsory.
- 2) Make suitable assumptions wherever necessary and mention it clearly in answer book.
- 3) Use of nonprogrammable calculator is allowed
- 4) Figures to right indicate full marks and course outcome mapped.

	CO	BL	PO
<b>Q. 1 Attempt the following. (1 × 6 = 6 Marks)</b>			
1. Which of the following methods is used to generate ultrasonic waves of frequency greater than 300 kHz is _____.	CO1	BL1	PO1
1. Piezoelectric effect                      2. Magnetostriction effect			
3. Photoelectric effect                      4. None of above			
2. The echo of a pulse of ultrasonic waves from a SONAR returns after 1.2 s. If the velocity of ultrasonic waves is 5400 m/s, the distance of the obstacle is _____.	CO1	BL1	PO1
1. 3240 m                                      2. 3480 m			
3. 3425 m                                      4. 2304 m			
3. The numerical aperture of an optical fiber is 0.5. Find the refractive index of the cladding (N <sub>2</sub> ) if the refractive index of the core is 1.53.	CO1	BL1	PO1
1. 1.446                                      2. 1.565			
3. 1.423                                      4. 1.654			
4. In an optical fiber, the inner layer is called _____ and the outer layer is called _____.	CO1	BL1	PO1
1. core, cladding                              2. Cladding, core			
3. transmit, reflect                              4. transmit, reflect			
5. In piezoelectric effect, the natural frequency of vibration of crystal is _____.	CO1	BL1	PO1
1. inversely proportional to the square root of the density of the crystal			
2. inversely proportional to the density of the crystal			
3. directly proportional to the square root of the density of the crystal			
4. directly proportional to the density of the crystal			
6. Which of the following is not a unique property of laser?	CO1	BL1	PO1
1. Speed                                      2. Monochromatic			
3. Coherent                                      4. One directional			
<b>Q.2 Solve Any Two of the following. (2 × 3 = 6 Marks)</b>			
(A) State the properties of Ultrasonic waves.	CO1	BL1	PO2
(B) What is forced oscillation? Setup the differential equation of forced oscillation and find its solution.	CO1	BL1	PO1
(C) What is direct and indirect piezoelectric effect? Which one is suitable for ultrasound production.	CO1	BL1	PO2
<b>Q. 3 Solve Any two of the following. (2 × 4 = 8 Marks)</b>			
(A) Find the natural frequency of 20 mm long pure iron rod. The density is 7.25 x 10 <sup>3</sup> kg/m <sup>3</sup> and Youngs modulus is 115 x 10 <sup>9</sup> N/m <sup>2</sup> .	CO1	BL1	PO1
(B) Discuss the under damped, over damped and critically damped motions of oscillator with examples.	CO1	BL1	PO2
(C) Derive the expression for acceptance angle of optical fiber.	CO1	BL1	PO1

\*\*\* End \*\*\*

Mid Test – March 2022

Course: F. Y.B. Tech (Group B)

Subject Name: Engineering Mechanics

Max Marks: 20

Date:-02 /03/2022

Sem: I

Subject Code: BTES103

Time :- 03.00 pm -04.00 pm

Instructions to the Students:

- 1) All questions are compulsory.
- 2) Make suitable assumptions wherever necessary and mention it clearly in answer book.
- 3) Use of nonprogrammable calculator is allowed
- 4) Figures to right indicate full marks and course outcome mapped.

Q.1 Attempt the following.

(1 × 6 = 6 Marks)

- |   | CO   | BL   | PO   |
|---|------|------|------|
| 1. The algebraic sum of all forces about any point is equal to the moment of the----- force about the same point.<br>a) Resultant    b) Equilibrant    c) 1 N    d) Horizontal                          | CO 1 | BL 2 | PO 1 |
| 2. Splitting single force in to two components means ----- of forces.<br>a) Resultant    b) Equilibrant    c) Resolution    d) Moment   | CO 1 | BL 3 | PO 1 |
| 3. Development of frictional force takes place at the point of contact between -----<br>a) top surface    b) bottom surface    c) two surfaces    d) None of these                                      | CO 2 | BL 2 | PO 1 |
| 4. The point through which the whole weight of the body acts, irrespective of it's position is known as<br>a) Moment of inertia<br>b) Centre of gravity<br>c) Centre of percussion<br>d) Centre of mass | CO 1 | BL 2 | PO 1 |
| 5. If the number of forces acting in a single point, then the force system is called as<br>a) Parallel<br>b) Concurrent<br>c) Non concurrent<br>d) Collinear  | CO 2 | BL 1 | PO 1 |
| 6. Lami's Theorem is applicable for<br>a) Two coplanar non concurrent forces.<br>b) Three coplanar concurrent forces.<br>c) Two coplanar concurrent forces.<br>d) Three coplanar non concurrent forces. | CO 2 | BL 1 | PO 1 |

Q.2 Solve Any Two of the following.

(2 × 3 = 6 Marks)

- |  |      |      |      |
|--|------|------|------|
| (A) Explain the system of forces.  | CO 1 | BL 2 | PO 1 |
| (B) Two forces of 22N and 45N acts away from a point. If the angle between the forces is 50°, Find the magnitude of resultant and the angle made by it with the 22N. | CO 1 | BL 5 | PO 2 |



(C) What do you mean by free body diagram?

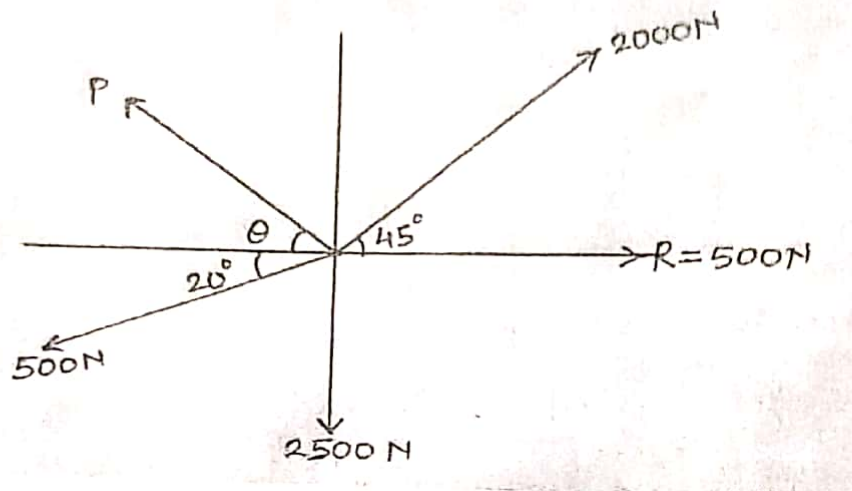
CO 2 BL 3 PO 1

Q. 3 Solve Any two of the following.

(2 × 4 = 8 Marks)

(A) The resultant of a system of forces is 500N acts along x-axis towards right. Find missing force P and its direction.

CO 1 BL 5 PO 2

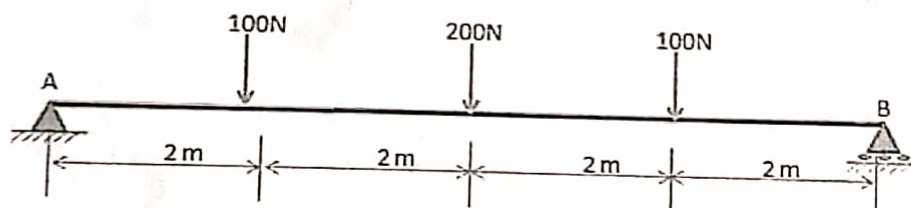


(B) A cylinder weighing 500N is resting on a smooth channel, the sides of channel are inclined at  $60^\circ$  and  $70^\circ$  to the horizontal, determine the reactions offered by channel surfaces.

CO 2 BL 5 PO 2

(c) Determine support reactions of given simply supported beam.

CO 1 BL 3 PO 2



\*\*\* End \*\*\*

Mid Test – March 2022

Course: F. Y.B. Tech (Group A)

Sem: I

Subject Name: Energy and Environment Engineering

Subject Code: BTES105

Max Marks: 20

Date:- 03/03/2022

Time :- 11.00 AM to 12.00 PM

Instructions to the Students:

- 1) All questions are compulsory.
- 2) Make suitable assumptions wherever necessary and mention it clearly in answer book.
- 3) Use of nonprogrammable calculator is allowed
- 4) Figures to right indicate full marks and course outcome mapped.

	CO	BL	PO
<b>Q.1 Attempt the following. (1×6=6 Marks)</b>			
1. In steam power plant the chemical energy of fuel is use to generate high pressure high temperature stem in _____ a. Boiler b. Condenser c. Evaporator d. None of the above	CO1	BL1	PO1
2. Which cell is used to converts solar energy directly into electrical energy a. Dry cell b. Photo cell c. Photovoltaic cell d. Battery	CO2	BL3	PO1
3. The work function of thermionic generator is the energy required to extract an electron from the metal. a. True b. False	CO2	BL1	PO2
4. Acid rain is caused by oxides of ..... a. Phosphorous & carbon b. Sulphur & nitrogen c. sulphur & phosphorus d. nitrogen & carbon	CO3	BL5	PO1
5. One of the main causes of air pollution in cities is emission from vehicles like cars and truck. cars emits various pollutants which are bad for human health when inhaled like 1) Nitrogen oxides 2) Carbon monoxides (CO) 3) Carbon dioxide (CO <sub>2</sub> ) 4) benzene Which of the pollutants are not tolerated by humans beings even at very low levels? a. 1&4 only b. 1&2 only c. 1,2&3 only d. 1,2&4 only	CO3	BL5	PO1
6. Which of the following is mainly responsible for the causes of water pollution? a. Afforestation b. Oil refineries c. Paper factories d. Both b and c	CO3	BL5	PO1

**Q.2 Solve Any Two of the following. (2×3=6 Marks)**

(A) Explain how electricity is generated from nuclear reactor.	CO1	BL2	PO2
(B) What is difference between primary air pollutant and secondary air pollutants?	CO3	BL4	PO2
(C) State selection of site for gas power station.	CO1	BL2	PO1
(D) Explain how water pollution can be controlled?	CO3	BL5	PO2

**Q.3 Solve Any two of the following. (2×4=8 Marks)**

(A) Enumerate the various system and components used in steam power plant.	CO2	BL2	PO1
(B) Write short note on fabric filter with diagram	CO3	BL3	PO1
(C) What is water pollution and what are the effects of water pollution?	CO3	BL5	PO2
(D) Define solar energy. What are the applications of solar energy?	CO4	BL	PO1

End

**Amabhooshan Vasantraodada Patil Institute of Technology, Budhgaon, Sangli**  
**Mid Semester Examination – March 2022**

Course: F. Y.B. Tech (Group B) ( II,IV,VI)  
 Subject Name: Engineering Mathematics I  
 Marks: 20

Date:- 03/03/2022

Sem: I  
 Subject Code: BS101  
 Time :- 11.00am – 12.00am.

**Instructions to the Students:**

- 1) All questions are compulsory.
- 2) Make suitable assumptions wherever necessary and mention it clearly in answer book.
- 3) Use of nonprogrammable calculator is allowed.
- 4) Figures to right indicate full marks and course outcome mapped.

