



Dr. Vasanttraodada Patil Shetkari Shikshan Mandal's
PADMABHOOSHAN VASANTRAODADA PATIL INSTITUTE OF TECHNOLOGY, BUDHGAON-416304

INSTRUMENTATION ENGINEERING DEPARTMENT

(DEGREE PROGRAMME: A.Y. 2021-22)

Semester-I
Mid Term Exam


Date: 01/12/2021


Notice

All the students from ~~3rd~~ TY & Final year from the Instrumentation Engineering department are informed that according to planner defined by DBATU; Mid Term Test is arranged from 08/12/2021 to 10/12/2021.

The total marks for this test are 20.

Day & Date	Time	TY	Time	B.Tech
Wednesday 8/12/2021	10:30AM to 11:30AM	Process loop components	12:30PM to 1:30PM	Process Instrumentation and Control
	2:30PM to 3:30PM	Microprocessor and Micro Controller	3:45PM to 4:45PM	Instrumentation System Design
Thursday 9/12/2021	10:30AM to 11:30AM	Digital Signal Processing	12:30PM to 1:30PM	Industrial Project Planning and Estimation
	2:30PM to 3:30PM	Engineering Instrumentation	3:45PM to 4:45PM	Clinical Instrumentation
Friday 10/12/2021	10:30AM to 11:30AM	Control System	12:30PM to 1:30PM	Analytical Instrumentation


Test In-Charge
Ms. P. D. Patil


HOD
Prof. L.S. Patil

**MID SEM EXAM
A.Y.2021-22(Sem-I)**

CLASS:-SY

Roll No	Enrollment Number	Full Name	RSM	PDP	PMM	
2101	2062691466010	OMKAR SURESH DALAVI	ST	AE	NAS	M-3
2102	2062691466007	DIVYA NAGNATH KUMBHAR	18	17	18	
2103		ANIKET DADASO LOHAR	18	16	19	
2104	2062691466005	ARJUN RAMA HONAKANDE	18	15	18	
2105		NIMISHA NARESH PHADNIS	20	18	20	
2106		AJAY PANDURANG MALI	20	18	20	
2107	2062691466001	AARTI ANIL KOLI	16	15	16	
2108	2062691466015	VINAYAK BALASAHEB MALI	18	17	16	
2109	2062691466002	ADITYA DATTATRAYA JAGTAP	18	18	18	
2110	2062691466017	ATHARV RAMESH PATIL	16	17	16	
2111	2062691466016	ANIKET BALASAHEB KOLI	18	15	18	
2112	2062691466011	SHIVANI BAJARANG OLEKAR	17	15	17	
2113	2062691466013	SUPRIYA MAHESH PAWAR	18	18	18	
2114		TUSHAR SHANKAR PAWAR	18	16	18	
2115	2062691466008	NIKITA SANJAY KHICHADE	18	17	18	
2116		SHRIDHAR SOPAN SHINDE	18	18	18	
2117	2162691466513	MANISH MAHESH SHETE	18	18	18	
2118	2162691466506	MAHESH DASHRATH SALUNKHE	18	18	18	
2119		AKSHAY UTTAM ATHAVALE	20	18	20	
2120		ROHIT DHONDIRAM BHOSALE	17	17	17	
2121		VITTHAL BHARAT HAKKE	18	18	18	
2122		VISHVAJEET RAVINDRA KHICHADE	16	16	16	
2123		RUSHIKESH RAMESH AWALE	18	18	18	
2124	2162691466508	RUSHIKESH GORAKH KALE	16	16	16	
2125	2162691466511	SANIKA APPASO PAILWAN	16	16	16	
2126	2162691466509	PAVAN BABU SAKATE	18	18	18	
2127	2162691466504	RUSHABH CHANDRAKANT SHINDE	18	18	16	
2128		ASHISH RAMESH CHAVAN	18	18	17	
2129	2062691466006	DANISH IMRAN SHAIKH	18	18	18	
2130	2162791466501	PARTH PRAKASH GHORPADE	18	18	18	
2131		TEJAS MILIND SHINDE	19	18	19	
2132		PRASHANT SUDAM NANGARE	18	18	18	
2133	2162691466503	DHANANJAY BALU SHINDE	18	18	15	
2134		KAUSTUBH SUDHIR GHONGADI	18	18	17	
			18	18	15	

MID SEM EXAM
A.Y.2021-22(Sem-I)

Class:-T.Y.

Sr.No	Enrollment Number	Full Name	El	M&M	CS	DSP	PLC
1	PRN:1962691466004	PAWAR PRATIK PRAKASH	13	18	19	16	
2	PRN:1962691466007	MAGAR HARSHAD MANIK	13	16	19	15	
3	PRN:1962691466015	NALAWADE AJINKYA DATTATRAY	17	18	20	17	
4	PRN:1962691466016	MOHITE NIKITA PRADIP	16	18	20	17	
5	PRN:1962691466032	PATIL SHUBHAM JAYSING	18	18	18	17	
6	PRN:1962691466033	MALI VISHAL SANJAY	17	16	17	16	
7	PRN:1962691466034	SHEKH MAHANMADIJAJ MAHANMADRAFIQ	17	18	18	18	
8	PRN:1962691466036	NANDIWALE VISHAL KAKASO	16	18	19	18	
9	PRN:1962691466042	KULKARNI PARAG HARSHAL	15	18	17	17	
10	PRN:1962691466054	PATIL RUTURAJ SADASHIV	15	18	16	17	
11	PRN:1962691466062	NANDRE PRATIK ADINATH	15	18	19	17	
12	PRN:2062691466001	RUSHIKESH DIPAK KOPARDE	13	18	17	15	
13	PRN:2062691466002	PATIL SUDARSHAN SHAHAJI	13	16	16	16	
14	PRN:2062691466003	BHOSALE NINAD RAMDAS	16	18	17	18	
15	PRN:2062691466004	MAHANUR ASAWARI SAMBHAJI	17	18	18	18	
16	PRN:2062691466005	PAWAR VAISHNAVI SANJAY	12	18	20	18	
17	PRN:2062691466006	DALAVI SANKET DILIP	14	18	20	17	
18	PRN:2062691466007	HULLE SOURABH SHITAL	17	18	16	18	
19	PRN:2062691466008	JAYAPPA SURAJ RAJARAM	18	18	18	17	
20	PRN:2062691466009	KUPWADE MAYURI RAVINDRA	16	18	18	18	
21	PRN:2062691466010	PATIL NIKITA ANIL	16	18	20	17	
22	PRN:2062691466011	PATIL ABOLI PRAKASH	15	18	18	18	
23	PRN:2062691466012	PATIL AVIRAJ SAMBHAJI	15	16	17	16	
24	PRN:2062691466013	WAKSHE GANESH MOHAN	10	16	15	16	
25	PRN:2062691466014	SURYAWANSHI VARAD SUNIL	18	18	19	18	
26	PRN:2062691466015	YELAVIKAR PAVAN JANARDAN	12	16	17	16	
27	PRN:2062691466016	DASHARATH MAHADEV DHERE	10	16	15	10	
28	PRN:2062691466017	PAWASKAR VALLARI SUSHIL	14	18	17	18	
29	PRN:2062691466018	DESAI PRAFULLA PRAKASH	12	18	15	18	

30	PRN:2062691466019	RAJOPADHYE SHUBHAM VASUDEV	16	16	18	16	
31	PRN:2062691466020	KOTHAWALE AASHPAK IQBAL	10	14	14	14	
32	PRN:2062691466021	PATIL SWAPNIL TUKARAM	12	18	14	18	
33	PRN:2062691466023	MANE VIDNYAN PRAKASH	16	16	20	12	
34	PRN:2062691466024	PATIL PRANAV MAHADEV	10	16	10	10	
35	PRN:2062691466022	PATIL PRATHAMESH	10	16	16	16	

MID SEM EXAM
A.Y.2021-22(Sem-I)

Class:-B.Tech.

Roll No	Full Name	PIC	ISD	AI	IPPE
1	Anuj raut	13	17	15	
2	Sushant Kisan Mohite	11	17	20	
3	Khot pradnya Rajendra	17	18	20	
4	Prasad Maruti Mohite	11	19	20	
5	Sanket Ganpati Desai	17	19	20	
6	Shrenik Annaso Patil	10	14	20	
7	Abhishek Popat Kamble	13	17	20	
8	Sharvil patil	10	16	20	
9	Harshad Rajesh Jadhav	12	17	20	
10	Omkar pandurang yadav	14	17	20	
11	Saurabh Shrikant Kadam	12	18	20	
12	Sumedh Bharat Patil	13	16	20	
13	Shubham Raghavendra Kulkarni	15	17	20	
14	Rohit Dagadu Kalubramhe	11	17	19	
15	Ruturaj Jaywant Sutar	11	17	19	
16	Suryawanshi Niranjana Rajkumar	15	17	20	
17	Prathmesh Gulabrao Patil	12	17	20	
18	Gourav mahendrasing Thakur	11	17	20	
19	Vaishnavy mukund gurav	16	16	15	
20	Awati Tanvi Vaibhav	17	17	19	
21	Abhinav Abaso Subhedar	15	17	20	
22	Dhiraj Patil	12	17	19	
23	Aundhe Saurabh Ajay	10	16	20	
24	Shubham Balasaheb Ghabak	17	19	20	
25	Sagar Mukundrao Pawar	14	19	20	
26	Tejaswini Prakash Mane.	16	19	20	
27	Sawant pavan ashok	11	15	18	
28	Onkar Jaysing Patil	13	19	20	
29	Amit Ananda Kalandre	14	16	20	
30	Ghatage Kartiki Hanmant	13	19	20	
31	Sharvi Manoj Gala	13	12	20	
32	Vaishnavi Abhay Basutkar	13	15	15	
33	Mayuri ravindra patil	11	13	20	
34	Pranav Suresh Gharge	10	17	19	
35	Avadhoot Vivek Kulkarni	15	17	20	
36	Prathmesh Uday Mule	14	18	20	
37	Digambar Deepak Anande	15	17	20	
38	Kiran ashok shinde	15	16	20	
39	Patil Nikita Balaso	17	15	20	
40	Revati Rajaram Salagare	14	15	20	
41	Rapelli Prem Vitthal	18	16	20	