**Q. 1 Attempt the following.**

**( 1 × 6 =6 Marks)**

1. If a square matrix of order n with  $|A| = 0$  then the rank of matrix A is  
 a) Greater than n    b) Less than n    c) Equal to n    d) 0
2. If Eigen values of matrix A are 1, 2, 5 then the values of determinant of A  
 a) 11    b) 8    c) 10    d) 2
3. The rank of matrix  $A = \begin{bmatrix} 1 & 1 & -1 \\ 2 & -3 & 4 \\ 3 & -2 & 3 \end{bmatrix}$  is equal to  
 a) 3    b) 2    c) 1    d) None of these
4. If  $u = x^y$ , then  $\frac{\partial u}{\partial y}$  is equal to  
 a)  $x^y \log x$     b) 0    c)  $yx^{y-1}$     d) None of these
5. If  $u = \frac{x^2}{y}$  then  $x \frac{\partial u}{\partial x} + y \frac{\partial u}{\partial y}$  is equal to  
 a) u    b) 2u    c) 1    d) None of these
6. If  $u = \frac{\sqrt{x} + \sqrt{y}}{\sqrt{x} - \sqrt{y}}$  is homogenous function of degree  
 a) 0    b) 1    c) 1/2    d) None of these

CO    BL    PO

CO1    BL\_1    PO 1,2

CO1    BL\_1    PO 1,2

CO1    BL\_1    PO 1,2

CO2    BL\_1,3    PO 1,2

CO2    BL\_1,3    PO 1,2

CO2    BL\_1,3    PO 1,2

**Q.2 Solve Any Two of the following.**

**( 2 × 3 =6 Marks)**

- (A) Reduce the normal form and find its rank.

$$\begin{bmatrix} 6 & 1 & 3 & 8 \\ 4 & 2 & 6 & -1 \\ 10 & 3 & 9 & 7 \\ 16 & 4 & 12 & 15 \end{bmatrix}$$

- (B) Find Eigen values and Eigen vector for the matrix  $A = \begin{bmatrix} 8 & -6 & 2 \\ -6 & 7 & -4 \\ 2 & -4 & 3 \end{bmatrix}$

- (C) Using Gauss –Jordan method, find the inverse of matrix A. where

$$A = \begin{bmatrix} 2 & 0 & -1 \\ 5 & 1 & 0 \\ 0 & 1 & 3 \end{bmatrix}$$

CO1    BL\_1    PO 1,2

CO1    BL\_1    PO 1,2

CO1    BL\_1    PO 1,2

**Q. 3 Solve Any two of the following. ( 2 × 4 = 8 Marks)**

- (A) If  $u = \log(x^3 + y^3 + z^3 - 3xyz)$  Prove that  $\frac{\partial u}{\partial x} + \frac{\partial u}{\partial y} + \frac{\partial u}{\partial z} = \frac{3}{x+y+z}$  and

$$\left( \frac{\partial}{\partial x} + \frac{\partial}{\partial y} + \frac{\partial}{\partial z} \right)^2 u = \frac{-9}{(x+y+z)^2}$$

- (B) Find the value of n so that the equation  $V = r^n(3\cos^2\theta - 1)$  satisfies the

$$\text{relation } \frac{\partial}{\partial r} \left( r^2 \frac{\partial V}{\partial r} \right) + \frac{1}{\sin\theta} \frac{\partial}{\partial \theta} \left( \sin\theta \frac{\partial V}{\partial \theta} \right) = 0$$

- (C) Verify Cayley Hamilton theorem for the matrix A where  $A = \begin{bmatrix} 1 & 2 & 2 \\ 2 & 1 & 2 \\ 2 & 2 & 1 \end{bmatrix}$ .

Hence simplify the expression  $A^5 - 3A^4 - 8A^3 - 7A^2 - 10A - 4I$  and obtain corresponding matrix.

- (D) If  $u=f(r)$ ,  $r^2 = x^2 + y^2 + z^2$  Prove that

$$\frac{\partial^2 u}{\partial x^2} + \frac{\partial^2 u}{\partial y^2} + \frac{\partial^2 u}{\partial z^2} = f''(r) + \frac{2f'(r)}{r}$$

CO2    BL\_1,3    PO 1,2

CO2    BL\_1,3    PO 1,2

CO1    BL\_1    PO 1,2

CO2    BL\_1,3    PO 1,2



DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE  
Padmabhooshan Vasantaoada Patil Institute of Technology, Budhgaon (Sangli)  
Mid Semester Examination— March, 2022

Course: F. Y. B. Tech

SEM: I

Subject Name: Communication Skills

Subject Code: HM (104)

Max. Marks: 20

Date:- 03/03/2022

Time:-04.00 pm to 05.00 pm

Instructions to the Students:

1. All the questions are compulsory.
2. Figures to the right indicate full marks and course outcome mapped.

CO BL PO

Q.1 Fill in the blanks with appropriate option. (1x 6=6 Marks)

1. Skimming & Scanning are related to.....techniques.

CO 1 BL1 PO1

A) Listening B) Reading C) Writing D) Speaking

2. Almost \_\_\_\_\_ messages, we convey through non-verbal communication/body language.

CO 1 BL1 PO1

A) 30-40% B) 40-50% C) 60-90% D) 20-30%

3. Haptics refers to.....

CO 1 BL1 PO1

A) Study of Time B) Eye contact C) Study of Touch D) Space between Participants

4. GD stands for.....

CO 1 BL1 PO1

A) Group Discussion B) Global Development C) Great Destruction D)None of these

5. The word 'communico' or 'communicare' means \_\_\_\_\_.

CO 1 BL1 PO1

A) to understand B) to remember C) to share D) to know

6. \_\_\_\_\_ means a speech done without preparation.

CO 1 BL1 PO1

A) Debate B) Elocution C) Presentation D) Extempore

Q.2 Solve Any Two of the following. (2x 3 = 6 Marks)

(A) Explain in brief 'Skimming' and 'Scanning'

CO 1 BL2 PO1

(B) Write a brief note on the importance of 'Non-verbal Communication' (Body Language).

CO 1 BL1 PO1

(C) Outline the importance of 'Listening Skill'.

CO 1 BL2 PO1

Q.3 Solve Any two of the following. (2 x 4 = 8 Marks)

(A) Analyze the Group Discussion (GD) process with respect to its principles.

CO 3 BL4 PO1

(B) Explain the various benefits of effective reading skills.

CO 1 BL2 PO1

(C) Illustrate presentation skills

CO 3 BL2 PO1

\*\*\* End \*\*\*

**DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE**

Mid Semester Examination - July 2021

Course: FY B. Tech

Sem: I

Subject Name: Computer Programming in "C"

Subject Code: BTBS104

Max Marks: 20

Date:- 03 /03/2021

Duration:- 1 Hr.

Instructions to the Students:

1. Attempt all questions.
2. Figure to the right indicate full marks

**Q.1 Solve Following Multiple Choice Questions**

(Level/CO) (PO)

6M

1. What is the extension of header file?  
a) .hd      b) .h      c) .hf      d) .hdr
2. How many bytes does "int = D" use?  
A. 0 B. 1 C. 2 OR 4 D. 10
3. ☐ is symbol is used for  
a) process      b) loop      c) connector      d) none of above
4. Device driver is a type of \_\_\_\_\_.  
a) special hardware      b) application software      c) system software      d) interface
5. \_\_\_\_\_ and \_\_\_\_\_ are used as multiple line comment and single line comment symbols.  
a) <>...</> and </>...</>      b) /\*...\*/ and /\*...\*/  
c) /\*...\*/ and /\*...\*/      d) "..." and '...'
- What is required in each C program?  
A. The program must have at least one function.  
B. The program does not require any function.  
C. Input data.  
D. Output data.

BT1/CO1 1,2,9

BT1/CO1 1,2,9

BT2/CO2 1,2,9

BT2/CO1 1,2,9

BT4/CO3 1,2,9

BL1/CO1 1,2,9

**Q.2 Solve Any Two of the following.**

3M X 2

- (A) Explain working of if-else statement with flowchart.
- (B) Define algorithm and explain characteristics of Algorithm
- (C) List various operators in C programming. Explain with example conditional operator in C.

BT2/CO2 1,2,3,10

BT2-CO2 1,2,3,10

BT2/CO2 1,2,3,10

**Q.3 Solve Any two of the following.**

4Mx2

- (A) Write a menu driven program to display the menu as follows and work according to the choice entered by the user  
Menu- 1.Multiplication 2.Division 3.Quit

BT5-CO3 2,3,4,5,

10

- (B) Calculate **Total Salary**. If the Basic Salary of employee is an input by user then Total Salary is given as Basic Salary plus 35% D.A. plus 10% H.R.A.

BT4-CO3 2,4,5,

10

- (C) If the marks of a student are inputted from user, display the class obtained by a student using else-if ladder:  
Wrong Marks — Marks < 0 or Marks > 100  
Fail — Marks >= 0 and Marks < 40  
Pass Class — Marks >= 40 and Marks < 50  
Second Class — Marks >= 50 and Marks < 60  
First Class — Marks >= 60 and Marks <= 100

BT4-CO3 2,3,4,5,

10

\*\*\*END\*\*\*

**DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE**  
**Padmabhooshan Vasantraodada Patil Institute of Technology, Budhgaon, Sangli**  
**Mid Semester Examination – March 2022**

Course: F. Y.B. Tech (Group A)

Sem: I

Subject Name: Engineering Graphics

Subject Code: BTES103

Max Marks: 20

Date: -4/3/2022

Time: - 11:00am to 12:30pm.

**Instructions to the Students:**

- 1) All questions are compulsory.
- 2) Make suitable assumptions wherever necessary and mention it clearly in answer book.
- 3) Use of nonprogrammable calculator is allowed
- 4) Figures to right indicate full marks and course outcome mapped.

	CO	BL	PO
<b>Q. 1 Attempt the following. ( 1 × 6 =6 Marks)</b>			
1. The dashed line represents a) Hidden edges    b) Projection line    c) Centre line    d) Hatching line	CO1	K1	PO1
2. If the line is inclined to VP and parallel to HP, then its top view will a) be perpendicular to x-y line    b) be parallel to x-y line c) show the true length    d) None of the above	CO3	K2	PO1
3. When a hexagon is inscribed in a circle, then the side length of hexagon is equal to a) radius of circle    b) diameter of circle c) double of diameter of circle    d) None of the above	CO1	K1	PO1
4. For first angle projection method, which of the following relationships is correct? a) Observer-Plane of Projection-Object    b) Observer-Object-Plane of Projection c) Object-Observer-Plane of Projection    d) Plane of Projection-Observer-Object	CO2	K1	PO1
5. For the point A, 20 mm below HP and 10mm behind V.P. State the quadrant in which the point lie in. a) First quadrant    b) Second quadrant    c) Third quadrant    d) Fourth quadrant.	CO2	K3	PO1
6. If a line is parallel to both H.P. and V.P. its S.V. will be..... a) True length    b) Apparent length    c) Point view    d) None of the above	CO3	K2	PO1
<b>Q.2 Solve Any Two of the following. ( 2 × 3 =6 Marks)</b>			
(A) Draw a regular pentagon of a given length of side 50mm.	CO1	K2	PO1
(B) Draw the projection of line AB, if point A is 20 mm above HP and 30 mm in front of VP. Point B is 75mm above H.P and 60mm in front of VP and distance between end projectors of AB is 60mm. Find True Length and angle made with HP and VP.	CO3	K3	PO1
(C) Draw the projections of the following points on the same ground line, keeping the projectors 40 mm apart. 1) Point A, 25mm below the H.P. and 15mm behind the V.P. 2) Point B, 20mm above the H.P. and 50mm behind the V.P. 3) Point C, 40mm below the H.P. and 25mm in front of the V.P.	CO3	K3	PO1



DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE  
Padmabhooshan Vasantraodada Patil Institute of Technology, Budhgaon, Sangli  
Mid Semester Examination – March 2022

**Course: F. Y.B. Tech (Group A)**

Sem: I

**Subject Name: Engineering Graphics**

**Subject Code: BTES103**

**Max Marks: 20**

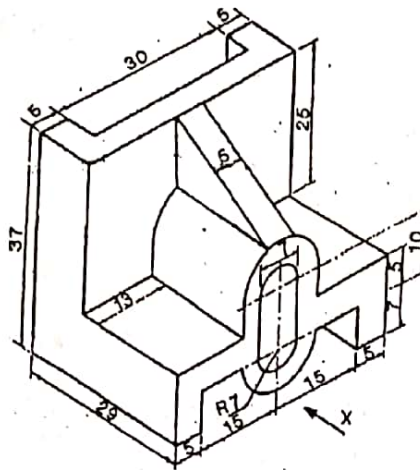
**Date:-4/3/2022**

**Time:- 11:00am to 12:30pm.**

**Q.3 Solve Any one of the following. ( 1 × 8= 8 Marks)**

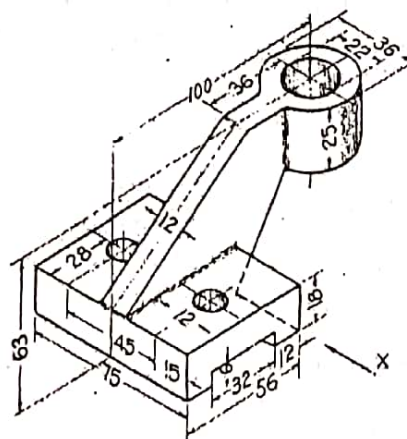
- (A) Draw the **Front View** looking in direction **X** and **Side View** by first angle projection method.