42	Saurabh Sambhaji Patil	17	14	20	
43	Mihir ponkshe	17	12	20	
44	Nikhil Shivaji Pawar	18	14	20	
45	Ghadage Roshan	17	17	20	
46	Patil Nikhil Rajendra	11	18	18	
47	Akash Ananda Kamble	16	15	19	
48	Tushar Thite	10	15	20	
49	Dhanawade Vinayak Namdev	17	16	20	
50	Saurabh Mahadev Patil	16	16	20	
51	Anisa Raju Mujawar	18	18	20	
52	Jasmin Jamal shikalgar	14	11	20	
53	Harshita karande	18	10	20	
54	Sanmukh Utkarsha Vikram	11	17	20	
55	Kshirsagar Akshata Bhalchandra	11	13	20	
56	Gopal Shamrao Kharmate	13	8	17	
57	Akshay Dinkar Patil	18	14	20	
58	Nitish Shekhar Pujari	18	14	19	
60	Shraddha Ramesh Awale	18	14	15	
61	Ankita Sarjerao Patil	18	11	20	
62	Suraj Chandrakant Shinde	18	15	18	
63	Santosh mahadev doddamani	18	13	20	
64	Harsh rathi	17	15	18	
65	Digvijay kiran Lad	19	19	20	
66	Atmaj Khichade	17	12	17	
67	Bhosale Aniket Dilip	18	16	20	
69	Bhatia Viren Ranjit	10	10	20	
70	Pareshu Vijay shinde	18	14	17	



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INSTRUMENTATION ENGINEERING DEPARTMENT

(DEGREE PROGRAMME: A.Y. 2021-22)

**Semester-I
Mid Term Test**

Date: 20/01/2022

Notice

All the students from second year from the Instrumentation Engineering department are informed that according to planner defined by DBATU; mid-term test is arranged from 24/1/2022 to 25/01/2022. The total marks for this test are 20.

Mode of exam conduction:- ONLINE

Day & Date	Time	SY
Monday 24/01/2022	10:30AM to 11:30AM	Engineering Mathematics- III
	2:00PM to 03:00PM	Sensor and Transducer
Tuesday 25/01/2020	10:30AM to 11:30AM	Network Analysis and Synthesis
	2:00PM to 03:00PM	Analog Electronics

Patil

Test In-Charge
Ms. P. D. Patil

[Signature]

HOD
Dr. N. M. Dhawale



Dr. Vasanttraodada Patil Shetkari Shikshan Mandal's
PADMABHOOSHAN VASANTRAODADA PATIL INSTITUTE OF TECHNOLOGY, BUDHGAON-416304

INSTRUMENTATION ENGINEERING DEPARTMENT

(DEGREE PROGRAMME: A.Y. 2021-22)

Semester-I
Mid Term Test

Instructions for Exam conduction:

1. The exam will be conducted online.
2. Write your full name; PRN number on answer sheet.
3. Question Paper uploaded on online platform at the time of paper.
4. Student should submit answer sheet in PDF format to respective subject teacher.



Patil

Test In-Charge
Ms. P. D. Patil

N. M. Dhawale

HOD
Dr. N. M. Dhawale

SY

A.Y. - 21-22

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

B. Tech in Instrumentation Engineering

Curriculum for Second Year

Semester III											
SR. No.	Course Category	Course Code	Course Title	Teaching Scheme			Evaluation Scheme				Credit
				L	T	P	CA	MSE	ESE	Total	
1	BSC	BTBS301	Engineering Mathematics – III	3	1	-	20	20	60	100	4
2	PCC 1	BTINC302	Sensor and Transducer	3	1	-	20	20	60	100	4
3	PCC 2	BTINC303	Network Analysis and Synthesis	3	1	-	20	20	60	100	4
4	ESC	BTINES304	Analog Electronics	3	1	-	20	20	60	100	4
5	LC	BTINL305	Sensor and Transducer Lab	-	-	2	60	-	40	100	1
6	LC	BTINL306	Analog Electronics Lab	-	-	2	60	-	40	100	1
7	Seminar	BTINS307	Seminar I	-	-	4	60	-	40	100	2
8	Internship	BTINS211P	Internship – 1 Evaluation	-	-	-	-	-	50	50	1
Total				12	4	8	260	80	410	750	21
Semester IV											
SR. No.	Course Category	Course Code	Course Title	Teaching Scheme			Evaluation Scheme				Credit
				L	T	P	CA	MSE	ESE	Total	
1	PCC 1	BTINC401	Digital Electronics	3	1	-	20	20	60	100	4
2	PCC 2	BTINC402	Feedback Control System	3	1	-	20	20	60	100	4
3	HSSMC	BTHM403	Industrial Management and Economics	4	-	-	20	20	60	100	4
4	BSC	BTINBS404	Electrical and Electronics Measurement	3	1	-	20	20	60	100	4
5	PEC 1	BTINPE405	Group A	3	1	-	20	20	60	100	4
6	LC	BTINL406	Digital Electronics Lab	-	-	2	60	-	40	100	1
7	LC	BTINL407	Feedback Control System Lab	-	-	2	60	-	40	100	1
8	Seminar	BTINM408	Mini Project I	-	-	4	60	-	40	100	2
9	Internship	BTINP409	Field Training / Internship/Industrial Training (minimum of 4 weeks which can be completed partially in third semester and fourth semester or in at one time).	-	-	-	-	-	-	-	Credits To be evaluated in V Sem.
Total				16	4	8	220	100	380	700	24

BSC = Basic Science Course, ESC = Engineering Science Course, PCC = Professional Core Course PEC = Professional Elective Course, OEC = Open Elective Course, LC = Laboratory Course HSSMC = Humanities and Social Science including Management Courses

➤ Important Note: Minimum Eight Experiment to perform based on the syllabus for the laboratory subject.

Group A [Sem- IV] (Professional Elective)

Sr. No.	Course Code	Course Title
01	BTINPE405 A	Microprocessor based systems
02	BTINPE405 B	Industrial Safety
03	BTINPE405 C	Signals and Systems

INSTRUMENTATION ENGINEERING

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

P.V.P. Institute of Technology, Budhgaon

MID SEMESTER EXAM- MAY 2022

Course: S.Y. Instrumentation Engg.

Sem: IV

Subject Name: Digital Electronics

Subject Code: BTIEC401

Max Marks:20 Date:- 23/05/2022

Duration:- 11:00am to 12:00noon

Instructions to the Students:

1. All questions are compulsory.
2. Draw neat diagram wherever necessary.
3. Assume suitable data if necessary.

(CO/BL) Marks

6

Q. 1 Attempt the following questions.

1. Which of the following is not a binary number?
a.0000 b.0101 c.4ABC d. 011 CO1,II
2. Convert the binary equivalent 110100 to its decimal equivalent.
a.21 b.52 c.24 d.24 CO1,V
3. Logic Gates are the building blocks of all circuits in a computer.
a. TRUE b. FALSE CO4,V
- 4.3 bits full adder contains _____ combinational inputs.
a.2 b.4 c.8 d.3 CO1,III
5. Complement of any variable can be easily obtained by using _____ gate.
a. Inverter gate b. AND gate c. OR gate d. NOR gate CO2,II
6. According to Boolean law: $A + 1 = ?$
a. 1 b. A c. 0 d. none of these CO2,II

Q.2 Solve Any Two of the following.

3 X 2

- (A) Reduce the expression $F = \sum m(1,4,8,12,13) + d(3,14)$ using mapping and implement it using AOI Logic. CO3,III
- (B) Expand $\bar{A} + \bar{B}$ to minterm and maxterm. CO3,III
- (C) Draw logic symbol and truth table of basic gates. CO1,III

Q. 3 Solve Any One of the following.

8

- (A) Give difference between minterm and maxterm. CO4,II
- (B) State and prove De-morgan's theorem. CO1,II

*** End ***

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

Mid Semester Examination – May 2022

Course: S.Y. Instrumentation

Sem: IV

Subject Name: Feedback Control System

Subject Code: BTINC402

Max Marks: 20

Date: -23.05.22

Duration: - 1 Hr.