CO4 K3 PO



- (B) Draw the **Front View** looking in direction **X** and **Top View** by first angle projection method.

CO4      K3      PO1





Dr. Vasanthaodada Patil Shtekari Shikshan Mandal's  
Padmabhooshan Vasanthaodada Patil Institute Of Technology, Budhgaon. (Sangli)  
FIRST YEAR ENGINEERING DEPARTMENT

Date: 15/06/2022

All First Year B. Tech Students are hereby informed that the Mid-Term examination will be held from 30<sup>th</sup> June.2022 to 01<sup>st</sup> July 2022 as per the following time table.

Day and Date	Time	Division	Subject
Thursday 30/06/2022	10:30 AM to 11:30 AM	II,IV,VI	Engg. Maths-II
	10:30 AM to 11:30 AM	I,III,V	Engg. Chemistry
	01:00 PM to 02:00 PM	II,IV,VI	Communication Skills
	01:00 PM to 02:00 PM	I,III,V	Computer Programming in "C"
	03:30 PM to 05:00 PM	II,IV,VI	Engineering Graphics
Friday 01/07/2022	10:30 AM to 11:30 AM	II,IV,VI	Engg. Physics
	10:30 AM to 11:30 AM	I,III,V	Engineering Mechanics
	01:00 PM to 02:00 PM	II,IV,VI	Energy and Environment Engg.
	01:00 PM to 02:00 PM	I,III,V	Engg. Maths-II

Note:-

I. Attend Mid-Term exam without fail as per the schedule.

  
Exam Co-ordinator

Mr. Amit Kumar Chavan,  
(First Year Engineering Dept.)



HoD,  
Dr. A. A. Patil,  
(First Year Engineering Dept.)



Dr. Vasantodada Patil Shtekari Shikshan Mandal's  
Padmabhooshan Vasantodada Patil Institute Of Technology, Budhgaon. (Sangli)  
FIRST YEAR ENGINEERING DEPARTMENT

NOTICE

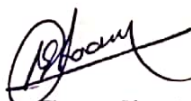
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Day and Date	Time	Division	Subject
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	10:30 AM to 11:30 AM	I,III,V	Engg. Chemistry
	01:00 PM to 02:00 PM	II,IV,VI	Communication Skills
	01:00 PM to 02:00 PM	I,III,V	Computer Programming in "C"
	03:30 PM to 05:00 PM	II,IV,VI	Engineering Graphics
Friday 01/07/2022	10:30 AM to 11:30 AM	II,IV,VI	Engg. Physics
	10:30 AM to 11:30 AM	I,III,V	Engineering Mechanics
	01:00 PM to 02:00 PM	II,IV,VI	Energy and Environment Engg.
	01:00 PM to 02:00 PM	I,III,V	Engg. Maths-II

Note:-

1. Attend Mid-Term exam without fail as per the schedule.
2. Answer papers will be provided by the institute.

  
Exam Co-ordinator  
Mr. Amit Kumar Chavan,  
(First Year Engineering Dept.)

  
HoD,  
Dr. A. A. Patil,  
(First Year Engineering Dept.)



**Instructions to the Students:**

1. Q. 1, Q. 2 and Q. 3 are compulsory.
2. Figures / Structures to the right indicate full marks.
3. Assume suitable data, if necessary.

**Q. 1 Attempt the following.**

1. Preprocessor command is denoted by

- a) \* b) % c) # d) /\*-----\*/

(Level/CO) PO Marks  
6X1

BL1-CO1 1,2,9

2. Which of the following are invalid variable name?

- a) basic salary b) BASIC\_SALARY c) #BASIC\_SALARY d) \_basic\_salary

BL1-CO1 1,2,9

3. ! is a \_\_\_\_\_ type of operator.

- a) Binary Operator b) Unary Operator c) Ternary Operator d) None of these

BL1-CO1 1,2,9

4. Void is a \_\_\_\_\_


- a) Statement b) Library Function c) Keyword d) None of these

BL1-CO1 1,2,9

5. Let  $x=3$  then  $y=x++ + ++x$  will give \_\_\_\_\_

- a) 6 b) 7 c) 8 d) Error

BL1-CO1 1,2,9

6.  This symbol is used in a flowchart as \_\_\_\_\_

- a) Process B) loop c) connector d) None of these

BL1-CO1 1,2,9

**Q.2 Solve Any Two of the following.**

(A) Define Translator. Explain Types Of Translator.

(B) Draw flowchart for largest number between three number.

(C) Note on: Input output statements in c with syntax and example

BL2-CO1 1,2,3,10

BL2-CO1 1,2,3,10

BL2-CO1 1,2,3,10

3 X 2

**Q.3 Solve Any One of the following.**

(A) 1. W.A. P. to check whether user is eligible for voting or not using if else statement (Take Value from user)

BL3-CO3 2,3,4,5,10

2. Swapping between two number without using third variable.

BL3-CO3

(B) 1. W.A. P. to check whether given number is even or odd using if else statement (Take Value from user)

BL3-CO3 2,3,4,5,10

2. If the marks obtained by a students in five different subjects are input through the keyboard, find out the total of these marks and percentage marks obtained by the students. Assume that the maximum marks that can be obtained by the a students in each subject is 100.

BL3-CO3

8X1

\*\*\* End \*\*\*

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE  
Padmabhooshan Vasantnada Patil Institute of Technology, Budhgaon (Sangli)

Mid Semester Examination— June, 2022

Course: F. Y. B. Tech

SEM: II

Subject Name: Communication Skills

Subject Code: HM (104)

Max. Marks: 20

Date:- 30/06/2022

Time:-01.00 pm to 02.00 pm

Instructions to the Students:

1. All the questions are compulsory.
2. Figures to the right indicate full marks and course outcome mapped.

Q.1 Fill in the blanks with appropriate option.

(1x 6=6 Marks)

CO BL PO

1. Skimming & Scanning are related to.....techniques.

CO1 BL1 PO1

- A) Listening B) Reading C) Writing D) Speaking

2. Almost \_\_\_\_\_ messages, we convey through non-verbal communication/body language.

CO1 BL1 PO1

- A) 30-40% B) 40-50% C) 60-90% D) 20-30%

3. Haptics refers to.....

CO1 BL1 PO1

- A) Study of Time B) Eye contact C) Study of Touch D) Space between Participants

4. GD stands for.....

CO1 BL1 PO1

- A) Group Discussion B) Global Development C) Great Destruction D)None of these

5. The word '*communico*' or '*communicare*' means \_\_\_\_\_.

CO1 BL1 PO1

- A) to understand B) to remember C) to share D) to know

6. \_\_\_\_\_ means a speech done without preparation.

CO1 BL1 PO1

- A) Debate B) Elocution C) Presentation D) Extempore

Q.2 Solve Any Two of the following.

(2x 3 = 6 Marks)

(A) Explain in brief 'Skimming' and 'Scanning'

CO1 BL2 PO1

(B) Write a brief note on the importance of 'Non-verbal Communication' (Body Language).

CO1 BL1 PO1

(C) Outline the importance of 'Listening Skill'.

CO1 BL2 PO1

Q.3 Solve Any two of the following.

(2 x 4 = 8 Marks)

(A) Analyze the Group Discussion (GD) process with respect to its principles.

CO3 BL4 PO1

(B) Explain the various benefits of effective reading skills.

CO1 BL2 PO1

(C) Illustrate presentation skills

CO3 BL2 PO1

\*\*\* End \*\*\*

**DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE**  
**Padmabhooshan Vasantaoada Patil Institute of Technology, Budhgaon, Sangli**  
**Mid Semester Examination – June 2022**

Course: F. Y.B. Tech (Group B)

Sem: II

Subject Name: Engineering Graphics

Subject Code: BTES203

Max Marks: 20

Date:-30/6/2022

Time:- 3:30pm to 5:00pm.

Instructions to the Students:

- 1) All questions are compulsory.
- 2) Make suitable assumptions wherever necessary and mention it clearly in answer book.
- 3) Use of nonprogrammable calculator is allowed
- 4) Figures to right indicate full marks and course outcome mapped.

**Q.1 Attempt the following. (1 × 6 = 6 Marks)**

- |  | CO  | BL | PO  |
|--|-----|----|-----|
| 1. The dashed line represents<br>a) Hidden edges    b) Projection line    c) Centre line    d) Hatching line   | CO1 | K1 | PO1 |
| 2. If the line is inclined to HP and parallel to VP, then its front view will<br>a) be perpendicular to x-y line    b) be parallel to x-y line<br>c) show the true length    d) None of the above  | CO3 | K2 | PO1 |
| 3. When a hexagon is inscribed in a circle, then the side length of hexagon is equal to<br>a) radius of circle    b) diameter of circle<br>c) double of diameter of circle    d) None of the above   | CO1 | K1 | PO1 |
| 4. For first angle projection method, which of the following relationships is correct?<br>a) Observer-Plane of Projection-Object    b) Observer-Object-Plane of Projection<br>c) Object-Observer-Plane of Projection    d) Plane of Projection-Observer-Object | CO2 | K1 | PO1 |
| 5. For the point A, 20 mm below HP and 10mm in front V.P. State the quadrant in which the point lie in.<br>a) First quadrant    b) Second quadrant    c) Third quadrant    d) Fourth quadrant.   | CO2 | K3 | PO1 |
| 6. If a line is parallel to both H.P. and V.P. its S.V. will be.....<br>a) True length    b) Apparent length    c) Point view    d) None of the above  | CO3 | K2 | PO1 |

**Q.2 Solve Any Two of the following. (2 × 3 = 6 Marks)**

- |  |     |    |     |
|--|-----|----|-----|
| (A) Draw a regular pentagon of a given length of side 50mm.  | CO1 | K2 | PO1 |
| (B) Draw the projection of line AB, if point A is 20 mm above HP and 30 mm in front of VP. Point B is 75mm above H.P and 60mm in front of VP and distance between end projectors of AB is 60mm. Find True Length and angle made with HP and VP.  | CO3 | K3 | PO1 |
| (C) Draw the projections of the following points on the same ground line, keeping the projectors 40 mm apart.<br>1) Point A, 25mm below the H.P. and 15mm behind the V.P.<br>2) Point B, 20mm above the H.P. and 50mm behind the V.P.<br>3) Point C, 40mm below the H.P. and 25mm in front of the V.P. | CO3 | K3 | PO1 |



**DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE**  
**Padmabhooshan Vasantraodada Patil Institute of Technology, Budhgaon, Sangli**  
**Mid Test – July 2022**

Course: F. Y.B. Tech (Group B)

Sem: II

Subject Name: Energy and Environment Engineering

Subject Code: ES205

Max Marks: 20

Date:- 01/07/2022

Time :- 01.00 PM to 02.00 PM

Instructions to the Students:

- 1) All questions are compulsory.
- 2) Make suitable assumptions wherever necessary and mention it clearly in answer book.
- 3) Use of nonprogrammable calculator is allowed.
- 4) Figures to right indicate full marks and course outcome mapped.