Instructions to the Students:

1. All questions are compulsory.
2. Draw neat labeled diagram wherever required.

(Level/CO) Marks

Q.1)

6

- | | | | |
|---|--|-----|--|
| 1 | Transfer function is ----- | C01 | |
| | a) $C(s)/R(s)$ with zero initial condition b) $R(s)/C(s)$ with zero initial condition | | |
| 2 | If G_1 and G_2 are connected in series then output is | C01 | |
| | a) G_1G_2 b) G_1+G_2 c) G_1/G_2 d) G_2/G_1 | | |
| 3 | If G_1 and G_2 are connected in parallel then output is | C01 | |
| | a) G_1G_2 b) G_1+G_2 c) G_1/G_2 d) G_2/G_1 | | |
| 4 | The node having only outgoing branches is known as | C02 | |
| | a) Sink node b) Source node c) Chain node d) Dummy node | | |
| 5 | The node having only incoming branches is known as | CO2 | |
| | a) Sink node b) Source node c) Chain node d) Dummy node | | |
| 6 | The node having incoming and outgoing branches is known as | CO2 | |
| | a) Sink node b) Source node c) Chain node d) Dummy node | | |

Q.2) Solve Any Two of the following

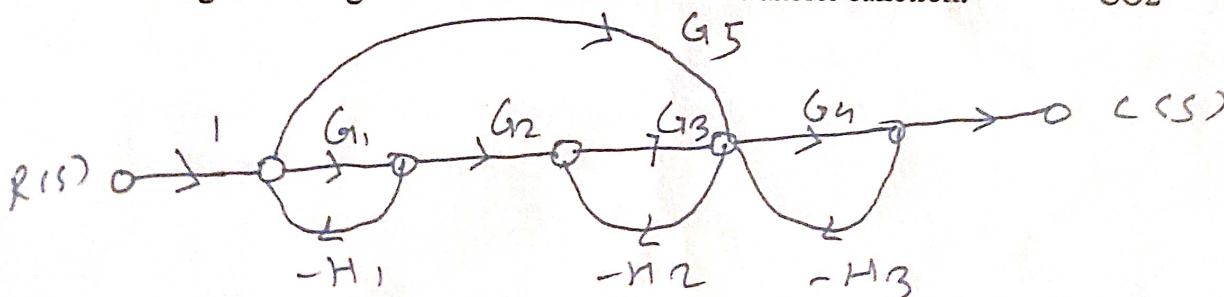
3 X 2

- | | | | |
|---|--|-----|--|
| 1 | Define a) Pole b) zero c) order d) Characteristics equation. | CO2 | |
| 2 | Define open loop system and closed loop system. | CO1 | |
| 3 | Write a note on: Electrical system. | CO1 | |

Q.3) Solve Any One of the following

8

- | | | | |
|---|---|-----|--|
| 1 | What is transfer function? Explain the procedure to find Transfer function. | CO2 | |
| 2 | Using Mason's gain formula find out overall transfer function. | CO2 | |



Course: SY in Instrumentation Engg.

Sem: VI

Subject Name: IME

Subject Code: BTHM403

Max Marks: 20

Date:-24/05/2021

Duration:- 1 Hr. (3.00pm TO 4.00pm)

Instructions to the Students:

1. All questions are compulsory
2. Write all the answers with neat labeled diagram.
3. Figures to the right indicates full marks

(CO) BL PO

Q.1 Attempt following Questions

1 X 6 = 6Marks

- 1) Which of the following is true about Principles of Management?
(A) The principles of management are in a continuous process of evolution
(B) The principles of management have evolved
(C) The principles of management have not evolved (D) None of the above
CO1 II PO11
- 2) Which of the following is the main reason for the existence of an organization?
(A) The vision of an organisation (B) The mission of an organization
(C) The objectives of an organization
(D) The Chief Executive Officer (CEO) of an organization
CO1 I PO11
- 3) Henri Fayol is known as _____.
(A) The father of general management
(B) The father of shop floor management
(C) The father of scientific management (D) All of the above
CO1 I PO11
- 4) The principles of management serve as a general guideline for _____.
(A) Decision making (B) Managerial actions
(C) Both a and b are correct (D) Both a and b are incorrect
CO1 II PO11
- 5) Which of the following is the correct meaning of concentration of decision-making authority?
(A) Span of management (B) Centralisation
(C) Decentralisation (D) None of the above
CO1 II PO11
- 6) _____ is known as "the father of scientific management."
(A) Fredrick W. Taylor (B) Henry Fayol
(C) Robert Owen (D) None of these
CO1 I PO11

Q.2 Solve Any Two of the following.

3 X 2 = 6 Marks

- (A) Give the definition of management and its importance.
CO1 I PO11
- (B) Explain the levels and function of Management.
CO1 I PO11
- (C) Give the difference between management and administration.
CO1 II PO11

Q.3 Solve Any One of the following.

8 X 1 = 8 Marks

- (A) Explain the principles of scientific management by Taylor.
CO1 I PO11
- (B) Explain principles of management by Fayol.
CO1 I PO11

*** End ***

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

P.V.P. Institute of Technology, Budhgaon

MID SEMESTER EXAM- MAY 2022

Course: S.Y. Instrumentation Engg.

Sem: IV

Subject Name: EEM

Subject Code: BTINBS404

Max Marks:20 Date:- 25/05/2022

Duration:- 11:00am to 12:00noon

Instructions to the Students:

1. All questions are compulsory.
2. Draw neat diagram wherever necessary.
3. Assume suitable data if necessary.

Q.1 Attempt the following questions.

(CO/BL) Marks

1. In measurement systems, which of the following static characteristics are desirable?

6

CO1

- a. Accuracy b. Sensitivity c. Reproducibility d. All of the above

2. A quantity whose magnitude has a definite repeating time cycle is called a

CO1

- a. transient b. steady state c. steady state aperiodic d. transient state periodic

3. High precision system is always Accurate.

CO1

- a. TRUE b. FALSE

4. What is the smallest change in the input signal that can be detected by an instrument called .

CO1

- a. Accuracy b. Precision c. Resolution d. Sensitivity.

5. Error due to improper zero adjustment is classified as

CO1

- a. Environment error b. Instrumental error. c. Random error d. Operator error

6. 'A system will be error free if we remove all systematic error'.

CO1

- a) True b) False

Q.2 Solve Any Two of the following.

(A) What is error? Explain its types.

3 X 2

(B) Give difference between Accuracy and Precision.

CO1

(C) Write a note on Hysteresis.

CO1

CO1

Q. 3 Solve Any One of the following.

(A) Explain Static characteristics of Instruments.

8

(B) Explain Dynamic characteristics of Instruments.

CO1

CO1

*** End ***

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

Mid Semester Examination

Course: S.Y B.Tech in Instrumentation

Sem: IV

Subject Name: Microprocessor Based System

Subject Code: BTINPE405 A

Max Marks: 20

Date:-24/05/2022

Duration:- 11:00 – 12:00

Instructions to the Students:

1. All questions are compulsory.
2. Give examples necessary for the answer.

Q. 1	(Level/CO)	Marks
1 What is stored by Register A) Data B) Memory C) both A & B	(CO1)	1 X 6
2 In 8085 name the 16 bit register A) Program Counter B) Stack Pointer C) Both A & B	(CO1)	
3 XCHG instruction exchanges the content of H-L with _____ register pair. A) B-C B) PSW C) D-E D) Stack Pointer	(CO2)	
4 In a microprocessor based system the stack is always in A) Microprocessor B) RAM C) ROM D) EPROM	(CO1)	
5 The clock speed of 8085 is A) 1MHz. B) 1KHz. C) 3.2KHz. D) 3.2MHz.	(CO1)	
6 In microprocessor based system I/O ports are used to interface A) I/O devices and memory chips B) The I/P device only B) O/P devices only D) All the I/O devices	(CO1)	
Q.2 Solve Any Two of the following.		3 X 2
(A) Explain following instructions with example. 1) Mov Rd, Rs 2) LHL D 3) LDA 16 bit address.	(CO3)	
(B) Explain different addressing modes for 8085 .	(CO2)	
(C) Write a programme for 8 bit addition.	(CO1)	
Q. 3 Solve Any One of the following.		8 X 1
(A) Draw timing diagram for MVI A, 45H	(CO2)	
(B) Draw architecture of 8085 Microprocessor in detail.	(CO1)	

*** End ***

Ty (21-22)

VI semester

Course Code	Course Name	Teaching Scheme			Evaluation Scheme				Credits
		L	P	T	Int	MSE	ESE	Total	
BTINC601	Digital System	3	0	1	20	20	60	100	4
BTINC602	Industrial automation and Control	3	0	1	20	20	60	100	4
BTINC603	Power Electronics and Drives	3	0	0	20	20	60	100	3
BTINOE604	Elective-VI [MOOC/Swayam/NPTEL] Elective-VI-A Project engineering and management Elective-VI-B Design of Experiments.	3	0	0	20	20	60	100	3
BTINE605	Elective-VII-A Embedded system Elective-VII-B Design of sensor and transducer.	3	0	0	20	20	60	100	3
BTINE606	Elective-VIII-A Industrial data communication. Elective-VIII-B Fiber optics and laser instruments	3	0	0	20	20	60	100	3
BTINL607	Digital system Lab	0	2	0	30	-	20	50	1
BTINL608	Industrial automation and Control Lab	0	2	0	30	-	20	50	1
BTINL609	Power Electronics and Drives Lab	0	4	0	60	-	40	100	2
	Industrial Training*								
	Total	18	08	02	240	120	440	800	24

*Industrial Training of 30 days to be assessed in 7 semester

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE
P.V.P. Institute of Technology, Budhgaon, Sangli
Mid-Term Test-A.Y. 2021-22-Sem-2

Class: T.Y. -Instrumentation Engineering
Subject Name: Digital System
Max Marks:20

Sem: VI
Subject Code: BTINC601
Date:13/5/2022

Duration:- 1 Hr.

Q. 1

1. For system is completely controllable, condition is

CO2

- a) $Q_c = 0$
- b) $Q_c \neq 0$
- c) $Q_c \geq 0$
- d) $Q_c \leq 0$

2. For system is completely controllable, observable is

CO2

- a) $Q_o = 0$
- b) $Q_o \neq 0$
- c) $Q_o \leq 0$
- d) $Q_o \geq 0$

3. The system is stable if

CO2

- a) All poles in right half of S-plane
- b) All poles in left half of S-plane
- c) All zeros in left half of S-plane
- d) All zeros in right half of S-plane

4. A system is said to be _____ if it is possible to transfer the system state from any initial state to any desired state in finite interval of time.

CO1

- a) Controllable
- b) Observable
- c) Cannot be determined
- d) Controllable and observable

5. Kalman's test is for :

CO2

- a) Observability
- b) Controllability
- c) Optimality
- d) Observability and controllability

6) _____ are the techniques for converting general state models into canonical one.

CO1

- a) Observable
- b) Controllable
- c) Diagonalization
- d) Canonical

Q.2 Solve Any Two of the following.

- (A) Explain transformation between S and Z plane.
- (B) Write a note on STM using Z transform method.

CO1
CO2

3 X 2

(C) Find whether the following system is controllable or not?

$$x(k+1) = \begin{bmatrix} 1 & -1 \\ 1 & -1 \end{bmatrix} x(k) + \begin{bmatrix} 1 \\ 1 \end{bmatrix} u(k)$$

CO2

Q.3 Solve Any One of the following.

- (A) Draw and explain block diagram of digital control systems.
- (B) Explain the conversion of SS to TF.

CO2
CO2

8

***** End *****

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

P. V. P. Institute of Technology, Budhgaon

MID SEMESTER EXAM – MAY 2022

Course: TY B. Tech in Instrumentation.

Sem: VI

Subject Name: Industrial Automation & Control

Subject Code: BTINC602

Max Marks: 20

Date:- 12.05.2022

Duration:- 1 Hr.

Instructions to the Students:

1. All questions are compulsory
2. Write all the answers with neat labeled diagram.
3. Figures to the right indicates full marks

Q. 1 Attempt following Questions

CO BL PO
1 X 6 = 6Marks

1. Offset Means?

2 II 1

A. Permanent Residual Error : True

B. Non-Permanent Residual Error : False

2. What are the type of Automation

A. Fixed Automation

B. Integral Automation

1 II 1

C. Both A & B

D. None of the above

3. What are the features of flexible Automation

A. Electronic Control

B. Changeable operation sequence

1 I 1

C. Both B & A

4. A solenoid:

A. Is widely used in industrial automation

B. Can be used only in de circuits

2 II 3

C. Is spring operated

5. Which of the following devices could be part of a sensor?

A. Relay

B. Brake

2 I 3

C. Thermometer

6. Flexible manufacturing allows for:

A. Quick and inexpensive product changes

B. Tool design and tool production

1 I 11

C. Factory management

Q.2 Solve Any Two of the following.

3 X 2 = 6 Marks

1. What is Automation, Explain Aims of Industrial Automation?

1 I 2

2. Write difference between PLC & DCS.

1 II 3

3. Explain PI controller.

2 I 3

Q.3 Solve Any One of the following.

8 X 1 = 8 Marks

1. Explain PLC block Diagram in detail.

1 I 3

2. Explain Hierarchical Structure of Automation System

1 II 3

****END****

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

Mid Semester Examination-May-22

Course: T.Y.B. Tech in Instrumentation Engg.

Sem: VI

Subject Name: Power Electronics & Drives

Subject Code: BTINC603

Max Marks:20

Date:- 13/05/2022

Duration:- 1 Hr.

Instructions to the Students:

1. All questions are compulsory.
2. Draw neat diagram wherever necessary.
3. Assume suitable data if necessary.

(CO) Marks

Q. 1 Choose correct option and write full sentence.

6

1. Which of the following devices does not belong to the transistor family?

1. IGBT 2. MOSFET 3. GTO 4. BJT

CO1

2. A power transistor is a

CO1

1. 3layer, 3 junction device 2. 3layer, 2junction device
3. 2layer, 1 junction device 4. 4layer, 3 junction device

CO1

3. The three terminals of the IGBT are.....

1. base, emitter & collector 2. gate, source & drain
3. base, source & drain 4. gate, emitter & collector

4 A Thyristor (SCR) is a

CO1

1. P-N-P device 2. N-P-N device 3. P-N-P-N device. 4. P-N device

5. Which of the following terminals does not belong to the MOSFET?

CO1

1. Drain 2. Gate 3. Base 4. Source

6. In IGBT, the n- layer above the p+ layer is called as the

CO1

1. drift layer 2. injection layer 3. body layer 4. collector layer

Q.2 Solve Any Two of the following.

3 X 2

(A) What is meant by IGBT. State application of IGBT.

CO1

(B) State types of Thyristor.

CO1

(C) Define latching current and holding current.

CO1

Q. 3 Solve Any One of the following.

(A) Draw symbol of thyristor. Also explain it's VI characteristics.

8

(B) Write a short note on need of isolation. Also explain isolation using pulse transformer and optocoupler.

CO1

CO1

***** End *****

Course: TY in Instrumentation Engg.

Sem: VI

Subject Name: PEM

Subject Code: BTINOE604 Elective-VI.A

Max Marks: 20

Date:-14/05/2021

Duration:- 1 Hr. (11.00 am to 12.00 pm)

Instructions to the Students:

1. All questions are compulsory
2. Write all the answers with neat labeled diagram.
3. Figures to the right indicates full marks

(CO)

Q.1 Attempt following Questions 1 X 6 = 6Marks

- 1) A project is anything which is-----
A. implicitly expressed B. not implicitly expressed
C. not a physical objective D. social acceptability CO1
- 2) Training requirement is a-----
A. financial factor B. hr factor C. marketing factor D. administrative factor CO1
- 3) Which of the following is NOT a source of Project Idea?
A. Attending Trade Fairs B. Analysis of Economic & Social Trends
C. Identifying unfulfilled psychological needs D. Increase Production. CO1
- 4) With respect to a project resources refer to :
A. Man power B. Machinery
C. Materials D. All of the above CO1
- 5) Which of the following is NOT the facet of Project Analysis?
A. Market Analysis B. Fundamental Analysis
C. Financial Analysis D. Technical Analysis CO1
- 6) What is to be prepared as a first step to avail finance for a new project?
A. Detailed Report B. Project Report
C. Promoter's bio-data D. Summary CO1

Q.2 Solve Any Two of the following.

3 X 2 = 6 Marks

- (A) Explain Characteristics Of Projects. CO1
- (B) Explain Stages Of Project Management. CO1
- (C) Explain the Types Of Organization. CO1

Q.3 Solve Any One of the following.

8 X 1 = 8 Marks

- (A) Explain Project Planning Process. CO1
- (B) Explain Project Management Functions. CO1

*** End ***

Course: T.Y. B. Tech in Instrumentation Engineering Sem: II

Subject Name: Design of Sensor & Transducer Subject Code: BTINE605 Elective-VII.B

Max Marks: 20

Date:-14.05.2022

Duration:- 3.00 pm to 4.00 pm

Instructions to the Students:

1. All questions are compulsory
2. Write all the answers with neat labeled diagram.
3. Figures to the right indicates full marks

(CO) BL PO

Q.1 Attempt following Questions

1 X 6 = 6Marks

CO1

PO1

- 1) Bonding element in a strain gauge must have _____
a) high insulation resistance b) low insulation resistance c) zero insulation resistance d) All above
- 2) High pressure is measured by.
a) Bridgeman Gauge b) Bourdon Tube C) Bellows d) All Above
- 3) What is the unit in which torque is measured?
a) Newton meter b) Meter per second c) Kilometer per hour d) Rotation per minute
- 4) Which is the most common load cell used in the force sensors?
a) Hydraulic load cells b) Strain-Gauge based load cells c) Pneumatic load cells d) Capacitive load cells
- 5) Pressure = ?
a) Force into area b) Force per displacement c) Speed into time d) None of above
- 6) In which of the following category be the thin plated diaphragm included ?
a) Primary transducer b) Secondary transducer c) Voltage measuring devices d) Spring balance system

Q.2 Solve Any Two of the following.

3 X 2 = 6 Marks

(A) List out steps to design diaphragm.

CO1 VI PO3

(B) Give classification of strain gauges and explain any one in detail

CO1 III PO1

(C) Explain Design factors in material selection of diaphragm

CO1 IV PO3

Q.3 Solve Any One of the following.

8 X 1 = 8 Marks

(A) Explain Design of torque measurement sensors

CO2 IV PO2

(B) Explain Design of DPT

CO2 IV PO3

*** End ***

Course: TY B. Tech

Sem : VI

Subject Name: Industrial data communication

Code: BTINE606

Max Marks: 20

Date:-12 / 05 / 2022

Duration:- 11:00 – 12:00

Instructions to the Students:

1. All questions are compulsory
2. Write all the answers with neat labeled diagram.
3. Figures to the right indicates full marks

(CO) BL

Q. 1 Attempt following Questions

1 X 6 = 6Marks

- | | | |
|---|-----|----|
| 1) Foundation field bus blocks are-----
a) Function block b) transducer block c) Recourse block d) All | CO1 | I |
| 2) Field bus access sub layer (FAS) services are described by FMS
a) True b) False | CO1 | I |
| 3) Network Security provides authentication and access control for resources.
a) True b) False | CO1 | I |
| 4) The term LAN stands for?
a) Local Area Net b) Local Area Network c) Local Array Network | CO1 | I |
| 5) Device that is used to connect a number of LANs is –
a). Router b) Bridge
c) Switch d) Both a and b | CO1 | I |
| 6) A term that refers to the way in which the nodes of a network are linked together
a) Network b) Topology c) interconnectivity | CO1 | II |

Q.2 Solve Any Two of the following.