		CO	BL	PO
<b>Q. 1 Attempt the following.</b>	<b>(1 × 6 = 6 Marks)</b>			
Principal of Solar power is based on				
1. a) Hydroelectric effect      b) Thermoelectric effect		CO1	BL1	PO1
c) Photovoltaic effect      d) Fission				
India's first nuclear power plant was installed at				
2. a) Tarapore      b) Kota		CO1	BL2	PO1
c) Kalpakkam      d) none of the above				
The economizer is used to heat				
3. a) air      b) feed water		CO1	BL1	PO1
c) flue gases      d) all above				
Which of the following categories does tidal power fall into?				
4. a) Hydrothermal      b) Hydropower		CO1	BL1	PO1
c) Solar      d) Wind				
What are the two main products of anaerobic digestion?				
5. a) Carbon monoxide and hydrogen      b) Methane and carbon dioxide		CO1	BL1	PO1
c) Methane and carbon monoxide      d) Hydrogen and carbon dioxide				
Trash racks are located				
6. a) near tailrace      b) at the entrance of turbine		CO1	BL1	PO1
c) inside penstock      d) intake				

**Q.2 Solve any TWO of the following.** **(2 × 3 = 6 Marks)**

(A) Explain how electricity is generated from a nuclear reactor.	CO1	BL2	PO1
(B) Describe the basic principle operation of MHD generator. Enumerate at least three advantages of MHD plant.	CO1	BL1	PO2
(C) Compare relative characteristics of HAWT & VAWT.	CO1	BL2	PO1

**Q.3 Solve any ONE of the following.** **(1 × 8 = 8 Marks)**

(A) Discuss the methods of Ocean Thermal Power generation with their suitable sketches.	CO1	BL2	PO1
(D) Define solar energy. What is flat plate collector? Describe its component with suitable sketch	CO1	BL1,2	PO1

\*\*\* End \*\*\*

Mid Term Test – June 2022

Course: F. Y.B. Tech (Group A)

Sem: II

Subject Name: Engineering Mechanics

Subject Code: ES203

Max Marks: 20

Date:-01/07/2022

Time :- 10:30 am-11:30am

Instructions to the Students:

- 1) All questions are compulsory.
- 2) Make suitable assumptions wherever necessary and mention it clearly in answer book.
- 3) Use of nonprogrammable calculator is allowed
- 4) Figures to right indicate full marks and course outcome mapped.

CO BL PO

Q.1 Attempt the following.

(1 × 6 = 6 Marks)

- |   |   |   |   |
|---|---|---|---|
| 1. The algebraic sum of all forces about any point is equal to the moment of the----- force about the same point.<br>a) Resultant    b) Equilibrant    c) 1 N    d) Horizontal                          | 1 | 2 | 1 |
| 2. Splitting single force in to two components means ----- of forces.<br>a) Resultant    b) Equilibrant    c) Resolution    d) Moment   | 1 | 3 | 1 |
| 3. Development of frictional force takes place at the point of contact between -----<br>a) top surface    b) bottom surface    c) two surfaces    d) None of these                                      | 2 | 2 | 1 |
| 4. Concentrated load acts at -----point.<br>a) Three<br>b) Two<br>c) Single<br>d) Four  | 1 | 2 | 1 |
| 5. A uniformly distributed load 'w' KN/m is acting on span 'L'. It's point load will be-----<br>a) w    b) wL    c) wL/2    d) wL <sup>2</sup> /2   | 2 | 1 | 1 |
| 6. Lami's Theorem is applicable for<br>a) Two coplanar non concurrent forces.<br>b) Three coplanar concurrent forces.<br>c) Two coplanar concurrent forces.<br>d) Three coplanar non concurrent forces. | 2 | 1 | 1 |

Q.2 Solve Any Two of the following.

(2 × 3 = 6 Marks)

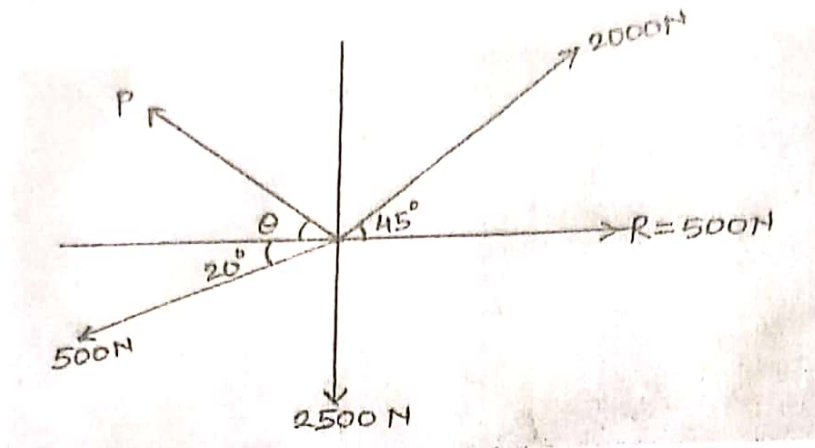
- |  |   |   |   |
|--|---|---|---|
| (A) Explain different supports with neat sketch.   | 1 | 2 | 1 |
| (B) Two forces of 22N and 45N acts away from a point. If the angle between the forces is 50°, Find the magnitude of resultant and the angle made by it with the 22N. | 1 | 5 | 2 |
| (C) What do you mean by free body diagram?   | 2 | 3 | 2 |

(2 × 4 = 8 Marks)

Q. 3 Solve Any two of the following.

- (A) The resultant of a system of forces is 500N acts along x-axis towards right. Find missing force P and its direction.

1 5 2

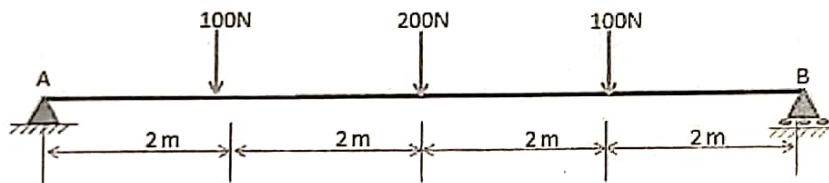


- (B) A cylinder weighing 500N is resting on a smooth channel, the sides of channel are inclined at  $60^\circ$  and  $70^\circ$  to the horizontal, determine the reactions offered by channel surfaces.

2 5 2

- (c) Determine support reactions of given simply supported beam.

1 3 2



\*\*\* End \*\*\*



Mid Semester Examination - June 2022

Instructions to the Students:

- 1) All questions are compulsory.
- 2) Make suitable assumptions wherever necessary and mention it clearly in answer book.
- 3) Use of nonprogrammable calculator is allowed
- 4) Figures to right indicate full marks and course outcome mapped.

CO BL PO

Q.1 Attempt the following.

(1 × 6 = 6 Marks)

1. The argument of complex number  $i$  is .....

CO1 BL\_1 PO 1,2

- a)  $\frac{\pi}{2}$       b) 0      c)  $\pi$       d)  $\frac{3\pi}{2}$

2. The hyperbolic function  $\sinh x =$

CO1 BL\_1 PO 1,2

- a)  $\frac{e^x + e^{-x}}{2}$       b)  $\frac{e^x - e^{-x}}{e^x - e^{-x}}$       c)  $\frac{e^x - e^{-x}}{2}$       d)  $e^x + e^{-x}$

3. The principal value of  $\log(-5)$  is equal to

CO2 BL\_2 PO 1,2

- a)  $\log 5$       b)  $\log 5 + i\pi$       c)  $-\log 5$       d)  $\log 5 + i$

4. For the differential equation  $x = \frac{1}{\sqrt{1 + \frac{dy}{dx} + \frac{d^2y}{dx^2}}}$  order and degree is

CO2 BL\_1 PO 1,2

- a) 2,1      b) 2,2      c) 1,1      d) 1,2

5. The integrating factor of the linear differential equation  $\frac{dy}{dx} + y \cos x = \frac{\sin 2x}{2}$  is

CO2 BL\_3 PO 1,2

- a)  $e^{\sin x}$       b)  $e^{\sin^2 x}$       c)  $e^{\sin^3 x}$       d) None

6. For the term  $\frac{y dx - x dy}{y^2}$  the total derivative is

CO2 BL\_3 PO 1,2

- a)  $d\left(\frac{y}{x}\right)$       b)  $d(x+y)$       c)  $d(xy)$       d)  $d\left(\frac{x}{y}\right)$

Q.2 Solve Any Two of the following.

(2 × 3 = 6 Marks)

CO1 BL\_3 PO 1,2

(A) If  $\alpha$  and  $\beta$  are the roots of  $x^2 + 2x + 2 = 0$  prove that  
 $(1+i)^n + (1-i)^n = 2^{\frac{n+1}{2}} \cos\left(\frac{n\pi}{4}\right)$

CO1 BL\_3 PO 1,2

(B) If  $\cos(\theta + i\phi) = \cos \alpha + i \sin \alpha$  prove that i)  $\cos 2\theta + \cosh 2\phi = 2i$  ii)  $\sin^2 \theta = \pm \sin \alpha$

CO1 BL\_3 PO 1,2

(C) If  $\tan(A + iB) = x + iy$  prove that

- i)  $\tan 2A = \frac{2x}{1-x^2-y^2}$   
ii)  $\tan 2B = \frac{2y}{1+x^2+y^2}$

Q. Solve Any two of the following. (2 × 4 = 8 Marks)

CO2 BL\_3 PO 1,2

(A) Solve  $(x^3 y^3 + xy) \frac{dy}{dx} = 1$

CO2 BL\_3 PO 1,2

(B) Solve  $x \cos x \frac{dy}{dx} + y(x \sin x + \cos x) = 1$

CO2 BL\_3 PO 1,2

(C) Solve  $(1+xy)ydx + (1-xy)x dy = 0$

CO2 BL\_3 PO 1,2

(D) Find the orthogonal trajectory of the cardioids  $r = a(1 - \cos \theta)$

END

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE  
Mid Semester Examination – June 2022

Course: F. Y. B. Tech

Subject Name: Engineering Physics

Max Marks: 20

Date:- 30/06/2022

Sem: II

Subject Code: BTBS102

Duration:- 1 Hr.

Instructions to the Students:

1. All questions are compulsory.
2. Use of nonprogrammable calculator is allowed.
3. Figures to the right indicate full marks.

Q.1 Attempt the followings

Marks CO BL PO

6

1. Which of the following is a piezoelectric material?

- (a) Iron (b) Nickel  
(c) Quartz or Tourmaline (d) None of above

CO1,2 R PO1

2. The frequency of ultrasonic waves is:

- a) below 20 Hz b) Above 20 KHz  
c) 20 Hz to 20 KHz d) Less than 20 Hz.

CO1,2 R PO1

3. If the frequency of the tank circuit is equal to the fundamental frequency of a crystal in piezoelectric generator, the amplitude of vibration is \_\_\_\_\_

- (a) Maximum (b) Minimum  
(c) Independent of frequency (d) Zero

CO1,2 U PO1

4. What is the wavelength of red light emitted by a helium-neon laser?

- a) 122 nanometers b) 633 nanometers  
c) 2.43 nanometers d) 1.37 micrometers

CO1,2 R PO1

3. Sharpness of resonance is inversely proportional to the

- a) restoring force b) angular frequency  
c) natural frequency d) damping factor

CO1,2 R PO1

6. The method of achieving population inversion in Ruby Laser is

- a) Optical pumping b) Inelastic Scattering  
c) Forward biasing d) chemical reaction

CO1,2 U PO1

Q.2 Solve Any Two of the following.

3 X 2

(A) Explain engineering & medical applications of Ultrasonic waves.

CO1,2 U, R PO1, 12

(B) Explain the terms- i) Population Inversion  
2) Metastable State

CO1,2 U PO1

(C) Discuss the different cases of damping.

CO1,2 R PO1

Q.3 Solve Any One of the following.

8 X 1

(A) Explain the principal, construction and working of Thomson's apparatus for determination of specific charge (e/m) of electron.

CO1,2 U, R PO1, 12

(B) What is stimulated emission? Explain construction & working of ruby laser with suitable diagram.

CO1,2 R PO1

\*\*\* End \*\*\*



**DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE**  
**Padmabhooshan Vasantraodada Patil Institute of Technology, Budhgaon, Sangli**  
**Mid Semester Examination – June 2022**

**Course: F. Y.B. Tech (Group B)**

**Subject Name: Engineering Graphics**

**Sem: II**

**Max Marks: 20**

**Date:-30/6/2022**

**Subject Code: BTES203**

**Time:- 3:30pm to 5:00pm.**

**Instructions to the Students:**

- 1) All questions are compulsory.
- 2) Make suitable assumptions wherever necessary and mention it clearly in answer book.
- 3) Use of nonprogrammable calculator is allowed
- 4) Figures to right indicate full marks and course outcome mapped.

**Q. 1 Attempt the following. ( 1 × 6 =6 Marks)**

- |  | CO  | BL | PO  |
|--|-----|----|-----|
| 1. The dashed line represents<br>a)Hidden edges    b) Projection line.    c) Centre line    d) Hatching line   | CO1 | K1 | PO1 |
| 2. If the line is inclined to HP and parallel to VP, then its front view will<br>a)be perpendicular to x-y line    b) be parallel to x-y line<br>c) show the true length    d) None of the above   | CO3 | K2 | PO1 |
| 3. When a hexagon is inscribed in a circle, then the side length of hexagon is equal to<br>a)radius of circle    b) diameter of circle<br>c)double of diameter of circle    d) None of the above   | CO1 | K1 | PO1 |
| 4. For first angle projection method, which of the following relationships is correct?<br>a)Observer-Plane of Projection-Object    b)Observer-Object-Plane of Projection<br>c)Object-Observer-Plane of Projection    d)Plane of Projection-Observer-Object | CO2 | K1 | PO1 |
| 5. For the point A, 20 mm below HP and 10mm in front V.P. State the quadrant in which the point lie in.<br>a)First quadrant    b)Second quadrant    c)Third quadrant    d)Fourth quadrant.   | CO2 | K3 | PO1 |
| 6. If a line is parallel to both H.P. and V.P. its S.V. will be.....<br>a)True length    b) Apparent length    c) Point view    d) None of the above   | CO3 | K2 | PO1 |

**Q.2 Solve Any Two of the following. ( 2 × 3 =6 Marks)**

- |  |     |    |     |
|--|-----|----|-----|
| (A) Draw a regular pentagon of a given length of side 50mm.  | CO1 | K2 | PO1 |
| (B) Draw the projection of line AB, if point A is 20 mm above HP and 30 mm in front of VP. Point B is 75mm above H.P and 60mm in front of VP and distance between end projectors of AB is 60mm. Find True Length and angle made with HP and VP.  | CO3 | K3 | PO1 |
| (C) Draw the projections of the following points on the same ground line, keeping the projectors 40 mm apart.<br>1) Point A, 25mm below the H.P. and 15mm behind the V.P.<br>2) Point B, 20mm above the H.P. and 50mm behind the V.P.<br>3) Point C, 40mm below the H.P. and 25mm in front of the V.P. | CO3 | K3 | PO1 |



**DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE**  
**Padmabhooshan Vasantaoada Patil Institute of Technology, Budhgaon, Sangli**  
**Mid Semester Examination – June 2022**

Course: F. Y.B. Tech (Group B)

Subject Name: Engineering Graphics

Max Marks: 20

Date:-30/6/2022

Sem: II

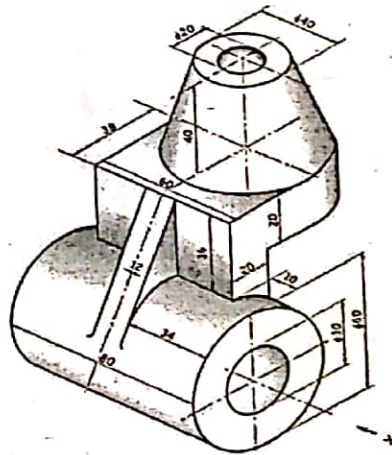
Subject Code: BTES203

Time:- 3:30pm to 5:00pm.

**Q. 3 Solve Any one of the following. (1 × 8 = 8 Marks)**

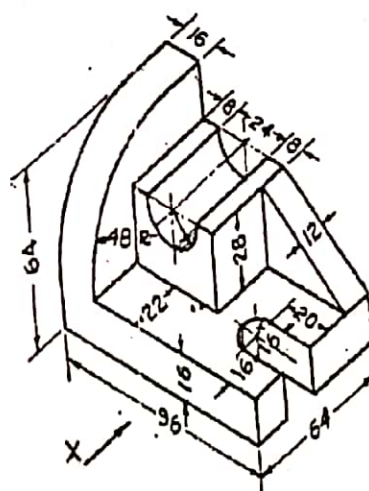
- (A) Draw the **Front View** looking in direction **X** and **Top View** by first angle projection method.

CO4 K3 PO1



- (B) Draw the **Front View** looking in direction **X** and **Top View** by first angle projection method.

CO4 K3 PO1



**Dr. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE**

**P. V. P Institute of Technology, Budhgaon, Sangli**

**Mid Semester Exam June, 2021-22**

**Course: F. Y. B. Tech**

**Sem: II**

**Subject Name: Engineering Chemistry (EC)**

**Subject Code: BTBS202**

**Max Marks: 20**

**Date: 30.06.2022**

**Duration : 1 Hr**

**Instructions: 1. All questions are compulsory**

**2. Draw the neat labeled diagrams wherever necessary**

**CO's / PO's  
BT Level**

**Que. I Multiple choice questions**

**(1×6)**

1. .... method is used for the determination of dissolved oxygen.

a) Winkler's method

b) EDTA method

c) Absorption method

d) Mohr's method

**(CO1) / PO1  
BT 1**

2. Cation exchanger column is regenerated by using .....

a) NaCl

b) HCl

c) KCl

d) NaOH

**(CO1) / PO1  
BT 2**

3. If the oxide film is stable and porous then rate of corrosion is .....

a) increases

b) decreases

c) remains constant

d) None

**(CO1) / PO1  
BT 1**

4. A point at which solid, liquid and vapor phase of a particular Substance coexist in equilibrium that point is known as.....

a) Eutectic point

b) Triple point

c) Equivalent point

d) None of above

**(CO2) / PO2  
BT 2**

5. The phase rule was first discovered by.....

a) Le Chatelier

b) Arrhenius

c) Nernst

d) J. W. Gibbs

**(CO2) / PO2  
BT 1**

6. What is degree of freedom when 3 phases of single component co-exist in equilibrium?

a) 2

b) 3

c) 0

d) 1

**(CO2) / PO2  
BT 4**

**Que. II Attempt any TWO of the following**

**(2×3)**

(A) Distinguish between temporary hardness and permanent hardness.

**(CO1) / PO1  
BT 2**

(C) What is Gibb's phase rule? Explain phase with example.

**(CO2) / PO2  
BT 1**

(B) Explain Zeolite process for softening of water?

**(CO1) / PO1  
BT 2**

**Que. III Attempt any ONE of the following**

**(1×8)**

(A) i) What is hard water? How does the hardness of water determined by EDTA complexometric method?

**(CO1) / PO1  
BT 2**

ii) Draw and explain the phase diagram of water vapour system.

**(CO2) / PO2  
BT 2**

(B) Explain hot lime soda process in brief.

**(CO2) / PO1  
BT 2**

**--§§-- END --§§--**

**DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE**  
**Padmabhooshan Vasantraodada Patil Institute of Technology, Budhgaon, Sangli**  
**Mid Semester Examination – June 2022**

Course: F. Y.B. Tech (Group B) ( II,IV,VI)

Sem: II

Subject Name: Engineering Mathematics II

Subject Code: BTBS201

Max Marks: 20

Date:- 30/06/2022

Time :- 10.30am – 11.30am.

Instructions to the Students:

- 1) All questions are compulsory.
- 2) Make suitable assumptions wherever necessary and mention it clearly in answer book.
- 3) Use of nonprogrammable calculator is allowed
- 4) Figures to right indicate full marks and course outcome mapped.

	CO	BL	PO
<b>Q. 1 Attempt the following. ( 1× 6 =6 Marks)</b>			
1. If $z=1+i\sqrt{3}$ then modulus and amplitude of Z are.....	CO1	BL_1	PO 1,2
a) $2, -\frac{\pi}{3}$ b) $2, \frac{\pi}{6}$ c) $2, \frac{\pi}{3}$ d) None of these			
2. $\log(-1)$ is equal to .	CO1	BL_2	PO 1,2
a) $2n\pi i$ b) $-2n\pi i$ c) $2n\pi$ d) None of these			
3. If integrating factor of $x dy + y dx$ is $\frac{1}{xy}$ then its total derivative is	CO2	BL_3	PO 1,2
a) $d\{\log(x^2 + y^2)\}$ b) $d\{\tan^{-1}(\frac{x}{y})\}$ c) $d\{\log(xy)\}$ d) None of these			
4. For the differential equation $\frac{d^2y}{dx^2} = \sqrt{1 + (\frac{dy}{dx})^2}$ order and degree is	CO2	BL_1	PO 1,2
a) 2,1      b) 2,2      c) 1,1      d) 1,2			
5. The integrating factor of the linear differential equation $\cos x \frac{dy}{dx} + y \sin x = \sec x$ is	CO2	BL_2	PO 1,2
a) $\cos x$ b) $\tan x$ c) $\sec x$ d) $\cot x$			
6. The non-exact differential equation $Mdx + Ndy = 0$ with $\frac{\frac{\partial M}{\partial y} - \frac{\partial N}{\partial x}}{N} = f(x)$ can be reducing into exact differential equation with integrating factor...	CO2	BL_1	PO 1,2
a) $e^{\int f(x)dx}$ b) $e^{\int f(y)dy}$ c) $e^{\int f(y)dy}$ d) $e^{\int f(x)dy}$			



**Q.2 Solve Any Two of the following.** ( 2 × 3 = 6 Marks)

CO1 BL\_3 PO 1,2

- (A) If  $\sin \alpha + \sin \beta + \sin \gamma = 0$  and  $\cos \alpha + \cos \beta + \cos \gamma = 0$  then prove that  $\cos(\alpha + \beta) + \cos(\beta + \gamma) + \cos(\gamma + \alpha) = 0$  and  $\sin(\alpha + \beta) + \sin(\beta + \gamma) + \sin(\gamma + \alpha) = 0$

CO1 BL\_3 PO 1,2

- (B) Find all the values of  $\left(\frac{1}{2} + i\frac{\sqrt{3}}{2}\right)^{\frac{3}{4}}$  show that their continued product is unity.

CO1 BL\_3 PO 1,2

- (C) If  $\cos h(u + iv) = x + iy$ , prove that

i)  $\frac{x^2}{\cos h^2 u} + \frac{y^2}{\sin h^2 u} = 1$

ii)  $\frac{x^2}{\cos^2 v} - \frac{y^2}{\sin^2 v} = 1$

**Q. Solve Any two of the following.** ( 2 × 4 = 8 Marks)

CO2 BL\_3 PO 1,2

- (A) Solve  $(1+y^2)dx + (x - e^{\tan^{-1} y})dy = 0$

CO2 BL\_3 PO 1,2

- (B) Solve  $x \frac{dy}{dx} + y = x^3 y^6$

CO2 BL\_3 PO 1,2

- (C) Solve  $(2xy + y - \tan y)dx + (x^2 - x \tan^2 y + \sec^2 y)dy = 0$

CO2 BL\_3 PO 1,2

- (D) Find the orthogonal trajectories of  $\frac{x^2}{a^2} + \frac{y^2}{b^2 + \lambda} = 1$  where  $\lambda$  is a parameter.