3 X 2 =6 Marks

- | | | |
|--|-----|----|
| (A) Explain four common field bus topologies in detail. | CO2 | I |
| (B) List the advantages and disadvantages of field bus technology .s | CO3 | II |
| (C) Describe the operation of different blocks in field bus device.. | CO2 | I |

Q. 3 Solve Any One of the following.

8 X 1 = 8 Marks

- | | | |
|---|-----|----|
| (A) Describe the architecture of communication network with respect to OSI model. | CO2 | II |
| (B) Explain the field bus project team and their responsibilities . | CO2 | II |

*** End ***

TY. (21-22)

Teaching & Evaluation scheme of Third year B. Tech. Instrumentation engineering

V Semester

Course Code	Course Name	Teaching Scheme			Evaluation Scheme				Credits
		L	P	T	Int	MSE	ESE	Total	
BTINC501	Process loop components	3	0	1	20	20	60	100	4
BTINC502	Microprocessor and Micro Controller	3	0	0	20	20	60	100	3
BTINC503	Digital Signal Processing	3	0	1	20	20	60	100	4
BTHM501	Value Education, Human Rights and Legislative Procedures[MOOC/ Swayam/ NPTEL]	2	0	0	-	-	-	Audit course	0
BTINE504	Elective-IV-A. Multi sensor and data fusion Elective-IV-B Engineering Instrumentation	3	0	0	20	20	60	100	3
BTINE505	Elective-V-A Control System Elective-V-B Artificial neural network.	3	0	0	20	20	60	100	3
BTINL506	Computational Technics Lab	0	2	0	30	-	20	50	1
BTINL507	Process loop components Lab	0	4	0	60	-	40	100	2
BTINL508	Microprocessor and micro Controller Lab	0	2	0	30	-	20	50	1
BTINF509	Industrial Training	-	-	-	50	-	-	50	1
	Total	17	08	02	270	100	380	750	22

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

Mid Semester Examination – 2021-22

Course: TY B. Tech in Instrumentation Engineering Sem: V
Subject Name: Process Loop Components Subject Code: BTINC501
Max Marks: 20 Date: 08/12/2021 Duration:- 1 Hr.

Instructions to the Students:

1. All Questions are compulsory.
2. Draw neat diagrams wherever necessary.
3. Assume suitable data if necessary.

Q. 1

(Level/CO) Marks
6

1. The acronym PLC stands for:
(A) Pressure Load Control
(B) Programmable Logic Controller
(C) Pneumatic Logic Capstan
(D) PID Loop Controller
(E) Pressure Loss Chamber
CO1
2. The initial response when tune output is not equal to input is called
(A) Transient Response
(B) Error Response
(C) Dynamic Response
(D) Either of the above
CO1
3. In a PLC, the scan time refers to the amount of time in which
(A) the technician enters the program
(B) timers and counters are indexed by
(C) one "rung" of ladder logic takes to complete
(D) the entire program takes to execute
(E) transmitted data communications must finish
CO2
4. Identify the problem in this motor control PLC program:
(A) Coil
(B) Start contact
(C) Seal-in contact
(D) Stop contact
(E) Power source
CO1
5. Why do we use 4-20 mA signal instead of 0-10 mA ?
(A) To elevate zero so that we can come to know whether it is dead zero or from signal : True
(B) To elevate zero so that we can come to know whether it is dead zero or from signal : False
CO1
6. For proper feedback in a process control element , it is required to ---
(A) Measure P
(B) Measure Setpoint
(C) Measure Error
(D) Measure Comparator
CO1

Q.2 Solve Any Two of the following.

- (A) Explain elements of process control
- (B) What is PID Controller Bumpless transfer
- (C) Explain Block diagram of PLC.

3 X 2

CO1
CO1
CO2

Q. 2 Solve Any One of the following.

(A) Explain Different timer and counter in details.

(B) Develop ladder logic that will turn ON an output light 5 Minutes after Switch A has been turn ON.

CO2

11

CO2

*** End ***

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

Mid Semester Examination

Course: B. Tech in Instrumentation

Sem: V

Subject Name: Microprocessor and Microcontroller

Subject Code: BTINC502

Max Marks: 20

Date:-08/12/2021

Duration:- 2.30pm-3.30pm

Instructions to the Students:

1. All questions are compulsory.
2. Give examples necessary for the answer.

	(Level/CO)	Marks
Q. 1		1 X 6
1 What is stored by Register	(CO1)	
A) Data B) Memory C) both A & B		
2 DMA signal/signals in 8085 is/are	(CO1)	
A) All B) HOLD. C) HLDA		
3 XCHG instruction exchanges the content of H-L with _____ register pair.	(CO2)	
A) B-C B) PSW C) D-E D) Stack Pointer		
4 In a microprocessor based system the stack is always in	(CO1)	
A) Microprocessor B) RAM C) ROM D) EPROM		
5 The clock speed of 8085 is	(CO1)	
A) 1MHz. B) 1KHz. C) 3.2KHz. D) 3.2MHz.		
6 In microprocessor based system I/O ports are used to interface	(CO1)	
A) I/O devices and memory chips B) The I/P device only		
B) O/P devices only D) all the I/O devices		
Q.2 Solve Any Two of the following.		3 X 2
(A) Explain following instructions with example.	(CO3)	
1) Mov Rd, Rs 2) LHL D 3) LDA 16 bit address.		
(B) Explain different addressing modes for 8255 PPI .	(CO2)	
(C) Write a programme for 8 bit addition.	(CO1)	
Q. 3 Solve Any One of the following.		8 X 1
(A) Draw and explain 8255 PPI block diagram.	(CO2)	
(B) Draw and Explain architecture of 8085 Microprocessor in detail.	(CO1)	

*** End ***

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

Mid Semester Examination – December 2021

Course: B. Tech in Instrumentation Engg.

Sem: V

Subject Name: Digital Signal Processing

Subject Code: BTINC503

Max Marks:20

Date:- 09 /12/2021

Duration:- 1 Hr.

Instructions to the Students:

1. All questions are compulsory.
2. Draw neat diagram wherever necessary.
3. Assume suitable data if necessary.

Q.1 Choose correct option and write full sentence.

(Level/CO)	BL	PO	Marks
			6

1. $Y(t) = x(t/5)$ is _____
 a) Compressed signal b) Expanded signal c) Time shifted signal
 d) Amplitude scaled signal by factor 1/5
2. Is the signal $x(n) = u(n+4) - u(n-4)$ causal?
 a) Yes b) No

CO1	I	PO2
-----	---	-----

CO1	I	PO2
-----	---	-----

3. What is the ROC of z-transform of finite duration anti-causal sequence?

CO1	V	PO2
-----	---	-----

- a) $z=0$ b) $z=\infty$
 c) Entire z-plane, except at $z=0$ d) Entire z-plane, except at $z=\infty$

4. What is the value of $u[1]$, where $u[n]$ is the unit step function?

CO1	V	PO2
-----	---	-----

- a) 1.5 b) 0.5 c) 1 d) -1

5. All causal systems must have the component of

CO1	II	PO2
-----	----	-----

- a) memory b) time invariance c) stability d) linearity

6. The system that accepts the input in the discrete form and produces the discrete time output is known as

CO1	II	PO2
-----	----	-----

- a) Linear system b) Discrete time system
 c) LTI system d) All of the above

Q.2 Solve Any Two of the following.

3 X 2

- (A) Draw & define unit step; unit ramp; unit impulse signal.

CO1	II	PO2
-----	----	-----

- (B) State any three properties of Z-transform.

CO2	II	PO2
-----	----	-----

- (C) Sketch $x(n)=2^n$ for $-2 < n < 2$; find (i) $x(2n)$ (ii) $x(n/2)$

CO2	V	PO1
-----	---	-----

Q.3 Solve Any One of the following.

8X1

- (A) Determine Z transform of $x(n)=\cos(n\omega_0 T)u(n)$

CO1	V	PO1
-----	---	-----

- (B) Determine D.T. sequence associated with Z transform given below using power series method $X[Z]=\frac{1}{1-z^{-1}}$; ROC $Z > 1$

CO1	V	PO1
-----	---	-----

*** End ***

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE
P.V.P. Institute of Technology Budhgaon

Mid Sem Exam – Dec 2021

Course: T.Y. B. Tech in Instrumentation Engineering

Sem: I

Subject Name: Engineering Instrumentation Subject Code: BTINE504 Elective-IV

Max Marks: 20

Date:-09.12.2021 Duration:- 1 Hr. (2.30pm – 3.30 pm)

Instructions to the Students:

- 1) All questions are compulsory.
- 2) Draw neat labeled figures wherever required.
- 3) Assume suitable data if necessary.