\*\*\* End \*\*\*

**Padmabhooshan Vasantraodada Patil Institute of Technology, Budhgaon**  
**First Year Engineering Department**  
**A.Y. 2021-21 SEM II**  
**Mid Term Exam Marks**

Div. FE-I		Subjects					
Branch: Civil, Instru and Chem		DS201	DS202	ES203	ES204	Total	%
Name of Faculty		RUJ	VJS	AAK	/NRC		
Date							
Out of Marks							
Roll No.	Name of the student	20	20	20	20	80	
1101	PRATHMESH VIJAY MANE	9	9	11	6	35	43.75
1102	AMRUTA VASANT SALGAR	15	11	18	6	50	62.50
1103	VIGHNAHAR VYANKATESH HUL	8	9	6	11	34	42.50
1104	ABHIJEET RAJENDRA HAJARE	8	7	6	11	32	40.00
1105	RUTURAJ SHIVAJI PATIL	9	9	11	8	37	46.25
1106	ARMAN HARUN MANER	7	7	11	3	28	35.00
1107	ROHIT ARVIND MANE	7	6	17	6	36	45.00
1108	IKHILAS JAMIRAHMAD MULLA	6	7	18	3	34	42.50
1109	AKIB ALTAJ JAMADAR	7	8	18	2	35	43.75
1110	TUSHAR SIDRAM PAWAR	9	8	14	2	33	41.25
1111	OMKAR LAXMAN WAGH	8	9	11	3	31	38.75
1112	MOHAMMAD ABID TAJUDDIN MU	10	12	17	7	46	57.50
1113	NINAD NIKHIL SHINDE	16	16	19	14	65	81.25
1114	RIYAN JAVED SAYYAD	13	13	17	3	46	57.50
1115	MRUNAL UMESH SHETE	11	14	13	12	50	62.50
1116	OM ARUN GATARE	17	12	11	5	45	56.25
1117	PRAGATI ABASAHEB DALAVI	9	7	17	5	38	47.50
1118	VISHWAJEET ANIL JAGTAP	17	13	19	15	64	80.00
1119	AKSHADA MOHAN PAWAR	12	15	17	18	62	77.50
1120	ANURAG RAJENDRAKUMAR KH	8	9	16	9	42	52.50
1121	PRASAD POPAT JADHAV	10	7	14	4	35	43.75
1122	VIVEK SANJAY ATPADKAR	10	6	11	2	29	36.25
1123	SHIVETA SANTOSH YADAV	9	7	16	1	33	41.25
1124	YASH SACHIN BHORE	9	9	18	5	41	51.25
1125	JAYESH SHANKAR SHINDE	7	10	16	10	43	53.75
1126	VISHWAJIT JOTIRAM SUTAR	4	4	9	3	20	25.00
1127	AMAN RAVINDRA SURYAANWANSI		AB	AB	AB	0	0.00
1128	ASHWAJIT JITENDRA KAVATHEKAR		AB	AB	AB	0	0.00
1129	PRANAV RAJENDRA BANDGAR	12	6	14	11	43	53.75
1130	HARSHAVARDHAN HIMMAT RATI	6	5	3	1	15	18.75
1131	PRAJAKTA VIJAY MANE	17	10	16	8	51	63.75
1132	VISHWAJIT VINAYAK PATIL	8	12	16	12	48	60.00
1133	KALAM SIKANDAR GODAD	15	15	19	14	63	78.75
1134	NIKHIL ARUN PUJARI	11	15	14	14	54	67.50
1135	SANKET DILIP JAGTAP	15	16	18	15	64	80.00
1136	VIKAS TANAJI JADHAV	12	9	10	18	49	61.25
1137	VAIDEHEE LAVESHKUMAR BANS	10	12	8	14	44	55.00
1138	POONAM CHANDRAKANT KHAD	19	19	20	17	75	93.75
1139	YASH DATTATRAY GAIKWAD	15	11	13	19	58	72.50
1140	MUKESH VITTHAL PAWAR			AB	AB	0	0.00
1141	SOURABH AVINASH KALE	12	12	9	9	42	52.50
1142	SURAJ SANDIP PAWAR	2	5	6	10	23	28.75
1143	SHIVAM TUKARAM KORE	10	17	19	18	64	80.00
1144	YUBRAJ UDAYSING DHAMI	14	12	12	12	50	62.50
1145	ADITYA SUBRAMANYAM PATIL	9	8	6	7	30	37.50
1146	AMAR SUBHASH PATIL	11	15	7	13	46	57.50
1147	VAIBHAV SATISH LAD	15	11	7	13	46	57.50
1148	RUSHIKESH GAJANAN SHINDE	8	13	11	16	48	60.00
1149	GANESH ARJUN CHOUGULE	14	18	16	16	64	80.00
1150	SHEKHAR SHIVAJI PATIL	9	9	12	14	44	55.00
1151	TEJAS KISHOR GORE	18	17	19	19	73	91.25
1152	IRSHAD JAMIR PATHAN	12	15	18	15	60	75.00
Total							

HOD

Dr. Mrs. A. A. Patil


Class Teacher  
Mr.R.U.Yadav



**Padmabhooshan Vasantraodada Patil Institute of Technology, Budhgaon**  
**First Year Engineering Department**  
**A.Y. 2021-21 SEM II**  
**Mid Term Exam Marks**

Div. FE-I		Subjects					Total	%
		BS201	BS202	ES203	HM204	ES205		
Branch: CSE		/AAP	SLP	SOK	SEN	AJP		
Name of Faculty								
Date								
Out of Marks		20	20	20	20	20	100	
Roll No.	Name of the student							
1201	SUMEDHI GAJANAN KAMBLE	18	18	18	19	17	90	90.0
1202	PRANAV POPAT SHINDE	13	14	13	16	9	64	64.0
1203	SNEHA POPAT MANEPATIL	18	19	20	18	12	87	87.0
1204	ROSHNI UDAY PAWAR	19	19	18	18	13	84	84.0
1205	SHUBHAM VILAS CHOPADE	10	10	12	12	11	55	55.0
1206	PRATHAMESH SURESH SAWANT	20	13	19	13	15	80	80.0
1207	RAMJAN MEHARUSAB NADAF	20	15	20	17	17	89	89.0
1208	MAVURI MALHARI JADHAV	18	18	18	20	19	93	93.0
1209	ANUJA CHANDRAKANT KANSE	13	17	19	18	17	84	84.0
1210	NIKITA DILIP PUKALE	18	14	14	16	17	79	79.0
1211	PRANALI ASHOK BEDAGE	19	18	14	19	17	87	87.0
1212	NIKITA POPAT JADHAV	10	10	5	15	13	53	53.0
1213	PRADYUMNA VISHAL JOSHI	19	15	12	15	13	74	74.0
1214	VISHAL HANMANT MARATHI	14	11	13	9	9	56	56.0
1215	SRUSHITI VIJAYKUMAR MASKE	15	16	18	16	13	78	78.0
1216	JAID RIYAJ SUTAR	17	12	10	9	11	59	59.0
1217	SAHIL FARUK SHAIKH	16	13	15	13	14	71	71.0
1218	ASHVEE ANIL GAIKWAD	17	9	10	14	11	61	61.0
1219	SADAB NAJIR KALAWANT	16	19	18	15	12	80	80.0
1220	ANAND SHIVANAND KONNUR	19	14	19	20	16	88	88.0
1221	SHIVKIRTI TANAJI SHINDE	18	12	5	13	10	58	58.0
1222	VISHAL MAHADEV WALE	12	9	11	13	9	54	54.0
1223	SHAILAJA DEVANAND MISAL	20	19	16	19	15	89	89.0
1224	DIGVIJAY SUBHASH BHOSALE	20	14	16	20	17	87	87.0
1225	PRADNYA CHANDRAKANT CHALAV	19	16	17	18	8	78	78.0
1226	ATHARV ALOK PATANKAR	16	19	18	18	17	88	88.0
1227	SURAJ NARAYAN KHADE	10	14	13	20	17	74	74.0
1228	DIPALI BHIMRAO BHANDARE	14	14	17	12	9	66	66.0
1229	MANDAR SACHIN JADHAV	16	12	17	15	14	74	74.0
1230	SUYASH ASHOK SHINDE	19	18	18	16	16	87	87.0
1231	VAISHNAVI VIKAS DESHMUKHE	20	11	13	19	7	70	70.0
1232	PRACHI SATISH PATIL	20	20	19	20	17	96	96.0
1233	PRACHI RAJENDRA ARAGE	11	12	9	10	10	52	52.0
1234	PRASAD PRAMOD KSHIRASAGAR	7	18	14	12	10	61	61.0
1235	ANURAJ BHARAT LOTE	9	11	2	17	8	47	47.0
1236	TANVI PRABHAKAR SHINDE	11	12	5	14	9	51	51.0
1237	USHA RAMCHANDRA KUDALE	16	13	9	16	12	66	66.0
1238	ONKAR VISHWANATH KARANDE	15	14	16	12	7	64	64.0
1239	ROHAN UTTAM PATIL	19	13	17	16	15	80	80.0
1240	SWAPNIL HANMANT PAWAR	14	12	13	15	11	65	65.0
1241	RUTUJA SANDIP UPASE	9	13	15	12	12	61	61.0
1242	VIRAJ RAJENDRA CHAVAN	8	7	17	10	4	46	46.0
1243	GAURAVI KIRAN KADAM	10	8	7	11	4	40	40.0
1244	DIGVIJAY DATTATRAY SHERIKAR	12	9	13	12	17	63	63.0
1245	PRANJAL SHAILENDRA KAMBLE	6	16	12	11	10	55	55.0
1246	ABHISHEK SURESH KATHOD	11	12	10	9	9	51	51.0
1247	MAHAMADJAKI MAHAMADFARUK	4	7	9	13	8	41	41.0
1248	RAHUL EKNATH CHAVAN	3	5	11	11	8	38	38.0
1249	SUKANYA SANJAY GHANTE	5	10	17	12	9	53	53.0
1250	ROHINI ANKUSH VADDIKAR	14	18	10	17	12	71	71.0
1251	PRANAV UDAY PATIL	16	11	15	9	7	58	58.0
1252	DHANASHRI MADHUKAR JADHAV	17	13	9	14	7	60	60.0
1253	SHRUTI ABASO BHOSALE	8	9	8	10	6	41	41.0
1254	ATHARV PRASAD CHARANKAR	17	10	15	12	6	60	60.0
1255	TEJAS NILESH LONDHE	8	8	15	9	3	43	43.0
1256	SWAPNIL PRAKASH SALUNKHE	4	8	20	8	7	47	47.0
1257	PIUTHIVIRAJ SHIVAJI CHAVAN	17	13	18	9	8	65	65.0
1258	PAWAN MAHADEV MUCHANDI	19	17	19	13	16	84	84.0
1259	ISHITA UNMESH KADEKAR	4	7	10	14	5	40	40.0
1260	RITESH KISAN PANDHARE	3	7	9	11	3	33	33.0
1261	JYOTIRADITYA ASHOK SALUNKHE	Ab	-	Ab	Ab	Ab	0	0.0
1262	PRATIK PANDURANG CHAVAN	18	17	18	12	13	78	78.0
1263	RUTUJA MACHINDRA HAJARE	16	13	11	12	5	57	57.0
1264	SANGRAM SADASHIV MANE	18	7	16	8	7	56	56.0
1265	RAJ SANJAY PATIL	17	8	10	11	10	56	56.0
1266	SAYALI RAVINDRA PATIL	12	12	8	11	10	53	53.0
1267	VIVEK DNYANESHWAR KUMBHAR	8	10	20	12	4	54	54.0
Total								