CO	BL	PO
CO1	II	1,4

Q.1 Attempt following questions (1 X 6 = 6 Marks)

- a) bridge is used for the precise measurement of inductances over a wide range (c)
 - a) Hay's b) Wien's c) Anderson d) Maxwell
- b) A set of reading has wide range and therefore it has (a)
 - a) low precession b) high precession c) low accuracy d) high accuracy
- c) 6) following are the desirable dynamic characteristic of measurement system (d)
 - a) fast response, fidelity, measuring lag and dynamic error b) fast response and measuring lag
 - c) fidelity and measuring lag d) fast response and fidelity
- d) Instruments measure the total quantity of electricity delivered at a particular time.
 - a) absolute b) indicating c) recording d) integrating
- e) In majority of instruments, damping is provided by
 - a) fluid friction b) spring c) eddy currents d) all of the above
- f) A set of reading has wide range and therefore it has
 - a) low precession b) high precession c) low accuracy d) High accuracy

Q.2 Solve Any Two of the following. (3 X 2 = 06 Marks)

- | | | | |
|--|-----|-----|-----|
| (A) Describe pressure gauge calibration | CO1 | III | 1,4 |
| (B) Explain Whetstone's bridge | CO3 | III | 2 |
| (C) Describe Design consideration of Schering's bridge | CO3 | VI | 2 |

Q.3 Solve Any One of the following. (8 X 1 = 08 Marks)

- | | | | |
|--|-----|-----|-----|
| (A) Describe working principal of Permanent Magnetic Moving Coil | CO2 | II | 1,3 |
| (B) Explain in detail DC Voltmeter | CO2 | III | 1,3 |

***** End *****

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

Mid Semester Examination – Dec. 2021

Course: B. Tech in Instrumentation

Sem: V

Subject Name: Elective-V- Control System

Subject Code:BTINE505

Max Marks:20

Date:-

Duration:- 1 Hr.

Q. 1

CO BL PO Marks

6

1. A linear time invariant system is stable if :

- a) System is excited by the bounded input, the output is also bounded
- b) In the absence of input output tends zero
- c) Both a and b
- d) None of the mentioned

3 II PO2

2. Which among the following are the interconnected units of state diagram representation?

3 II PO2

- a) Scalars
- b) Adders
- c) Integrator
- d) All of the mentioned

3. Transfer function analysis is applicable if the initial conditions are

3 II PO2

- a) Zero
- b) Non-zero
- c) Equal
- d) Not equal

4. The ROC of z-transform of any signal cannot contain zeros.

2 II PO2

- a) True
- b) False

5. The Z-Transform $X(z)$ of a discrete time causal signal $x(n)$ is defined as:

3 II PO2

- a) $\sum_{n=-\infty}^{\infty} x(n)z^n$
- b) $\sum_{n=-\infty}^{\infty} x(n)z^{-n}$
- c) $\sum_{n=0}^{\infty} x(n)z^n$
- d) None of the mentioned

6. State space analysis is applicable for non-linear systems and for multiple input and output systems.

3 II PO2

- a) True
- b) False

Q.2 Solve Any Two of the following.

3 X 2

(A) Write a short note on state space analysis for electrical systems.

3 V PO2

(B) Find the Z-transform of the $x(n) = \{2, 3, -5, 6, 8, 1, 0, 2, 6\}$

3 V PO2

(c) Write a short note on Jury's stability test.

2 IV PO2

Q. 3 Solve Any One of the following.

8

(A) Explain disadvantages of TF and explain how overcome using state space analysis.

1 III PO3

(B) For the given matrix find the Eigen value and Eigen vector $A =$

3 V PO3

$$\begin{bmatrix} 3 & -2 \\ -1 & 2 \end{bmatrix}$$

Final yr (21-22)

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

B. Tech (Instrumentation Engineering)
Proposed Curriculum for Semester VII [Final Year]

Sr No.	Course Code	Type of Course	Course Title	Hours Per Week			Evaluation Scheme			Total Marks	Credits
				L	T	P	MSE	CA	ESE		
01.	BTIEC701	PCC1	Process Instrumentation and Control	3	-	0	20	20	60	100	3
02.	BTIEC702	PCC2	Instrumentation System Design	3	-	0	20	20	60	100	3
03.	BTIEC703	PCC3	Industrial Project Planning and Estimation	3	-	-	20	20	60	100	3
04.	BTIEPE704A	PEC1 (Elective - IX)	Image Processing	3	-	0	20	20	60	100	3
	BTIEPE704B		Internet of things								
	BTIEPE704C		Clinical Instrumentation								
05.	BTIEOE705A	OEC1 Open (Elective - X)	Analytical Instrumentation	3	0	0	20	20	60	100	3
	BTIEOE705B		Adaptive Control System								
	BTIEOE705C		Automobile Instrumentation								
06.	BTIEL706	Lab	Process Instrumentation and Control Lab	0	0	2	-	30	20	50	1
07.	BTIEL707	Lab	Instrumentation System Design Lab	0	0	2	-	30	20	50	1
08.	BTIEL708	Lab	PEC1 Elective - IX Lab	0	0	2	-	30	20	50	1
09.	BTIES709	Seminar	Seminar	0	0	2	-	30	20	50	1
10.	BTIEP710	Project	Project Part-I	0	0	12	-	30	20	50	3
11.	BTIEF711	-	Industrial Training	-	-	-	-	-	50	50	1
Total				15	0	20	100	250	450	800	23

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

P.V.P. Institute of Technology Budhgaon

Mid Sem Exam – Dec 2021

Course: Final Year B. Tech in Instrumentation Engineering

Sem: I

Subject Name: Process Instrumentation & Control

Subject Code: BTIEC701

Max Marks: 20

Date:- 08.12.2021 Duration:- 1 Hr. (12.00 noon – 1.00 pm)

Instructions to the Students:

- 1) All questions are compulsory.
- 2) Draw neat labeled figures wherever required.
- 3) Assume suitable data if necessary.

Q.1 Attempt Following

1 X 6 = 6 Marks

CO	BL	PO
CO1	II	PO2

- a) Instrumentation in plants offers the advantage
 - a) Greater safety of operation
 - b) Better quality of product
 - c) Greater operation economy
 - d) All above
- b) Degree of freedom is equal to
 - a) Number of equations
 - b) Number of variables
 - c) Difference between No. of process variables and No. of equations
 - d) All above
- c) Which are process characteristics
 - a) Process equation, process lag, process load
 - b) Accuracy, precession, resolution
 - c) Step, ramp, sine wave
 - d) Peak overshoot
- d) What is a process control system?
 - a) system to keep the parameters at zero value
 - b) system to maintain the parameters constant
 - c) system to keep the parameters at highest value
 - d) system to check the voltage
- e) Mcleoid Gauge used for
 - a) Flow measurement
 - b) Level measurement
 - c) Pressure measurement
 - d) Displacement measurement
- f) Use of Integral controller with proportional
 - a) Elimination of offset
 - b) Reduction of offset
 - c) Stability
 - d) None of above

Q.2 Solve Any Two of the following.

3 X 2 = 6 Marks

- (A) Explain feed forward system
- (B) Explain time constant of a process
- (C) Design feedback control system for level loop

CO2	V	PO2
CO1	III	PO2
CO3	VI	PO3

Q.3 Solve Any One of the following.

1 X 8 = 8 Marks

- (A) Explain Position algorithm of PID controller
- (B) List out PID tuning methods and explain any one in detail

CO2	III	PO3
CO2	IV	PO4

***** End *****

Course: B. Tech in Instrumentation.

Subject Name: Instrumentation System Design

Max Marks: 20

Date:-08.12.2021

Sem: VII

Subject Code: BTIEC702

Duration:- 1 Hr.

Instructions to the Students:

1. All questions are compulsory
2. Write all the answers with neat labeled diagram.
3. Figures to the right indicates full marks

Q.1 Attempt following Questions

1 X 6 = 6Marks

- | | (CO) | BL | PO |
|---|------|----|-----|
| 1) A/D conversion is not needed in the smart sensor/transmitter
a) True b) False | 1 | I | 1,3 |
| 2) Resistance temperature detector is _____
a) Electrical Transducer b) Mechanical Transducer
c) Chemical Transducer d) Physical Transducer | 1 | I | 1 |
| 3) The output of thermocouple is in the range of
a) Volts b) Millivolts c) Amperes d) Milliamperes | 1 | I | 1,3 |
| 4) By a Rotameter we can measure-----
a) Specific gravity b) Viscosity c) Flow d) Rotation | 1 | I | 1,3 |
| 5) If the displacement is measured with strain gauge then the number of strain gauge normally required are-----
a) one b) Two c) Three d) Four | 1 | I | 1,3 |
| 6) Strain gauge, LVDT and thermocouple are examples of-----
a) Active transducers b) Passive transducers
c) Analog transducers d) Primary transducers | 1 | I | 1 |

Q.2 Solve Any Two of the following.

3 X 2 = 6 Marks

- | | | | |
|---|---|---|-----|
| (A) Calculate the equivalent pressure for 4.5Ma, 7.8Ma, 10.5Ma, 16.8mA. | 1 | I | 1,3 |
| (B) Write performance characteristics of transducers. | 1 | I | 1,3 |
| (C) Explain Strain Gauge signal Conditioning. | 1 | I | 1,3 |

Q.3 Solve Any One of the following.

8 X 1 = 8 Marks

- | | | | |
|---|---|---|-----|
| (A) Explain Signal Conditioning of RTD. | 1 | I | 1,3 |
| (B) Design A signal Conditioning for J type thermocouple for the temperature measurement of 50 degree Celsius to 150 degree Celsius. The output voltage required is 10 V. Thermocouple output at 50 and 150 is 2.585mv and 8.010mv respectively | 1 | I | 1,3 |

Course: B. Tech in Instrumentation.

Sem: VII

Subject Name: Industrial Project Planning & Estimation

Subject Code: BTIEC703

Max Marks: 20

Date:-

Duration:- 1 Hr.