Class Teacher  
Dr. S. L. Patil

  
HOD  
Dr. Mrs. A. A. Patil



**Padmabhooshan Vasantrodada Patil Institute of Technology, Budhgaon**  
**First Year Engineering Department**  
**A.Y. 2021-21 SEM II**  
**Mid Term Exam Marks**

Div: FE-III		Subjects					
Branch: Chem and ETC		BS201	BS202	ES203	ES204		
Name of Faculty		RUY	/DAL	VGS	/MSM	Total	%
Date							
Out of Marks		20	20	20	20	80	
Roll No.	Name of the student						
1301	NIHALAHAMAD IRFAN ATTAR	16	7	11	14	48	60
1302	GAYATRI DADASO SALUNKHE	14	18	16	16	64	80
1303	ABHISHEK APPASO MANE	20	17	14	19	70	87.5
1304	ADITYA NAVANATH LUGADE	17	20	18	14	69	86.25
1305	RITESH DHANAJI JADHAV	19	14	11	10	54	67.5
1306	SOHAN SUNIL MALI	19	9	6	10	44	55
1307	SANJANA NITIN CHAVAN	16	19	15	13	63	78.75
1308	SAMARTH GURUPRASAD KULKARNI	16	9	11	8	44	55
1309	PIYUSH SURESH BHANDARE	11	8	6	9	34	42.5
1310	ABHISHEK SADASHIV SWAMI	16	4	8	16	44	55
1311	KANHAIA CHAVGONDA PATIL	12	12	14	10	48	60
1312	HRUTIKA RAJESH VARANE	9	17	13	8	47	58.75
1313	HARSHALI SHRIKANT LOKHANDE	20	18	17	17	72	90
1314	OBALD ABOOZAR KHAN	14	6	15	12	47	58.75
1315	AVANTIKA MAHENDRA KADAM	16	9	14	10	49	61.25
1316	KALYANI NANDKISHOR JAGTAP	20	19	19	16	74	92.5
1317	VAISHNAVI DATTATRAY PATIL	10	14	11	9	44	55
1318	DEEPAK SANJAY PATIL	18	8	6	8	40	50
1319	PRAJIT PARASHURAM KOLEKAR	12	14	16	13	55	68.75
1320	PRUTHVIRAJ DILIP DESHMUKH	15	12	6	8	41	51.25
1321	ADITYA MANIK PATIL	16	10	15	10	51	63.75
1322	SAKSHI SANJAY PATIL	20	11	15	14	60	75
1323	PRATIK DHARMENDRA NIKAM	20	19	17	17	73	91.25
1324	PRATIKSHIA VIJAY SAWANT	19	17	16	13	65	81.25
1325	SAKSHI KUMAR PATIL	14	16	15	9	54	67.5
1326	RUSHIKESH DHANAJI NIKAM	20	19	17	17	73	91.25
1327	YOGESH RAVASHEB PATIL	20	16	16	16	68	85
1328	ATHIRV SANDEEP SHELAR	17	13	14	10	54	67.5
1329	YASH ASHOK RAJMANE			10	8	18	22.5
1330	NIKITA DIPAK PAWAR	14	12	15	11	52	65
1331	PRANALI DATTAJI BABAR	18	16	15	9	58	72.5
1332	SHRIDHAR RAJENDRA PATIL	19	16	14	14	63	78.75
1333	HARSHADA VIKAS PATIL	15	18	17	12	62	77.5
1334	SATYAJIT KRUSHNAT YEWALE	15	12	9	15	51	63.75
1335	UDAY DADASO GIJULI	4	8	13	11	36	45
1336	SHIVRAJ MANOHAR MASKE	6	5	16	15	42	52.5
1337	PRATHAMESH SANJAY SURYAWANSHI	7	17	15	16	55	68.75
1338	SAMMED SUNIL NANDANIKAR	3	12	16	17	48	60
1339	MANE TEJAS GAJANAN	9	15	14	15	53	66.25
1340	TATYASO MOHAN DHANAWADE	12	15	14	18	59	73.75
1341	AMAR PANDURANG KHARADE	10	15	13	14	52	65
1342 AC	RISHI DILIP KADAM	0	0	0	0	0	0
1343 AC	VAISHNAVI AANANDRAO PATIL	0	0	0	0	0	0
1344		0	0	0	0	0	0
1345	RAMA UTTAM WAGHMODE	5	14	11	13	43	53.75
1346	SATYAJEET JITENDRA VIBHUTE	20	20	16	14	70	87.5
1347	VEDANT DHANANJAY BANCHHADE	8	19	16	13	56	70
1348	AARMAN JAFAR SANDI	9	12	16	9	46	57.5
1349	VAIBHAV APPARAO KAMBLE	18	15	15	16	64	80
1350	HARSHAD GAJENDRA KAVTHEKAR	8	10	18	13	49	61.25
1351	ANIKET BHIMRAO DINDE	8	12	16	17	53	66.25
1352	SUCHERITA KIRAN SIDNALE	8	14	15	9	46	57.5
1353	OMKAR SHIVAJI MALI	18	17	16	14	65	81.25
1354	TUSHAR TANAJI JADHAV	8	9	18	15	50	62.5
1355	RITESH KISAN NALAWADWE	AB	AB	AB	AB	0	0
1356	SHIRAVANI ABASO EDAKE	11	17	12	5	45	56.25
1357	SUJAY SUDARSHAN CHOUGULE	7	11	14	10	42	52.5
1358	SIDDHI SATISH THORAT	20	19	18	14	71	88.75
1359	ATUL ARJUN THORAT	18	18	17	12	65	81.25
1360	SHIREYA SATISH PATIL	18	19	15	11	63	78.75
1361	TEJAS BAJARANG PAWAR	2	9	3	3	17	21.25
1362	BAPU CHINTAMANI NITAVE	8	14	9	10	41	51.25
1363	PRANAV MARUTI JAGTAP	11	9	5	11	36	45
1364	AJINKYA BHIYA SHENDGE	17	17	15	14	63	78.75
Total							

HOD  
Dr. Mrs. A. A. Patil

Class Teacher  
Ms.D.A.Lavate

**Padmabhooshan Vasantraodada Patil Institute of Technology, Budhgaon**  
**First Year Engineering Department**  
**A.Y. 2021-21 SEM II**  
**Mid Term Exam Marks**

Div. FE-IV		Subjects					Total	%
		BS201	BS202	ES203	IIM204	ES205		
Branch: CSE (AI)		PBKL	SLP	CDP	SEN	AJP		
Name of Faculty								
Date								
Out of Marks		20	20	20	20	20	100	
Roll No.	Name of the student							
1401	PRANOTI MAHESH PATIL	20	18	20	19	16	93	93
1402	PRAJAKTA SURYAKANT SURYAWANSI	13	17	18	15	12	75	75
1403	KRANTI SHRIMANDHAR THORBOLE	19	16	19	18	14	86	86
1404	SANJANA SHAM GURAV	16	11	18	19	14	78	78
1405	PRUTHVIRAJ ABHIMANYU ROTE	19	14	18	10	12	73	73
1406	SOURABH ARUN NARALE	12	9	18	10	6	55	55
1407	ARCHANA SIDDHANATH NIKAM	20	18	20	18	14	90	90
1408	SHIREYA SHITAL MITHARE	14	13	15	14	11	67	67
1409	ATHARVA GANPATRAO KADAM	9	12	17	8	13	59	59
1410	SHIREEYASH PRATAP MANUGADE	7	14	16	9	10	56	56
1411	PRAGATI BHASKAR GURAV	6	9	14	10	7	46	46
1412	SANNESH SANJAY LIMKAR	11	15	19	7	7	59	59
1413	AKSHATA HEMANT KASAR	20	18	20	13	16	87	87
1414	UTKARSH UMESH LATTHE	13	10	17	9	8	57	57
1415	KSHITIJA SHASHIKANT PATIL	13	15	19	15	7	69	69
1416	SANDIP SHIVAJI SAWANT	6	8	15	4	3	36	36
1417	OM RAGHVENDRA WAGHMARE	5	8	19	13	8	53	53
1418	TANISHKA BALASO KADAM	17	14	20	14	11	76	76
1419	CHIRAYU CHARUDATTA JADHAV	20	15	20	18	14	87	87
1420	RUTUJA SANJAY DANDAVATE	3	8	19	8	6	44	44
1421	ANJALI VIJAY JADHAV	14	12	13	17	6	62	62
1422	TEJAS SAHEBRAO SATPUTE	13	15	14	14	9	65	65
1423	GIRIDHAR ANIL SONAWANE	10	12	12	13	15	62	62
1424	KRUSHNA RAM PAWAR	20	14	19	11	14	78	78
1425	PRAVIN TANAJI PATIL	9	12	13	8	14	56	56
1426	MANOJ ANIL WANJARI	Ab	AB	AB	AB	AB	0	0
1427	SHUBHAM VISHNU MALAGE	Ab	AB	AB	AB	AB	0	0
1428	ANKITA HANMANT PATIL	9	16	16	11	10	62	62
1429	RAVIKUMAR YASHAVANT WAGHAMOD	14	14	16	11	9	64	64
1430	ANKITA ANNASO PATIL	16	15	20	15	15	81	81
1431	RUSHIKESH MUKUND AMANE	20	15	20	15	16	86	86
1432	ATHARV MAHADEV MALI	20	13	18	12	14	77	77
1433	HARSHIVARDHAN SUBHASH PATIL	20	12	17	11	15	75	75
1434	ANKUSH LAKSHMAN BHAIAPGOL	16	12	14	12	15	69	69
1435	SHRUTI RAJENDRA PATIL	20	13	18	12	13	76	76
1436	SUJIT SANJAY JAYAPPA	19	8	20	13	15	75	75
1437	ASHISH VYANKATRAO TAVADAR	20	13	20	12	14	79	79
1438	AARTI RAJGONDA PATIL	20	17	18	14	15	84	84
1439	OMKAR KUMAR POL	19	13	15	10	13	70	70
1440	YASH RAJENDRA GHORPADE	9	14	15	13	12	63	63
1441	SHREYAS SUNIL KADAM	17	11	20	12	9	69	69
1442	RUTUJA DILIP MALI	19	10	20	12	7	68	68
AC 1443	SHRIDHAR BAJIRAO PATIL	Ab	AB	AB	AB	AB	0	0
1444	NISARGA POPAT PATIL	17	15	18	17	14	81	81
1445	SANIKA GOVIND SHEREKAR	19	14	20	16	12	81	81
1446	ZEHIRA SHABBAR BHOJANI	20	17	20	15	15	87	87
1447	SWATI ARUN KOLI	17	11	13	10	8	59	59
1448	AISHWARYA SUNIL MANE	14	8	20	13	12	67	67
1449	PRERNA VAIBHAV CHOUGULE	20	15	18	18	16	87	87
1450	SUSHANT MANVENDRA LOKHANDE	8	6	20	12	14	60	60
1451	AKSHATA CHANDRASHEKHAR SUTAR	15	15	7	11	14	62	62
1452	ABHISHEK BHARAT SALUNKHE	7	9	7	13	8	44	44
1453	SNEHAL SANJAY PATIL	16	19	19	18	16	88	88
1454	SANIKA ASHOK JADHAV	15	18	20	14	11	78	78
1455	VRUSHALI MAHADEV MAGADUM	15	14	20	18	14	81	81
Total								

Class Teacher  
Mr.S. E. Narwade

HOD  
Dr. Mrs. A. A. Patil



**Padmabhooshan Vasantraodada Patil Institute of Technology, Budhgaon**  
**First Year Engineering Department**  
**A.Y. 2021-21 SEM II**  
**Mid Term Exam Marks**

Div. FE-V		Subjects				Total	%
ch: Electrical / Mechanical		ES201	ES202	ES203	ES204		
Name of Faculty		/AVP	/DAL	MSK	UMM		
Date							
Out of Marks		20	20	20	20	80	
Roll No.	Name of the student						
1501	HARSHVARDHAN ANANDA KADA	7	11	10	1	29	36.25
1502	ATHRAV VIVEK RAJMANE	5	11	10	5	31	38.75
1503	AASHISH MILIND GORE	10	15	10	17	52	65.00
1504	VAIBHAVI VIKAS PATIL	8	12	4	3	27	33.75
1505	DADASO HANMANT HONMANE	10	10	7	3	30	37.50
1506	SATVAJEET SACHIN PATIL	9	10	6	1	26	32.50
1507	BASVESHVAR VITTHALRAO VAN	10	13	10	8	41	51.25
1508	SOURABH RAMRAO PATIL	9	9	6	2	26	32.50
1509	RITESH DEVIDAS LONARE	10	10	4	2	26	32.50
1510	PRATHMESH PRAMOD VASUDEV	10	15	9	6	40	50.00
1511	ADITYA SUNIL POTADAR	7	14	10	4	35	43.75
1512	SHUBHAMRAJE SUNIL NIMBALKAR	6	18	6	8	38	47.50
1513	SATWISHILA VILAS SARGAR	8	15	4	4	31	38.75
1514	ASHISH SANTOSH MASALE	8	14	7	4	33	41.25
1515	NISHIKANT NAMDEV MASKE	10	11	6	13	40	50.00
1516	GURUPAD SHIVAPPA AWATI	11	14	8	5	38	47.50
1517	RAHUL ANIL GIDD	7	16	8	12	43	53.75
1518	DHAIRYASHIL DATTAJIRAO DUBA	10	13	6	4	33	41.25
1519	SANKET SUHAS PATIL	5	11	9	8	33	41.25
1520	SATVAJEET PANDURANG PATIL	10	14	8	8	40	50.00
1521	PRATIK BHAUSO SUREAWANSHI	8	AB	AB	AB	8	10.00
1522	DIVYA YUVRAJ SHINDE	14	14	13	9	50	62.50
1523	SHRAVAN LALASO HATTIKAR	7	10	3	3	23	28.75
1524	CHAITANYA VIJAY KIRDAT	18	19	15	12	64	80.00
1525	AVISHKAR RAMCHANDRA KIRDA	15	19	13	12	59	73.75
1526	ABHIJEET LAXMAN JADHAV	17	18	16	10	61	76.25
1527	ROHAN MAHADEV HARGE	3	10	11	8	32	40.00
1528	VISHWAJEET RAMCHANDRA PATIL	3	5	4	8	20	25.00
1529	ROHIT SIDDHAPPA GADADE	9	13	7	12	41	51.25
1530	VISHWAJIT SUDHIR DAMATE	9	15	13	10	47	58.75
1531	PRATIK TATYASAHEB SALUNKHE	9	7	5	8	29	36.25
1532	SANKET HANAMANT PATIL	7	9	6	8	30	37.50
1533	MAYUR SANJAY BHARATE	5	8	5	9	27	33.75
1534	ROHAN VIKRAM MANE	6	19	12	6	43	53.75
1535	RAHUL MILINDAR WADAR	3	14	5	10	32	40.00
1536	PRANAV VILAS UGALE	11	16	12	10	49	61.25
1537	SHUBHAM NANASO SUTAR	5	8	5	8	26	32.50
1538	ADARSH ARVIND SHINDE	11	16	11	8	46	57.50
1539	BILAL SAEED BARASKAR	2	11	11	4	28	35.00
1540	KEDAR HANMANT SALUNKHE	9	15	12	13	49	61.25
1541	AYAN SANJIV POPHARE	AB	AB	AB	AB	0	0.00
1542	HARSHVARDHAN HANMANT MAH	13	AB	10	12	35	43.75
1543	ADITYA DIGAMBAR ZENDE	13	20	14	17	64	80.00
1544	ADITYA NAMDEV GADADE	2	9	8	9	28	35.00
1545	KAUSTUBH VIJAYKUMAR SAVKAR	8	13	6	10	37	46.25
1546	SHRINIVAS SANTOSH BHUSHINGI	11	18	9	12	50	62.50
1547	DHAIRYASHIL CHANDRAKANT MO	10	9	9	9	37	46.25
1548	SHUBHAM UTTAMRAO BANDGAR	8	9	5	9	31	38.75
1549	MOHAN ADVYAPPA BHOMANNAG	8	12	7	13	40	50.00
1550	ARIHANT PRASHANT BHIVARE	8	10	9	12	39	48.75
1551	SUNIL DATTA SARGAR	7	9	11	8	35	43.75
1552	VIKAS JAYAPPA SARGAR	6	9	13	9	37	46.25
1553	VISHNU HARIBA KARAPE	6	11	7	9	33	41.25
1554	MOIN NAJEER SUTAR	10	16	11	10	47	58.75
1555	SHREYA PRASHANT KOKANE	6	20	13	12	51	63.75
1556	VISHWAJEET DADASO JADHAV	3	5	6	8	22	27.50
1557	ROHIT SAMBHAJI CHAVAN	AB	AB	AB	AB	0	0.00
1558	SANTOSH SAMBHAJI DUDHIAL	3	8	8	8	27	33.75
1559	SHRIRAJ UDAY PATIL	11	14	9	8	42	52.50
AC 1560	SUSHANT SACHIN PATIL		AB	AB	AB	0	0.00
Total							

Class Teacher  
Mrs.A.V.Patil

HOD  
Dr. Mrs. A. A. Patil



**Padmabhooshan Vasantraodada Patil Institute of Technology, Budhgaon**  
**First Year Engineering Department**  
**A.Y. 2021-21 SEM II**  
**Mid Term Exam Marks**

Div. FE-VI		Subject						
Branch: ECS		BS201	BS202	ES203	HM204	ES205	Total	%
Name of Faculty		/SPM	/RGP	/APL	AKC	SSG		
Date								
Out of Marks		20	20	20	20	20	100	100
Roll No.	Name of the student							
1601	ARYAN NITIN MANE	10	10	18	17	15	70	70.00
1602	RUTUJA SANJAY MALI	17	14	19	18	18	86	86.00
1603	SNEHAL MAHESH PAWAR	16	8	17	17	11	69	69.00
1604	RUSHIKESH BALASO MIRAJE	12	17	11	18	7	65	65.00
1605	ARSHAD UMAR SHAIKH	11	14	15	17	10	67	67.00
1606	PRATHAMESH ADHIK MANE	16	12	15	18	16	77	77.00
1607	BHAGYASHREE DINKAR SHINDE	17	12	19	17	11	76	76.00
1608	GURUPRASAD SURESH PUJARI	15	9	15	20	14	73	73.00
1609	SHUBHAM SIDU NANGARE	9	6	AB	8	9	32	32.00
1610	ABHAY GAJANAN NANGARE	12	9	17	15	7	60	60.00
1611	PAYAL SANJAY BHOSALE	11	8	18	16	13	66	66.00
1612	SANIKA UTTAM LAD	14	13	18	17	18	80	80.00
1613	PARSHWA VINOD PATIL	17	16	20	18	19	90	90.00
1614	SANKET SHIVAJI KATAKAR	11	14	7	15	11	58	58.00
1615	PRAGATI CHANDRAKANT KAMBLI	10	9	14	12	11	56	56.00
1616	ANISHA AJIT SHINDE	15	16	17	16	14	78	78.00
1617	VISHWARAJ RAJENDRA PATIL	16	7	7	15	14	59	59.00
1618	VIDYA DILIP MADANE	9	7	12	10	9	47	47.00
1619	ANKITA VILAS MADANE	9	6	10	9	9	43	43.00
1620	SANJIVANI BHIMRAV MADANE	10	5	9	10	9	43	43.00
1621	SIDDHARTH SUNIL VADGAONKAR	9	10	16	13	11	59	59.00
1622	NIRANJAN UDAY PATIL	10	6	13	17	9	55	55.00
1623	SWAPNIL SUNIL MALI	5	7	17	7	5	41	41.00
1624	SHRIYATA DINKAR CHAVAN	17	10	18	14	10	69	69.00
1625	VISHWAJEET NANASO CHAVAN	11	8	16	16	10	61	61.00
1626	SHRAWANI SANJAYKUMAR NIKAM	8	12	7	16	10	53	53.00
1627	RUSHIKESH ANANDA KOLAPE	8	6	14	12	9	49	49.00
1628	SHIRADDHA SANJAY CHOUGULE	16	17	16	18	17	84	84.00
1629	PRATHAMESH SHANKAR MALI	8	7	16	15	12	58	58.00
1630	PRATHMESH VASANTRAO PATIL	9	11	18	12	12	62	62.00
1631	AKANKSHA ANANDARAO JAGDAL	10	16	AB	AB	AB	26	26.00
1632	SANIKA MANGESH PATIL	16	13	13	19	16	77	77.00
1633	SANIKA PRASHANT LIMAYE	14	15	13	18	17	77	77.00
1634	ATUL SUHAS PATIL	10	5	15	9	9	48	48.00
1635	PRATIK VIJAY JADHAV	9	6	15	12	8	50	50.00
1636	SANIKSHA SAMBHAJI HAJARE	8	14	15	12	7	56	56.00
1637	VRUSHABH SHANTINATH MULE	9	6	13	14	9	51	51.00
1638	ATHARVA AVINASH BIDKAR	10	11	17	14	14	66	66.00
1639	SHREYA RAHUL YADAV	11	13	16	19	12	71	71.00
1640	HARSHIVARDHAN VIJAY PATIL	9	12	17	17	12	67	67.00
1641	SHRUTI PRASHANT GURAV	16	18	19	20	15	88	88.00
1642	PRAJVAL RAMESH MAHARNUR	9	8	15	13	11	56	56.00
1643	PRAJWAL DILIP PATIL	11	18	20	19	18	86	86.00
1644	AAKASH CHANDRAKANT MULIK	8	9	15	19	10	61	61.00
1645	PRANAV SHAHAJI MOHITE	8	9	16	17	10	60	60.00
1646	SHREYA ANIL PATIL	14	11	18	15	12	70	70.00
1647	SUMAIYYA RAJU SHAIKH	15	10	18	19	10	72	72.00
1648	SOHAM SANMATIKUMAR BAGEWA	10	4	8	12	9	43	43.00
1649	PRATIK SANTOSH PATIL	9	6	9	4	8	36	36.00
1650	OMKAR AJIT SHINDE	13	17	13	17	11	71	71.00
1651	MAITHILI SANTOSH PATIL	15	13	19	19	9	75	75.00
1652	SUMEDH BHARAT PATIL	13	16	14	14	12	69	69.00
1653	TRUPTI DINKAR PATIL	13	18	15	17	15	78	78.00
1654	PRATIKSHA PRAMOD SALE	16	17	13	19	15	80	80.00
1655	DHANARAJ SHIDHU BALLOLE	8	5	7	8	12	40	40.00
1656	ROHIT DHANAJI CHAVAN	8	7	11	13	7	46	46.00
1657	RAMESH PANCHAMRUT PATTANSI	14	15	18	20	16	83	83.00
1658	ASHRAF ISMAIL ATTAR	AB	AB	AB	AB	AB	0	0.00
1659	HARSHADA PRAMOD PATIL	15	15	19	19	9	77	77.00
1660	SEJAL NAMDEV PAWAR	13	13	17	18	9	70	70.00
1661	KARAN SANJAY KOLI	8	11	13	15	7	54	54.00
Total								

Class Teacher  
Mr. A. K. Chavan

HOD  
Dr. Mrs. A. A. Patil