Instructions to the Students:

1. All questions are compulsory
2. Write all the answers with neat labeled diagram.
3. Figures to the right indicates full marks

(CO) BL

Q.1 Attempt following Questions

1 X 6 = 6Marks

- 1) Project performance consists of
A. Time
B. Cost
C. Quality
D. All of the above
1 I
- 2) The probability of completing the project can be estimated based upon the
A. Uniform distribution curve
B. Normal distribution curve.
C. U-shaped distribution curve
D. None of the above
1 II
- 3) The entire process of a project may be considered to be made up on number of sub process placed in different stage called the
A. Technical key resources
B. Work key structure
C. Work Breakdown Structure (WBS).
D. None of the above
1 II
- 4) Controlling the changes in the project may affect
A. The progress of the project
B. Stage cost
C. Project scope
D. All of the above
2 I
- 5) Following is (are) the responsibility (ies) of the project manager.
A. Budgeting and cost control
B. Allocating resources
C. Tracking project expenditure
D. All of the above
1 II
- 6) Each component of the software product is separately estimated and the results aggregated to produce an estimate for the overall job.
A. Algorithmic model
B. Expert judgment
C. Bottom-up
D. Top down
2 I

3 X 2 = 6 Marks

Q.2 Solve Any Two of the following.

- (A) Short note on Project statement
- (B) Explain Project Management Cycle
- (C) Explain project organization structure

1	II
1	I
1	II

Q.3 Solve Any One of the following.

8 X 1 = 8 Marks

- (A) Define Project & explain project objectives & scope
- (B) Explain instrument specification sheet in detail

1	III
2	II

***** End *****

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

Mid Semester Examination-DEC21

Course: B. Tech in Instrumentation

Sem: VII

Subject Name: Analytical Instrumentation

Subject Code: BTIEOE705A

Max Marks:20

Date:-

Duration:- 1 Hr.

	(Level/CO)	BL	PO	Marks
Q. 1				6
1. Which of the following is not a type of Spectroscopy? a) Gamma ray b) Sound c) Nuclear magnetic resonance d) X ray	3	II	PO2	
2. Which of the following statements is false about single beam absorption instruments? a) Tungsten bulb is used as source b) Beam splitter is used to get parallel beam c) Test tube is used as sample holder d) Photovoltaic cell as detector	3	II	PO2	
3. Which of the following statement is false about double beam absorption instruments? a) It is similar to single beam instruments except two beams are present b) Reference beam must have higher intensity than sample beam c) Both the beams after they pass through respective samples are compared d) Tungsten bulb is used as source	3	II	PO2	
4. Which of the following is not an application of colorimeter? a)Paints b)Composition detection c)Cosmetic d) Inks	2	II	PO3	
5. Colorimeters are used in applications where great accuracy is required. a) True b) False	3	II	PO2	
6. Which of the following is the purpose of the beam splitter in double beam photometer or colorimeter? a) Splits beam in such a way that sample beam has higher intensity b) Splits beam into two equal intensity beams c) Splits beam in such a way that reference beam has higher intensity d) Merge two equal intensity beams into single beam	3	II	PO2	

Q.2 Solve Any Two of the following.

3 X 2

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

Mid Semester Examination-2021-22

Course: S.Y.B. Tech in Instrumentation Engg.

Sem: III

Subject Name: Analog Electronics

Subject Code: BTINC304

Max Marks:20

Date:- 25/01/2022

Duration:- 1 Hr.

Instructions to the Students:

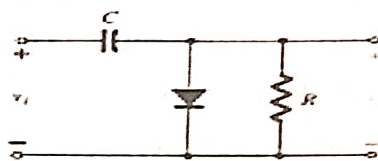
1. All questions are compulsory.
2. Draw neat diagram wherever necessary.
3. Assume suitable data if necessary.

(Level/CO) Marks

6

Q.1 Choose correct option and write full sentence.

1. What is the circuit in the given diagram called?



CO3

1. Clipper 2. Clamper 3. Half wave rectifier 4. Full wave rectifier

2. A transistor is a operated device.

CO1

1. Current 2. voltage 3. both voltage and current 4. none of the above

CO1

3. A transistor has

1. one pn junction 2. two pn junctions 3. three pn junctions 4. four pn junctions

4. Op-amp can amplify

CO2

1. a.c. signal only 2. d.c. signal only 3. both a.c. & d.c. signal
4. Neither a.c. & d.c. signal

5. Which material is generally used for the manufacture of Zener diode?

CO3

1. Silicon 2. Germanium 3. Mercury 4. Arsenic

6. An oscillator produces..... oscillations

CO3

1. Damped 2. Undamped 3. Modulated 4. none of the above

Q.2 Solve Any Two of the following.

3 X 2

(A) Write a short note on Oscillator.

CO3

(B) Compare inverting amplifier and non-inverting amplifier.

CO2

(C) Draw and explain voltage doubler circuit.

CO3

Q.3 Solve Any One of the following.

(A) Explain BJT configurations.

CO1

8

(B) Define clipper? Explain series clipper and shunt clipper.

CO3

*** End ***

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

Mid Semester Examination

Course: B. Tech in Instrumentation

Sem: V

Subject Name: Sensors and Transducers

Subject Code: BTINC303

Max Marks: 20

Date:- 24 / 01 / 2022

Time:- 2:00pm-3:00pm

Instructions to the Students:

1. All questions are compulsory.
2. Give examples necessary for the answer.

(Level/CO) Marks
1 X 6

Q. 1

- 1 Which transducer is known as 'self-generating transducer'? (CO1)
a) Active transducer b) Passive transducer
c) Secondary transducer d) Analog transducer
- 2 Photoelectric cells are used to convert (CO1)
a) light energy into sound energy b) electrical energy into light energy
c) light energy into electrical energy d) light energy into heat energy
- 3 What is the moving part of a linear variable differential transformer (LVDT)? (CO2)
a. Primary b. Secondary c. Diaphragm d. Core
- 4 What device is similar to an RTD but has a negative temperature coefficient? (CO1)
a. Strain gauge b. Thermistor c. Negative-type RTD d. Thermocouple
- 5 What will happen to resistance, if the length of the conductor is increased? (CO1)
a) Decreases b) No change c) Increases d) Doubles
- 6 Peltier effect is reverse of seebeck effect. (CO1)
a) True b) False

Q.2 Solve Any Two of the following.

3 X 2

- (A) What is Transducer ? Give its classification . (CO3)
- (B) List head type flow meter .Explain any one. (CO2)
- (C) Describe venture meter with neat sketch. (CO1)

Q. 3 Solve Any One of the following.

8 X 1

- (A) Write short note on Ultrasonic Sensor (CO2)
- (B) Describe working principle of L.V.D.T with suitable diagram. (CO1)

*** End ***

**MID SEM EXAM
A.Y.2021-22(Sem-I)**

CLASS:-SY

Roll No	Enrollment Number	Full Name	RSM	PDP	PMM	
2101	2062691466010	OMKAR SURESH DALAVI	ST	AE	NAS	M-3
2102	2062691466007	DIVYA NAGNATH KUMBHAR	18	17	18	
2103		ANIKET DADASO LOHAR	18	16	19	
2104	2062691466005	ARJUN RAMA HONAKANDE	18	15	18	
2105		NIMISHA NARESH PHADNIS	20	18	20	
2106		AJAY PANDURANG MALI	20	18	20	
2107	2062691466001	AARTI ANIL KOLI	16	15	16	
2108	2062691466015	VINAYAK BALASAHEB MALI	18	17	16	
2109	2062691466002	ADITYA DATTATRAYA JAGTAP	18	18	18	
2110	2062691466017	ATHARV RAMESH PATIL	16	17	16	
2111	2062691466016	ANIKET BALASAHEB KOLI	18	15	18	
2112	2062691466011	SHIVANI BAJARANG OLEKAR	17	15	17	
2113	2062691466013	SUPRIYA MAHESH PAWAR	18	18	18	
2114		TUSHAR SHANKAR PAWAR	18	16	18	
2115	2062691466008	NIKITA SANJAY KHICHADE	18	17	18	
2116		SHRIDHAR SOPAN SHINDE	18	18	18	
2117	2162691466513	MANISH MAHESH SHETE	18	18	18	
2118	2162691466506	MAHESH DASHRATH SALUNKHE	18	18	18	
2119		AKSHAY UTTAM ATHAVALE	20	18	20	
2120		ROHIT DHONDIRAM BHOSALE	17	17	17	
2121		VITTHAL BHARAT HAKKE	18	18	18	
2122		VISHVAJEET RAVINDRA KHICHADE	16	16	16	
2123		RUSHIKESH RAMESH AWALE	18	18	18	
2124	2162691466508	RUSHIKESH GORAKH KALE	16	16	16	
2125	2162691466511	SANIKA APPASO PAILWAN	16	16	16	
2126	2162691466509	PAVAN BABU SAKATE	18	18	18	
2127	2162691466504	RUSHABH CHANDRAKANT SHINDE	18	18	16	
2128		ASHISH RAMESH CHAVAN	18	18	17	
2129	2062691466006	DANISH IMRAN SHAIKH	18	18	18	
2130	2162791466501	PARTH PRAKASH GHORPADE	18	18	18	
2131		TEJAS MILIND SHINDE	19	18	19	
2132		PRASHANT SUDAM NANGARE	18	18	18	
2133	2162691466503	DHANANJAY BALU SHINDE	18	18	15	
2134		KAUSTUBH SUDHIR GHONGADI	18	18	17	
			18	18	15	

MID SEM EXAM
A.Y.2021-22(Sem-I)

Class:-T.Y.

Sr.No	Enrollment Number	Full Name	El	M&M	CS	DSP	PLC
1	PRN:1962691466004	PAWAR PRATIK PRAKASH	13	18	19	16	
2	PRN:1962691466007	MAGAR HARSHAD MANIK	13	16	19	15	
3	PRN:1962691466015	NALAWADE AJINKYA DATTATRAY	17	18	20	17	
4	PRN:1962691466016	MOHITE NIKITA PRADIP	16	18	20	17	
5	PRN:1962691466032	PATIL SHUBHAM JAYSING	18	18	18	17	
6	PRN:1962691466033	MALI VISHAL SANJAY	17	16	17	16	
7	PRN:1962691466034	SHEKH MAHANMADIJAJ MAHANMADRAFIQ	17	18	18	18	
8	PRN:1962691466036	NANDIWALE VISHAL KAKASO	16	18	19	18	
9	PRN:1962691466042	KULKARNI PARAG HARSHAL	15	18	17	17	
10	PRN:1962691466054	PATIL RUTURAJ SADASHIV	15	18	16	17	
11	PRN:1962691466062	NANDRE PRATIK ADINATH	15	18	19	17	
12	PRN:2062691466001	RUSHIKESH DIPAK KOPARDE	13	18	17	15	
13	PRN:2062691466002	PATIL SUDARSHAN SHAHAJI	13	16	16	16	
14	PRN:2062691466003	BHOSALE NINAD RAMDAS	16	18	17	18	
15	PRN:2062691466004	MAHANUR ASAWARI SAMBHAJI	17	18	18	18	
16	PRN:2062691466005	PAWAR VAISHNAVI SANJAY	12	18	20	18	
17	PRN:2062691466006	DALAVI SANKET DILIP	14	18	20	17	
18	PRN:2062691466007	HULLE SOURABH SHITAL	17	18	16	18	
19	PRN:2062691466008	JAYAPPA SURAJ RAJARAM	18	18	18	17	
20	PRN:2062691466009	KUPWADE MAYURI RAVINDRA	16	18	18	18	
21	PRN:2062691466010	PATIL NIKITA ANIL	16	18	20	17	
22	PRN:2062691466011	PATIL ABOLI PRAKASH	15	18	18	18	
23	PRN:2062691466012	PATIL AVIRAJ SAMBHAJI	15	16	17	16	
24	PRN:2062691466013	WAKSHE GANESH MOHAN	10	16	15	16	
25	PRN:2062691466014	SURYAWANSHI VARAD SUNIL	18	18	19	18	
26	PRN:2062691466015	YELAVIKAR PAVAN JANARDAN	12	16	17	16	
27	PRN:2062691466016	DASHARATH MAHADEV DHERE	10	16	15	10	
28	PRN:2062691466017	PAWASKAR VALLARI SUSHIL	14	18	17	18	
29	PRN:2062691466018	DESAI PRAFULLA PRAKASH	12	18	15	18	

30	PRN:2062691466019	RAJOPADHYE SHUBHAM VASUDEV	16	16	18	16	
31	PRN:2062691466020	KOTHAWALE AASHPAK IQBAL	10	14	14	14	
32	PRN:2062691466021	PATIL SWAPNIL TUKARAM	12	18	14	18	
33	PRN:2062691466023	MANE VIDNYAN PRAKASH	16	16	20	12	
34	PRN:2062691466024	PATIL PRANAV MAHADEV	10	16	10	10	
35	PRN:2062691466022	PATIL PRATHAMESH	10	16	16	16	

MID SEM EXAM
A.Y.2021-22(Sem-I)

Class:-B.Tech.

Roll No	Full Name	PIC	ISD	AI	IPPE
1	Anuj raut	13	17	15	
2	Sushant Kisan Mohite	11	17	20	
3	Khot pradnya Rajendra	17	18	20	
4	Prasad Maruti Mohite	11	19	20	
5	Sanket Ganpati Desai	17	19	20	
6	Shrenik Annaso Patil	10	14	20	
7	Abhishek Popat Kamble	13	17	20	
8	Sharvil patil	10	16	20	
9	Harshad Rajesh Jadhav	12	17	20	
10	Omkar pandurang yadav	14	17	20	
11	Saurabh Shrikant Kadam	12	18	20	
12	Sumedh Bharat Patil	13	16	20	
13	Shubham Raghavendra Kulkarni	15	17	20	
14	Rohit Dagadu Kalubramhe	11	17	19	
15	Ruturaj Jaywant Sutar	11	17	19	
16	Suryawanshi Niranjana Rajkumar	15	17	20	
17	Prathmesh Gulabrao Patil	12	17	20	
18	Gourav mahendrasing Thakur	11	17	20	
19	Vaishnavy mukund gurav	16	16	15	
20	Awati Tanvi Vaibhav	17	17	19	
21	Abhinav Abaso Subhedar	15	17	20	
22	Dhiraj Patil	12	17	19	
23	Aundhe Saurabh Ajay	10	16	20	
24	Shubham Balasaheb Ghabak	17	19	20	
25	Sagar Mukundrao Pawar	14	19	20	
26	Tejaswini Prakash Mane.	16	19	20	
27	Sawant pavan ashok	11	15	18	
28	Onkar Jaysing Patil	13	19	20	
29	Amit Ananda Kalandre	14	16	20	
30	Ghatage Kartiki Hanmant	13	19	20	
31	Sharvi Manoj Gala	13	12	20	
32	Vaishnavi Abhay Basutkar	13	15	15	
33	Mayuri ravindra patil	11	13	20	
34	Pranav Suresh Gharge	10	17	19	
35	Avadhoot Vivek Kulkarni	15	17	20	
36	Prathmesh Uday Mule	14	18	20	
37	Digambar Deepak Anande	15	17	20	
38	Kiran ashok shinde	15	16	20	
39	Patil Nikita Balaso	17	15	20	
40	Revati Rajaram Salagare	14	15	20	
41	Rapelli Prem Vitthal	18	16	20	

42	Saurabh Sambhaji Patil	17	14	20	
43	Mihir ponkshe	17	12	20	
44	Nikhil Shivaji Pawar	18	14	20	
45	Ghadage Roshan	17	17	20	
46	Patil Nikhil Rajendra	11	18	18	
47	Akash Ananda Kamble	16	15	19	
48	Tushar Thite	10	15	20	
49	Dhanawade Vinayak Namdev	17	16	20	
50	Saurabh Mahadev Patil	16	16	20	
51	Anisa Raju Mujawar	18	18	20	
52	Jasmin Jamal shikalgar	14	11	20	
53	Harshita karande	18	10	20	
54	Sanmukh Utkarsha Vikram	11	17	20	
55	Kshirsagar Akshata Bhalchandra	11	13	20	
56	Gopal Shamrao Kharmate	13	8	17	
57	Akshay Dinkar Patil	18	14	20	
58	Nitish Shekhar Pujari	18	14	19	
60	Shraddha Ramesh Awale	18	14	15	
61	Ankita Sarjerao Patil	18	11	20	
62	Suraj Chandrakant Shinde	18	15	18	
63	Santosh mahadev doddamani	18	13	20	
64	Harsh rathi	17	15	18	
65	Digvijay kiran Lad	19	19	20	
66	Atmaj Khichade	17	12	17	
67	Bhosale Aniket Dilip	18	16	20	
69	Bhatia Viren Ranjit	10	10	20	
70	Pareshu Vijay shinde	18	14	17	



Dr. Vasanttraodada Patil Shetkari Shikshan Mandal's
PADMABHOOSHAN VASANTRAODADA PATIL INSTITUTE OF TECHNOLOGY, BUDHGAON-416304

INSTRUMENTATION ENGINEERING DEPARTMENT

(DEGREE PROGRAMME: A.Y. 2021-22)

Semester-I
Mid Term Exam

Date: 01/12/2021

CIRCULAR

According to planner decided by DBATU, Mid Term Exam is arranged from 08/12/2021 to 10/12/2021. The rules for this exam are as follows,

- 1) Mid Term Exam will be of 20 Marks for each subject.
- 2) The typed question paper (Hard copy & Softcopy) & solution (Softcopy) should be submitted on or before 06/12/2021 to Test In-charge.
- 3) Faculty should submit the following credentials of their subject to Ms. P. D. Patil, (Test In-Charge) after Unit test is on or before 18/012/2021.
 - i) Attendance cum result Sheet.
- 4) Soft copy of question paper and its solution also mark sheet send on following mail ID
Mail ID: pdpatil.instru@pvpitsangli.edu.in

Patil

Test In-Charge
Ms. P. D. Patil

Prof. L.S. Patil

HOD
Prof. L.S. Patil



Dr. Vasanttraodada Patil Shetkari Shikshan Mandal's
PADMABHOOSHAN VASANTRAODADA PATIL INSTITUTE OF TECHNOLOGY, BUDHGAON-416304

INSTRUMENTATION ENGINEERING DEPARTMENT

(DEGREE PROGRAMME: A.Y. 2021-22)

Mid Semester Exam
(SEM-II)

Date: 05/05/2022

CIRCULAR

According to planner decided by DBATU, Mid Semester Exam is arranged from 12/05/2022 to 14/05/2022. The rules for this exam are as follows,

- 1) Mid Semester Exam will be of 20 Marks for each subject.
- 2) The typed question paper & solution (Hard copy & Softcopy) should be submitted on or before 09/05/2022 to Test In-charge.
- 3) Faculty should submit the following credentials of their subject to Ms. P. D. Patil, (Test In-Charge) after MSE is on or before 20/05/2022.
 - i) Attendance cum result Sheet.
- 4) Soft copy of question paper and its solution also mark sheet send on following mail ID

Mail ID: pdpatil.instru@pvpitsangli.edu.in

Name of the Faculty	Sign	Name of the Faculty	Sign
Prof. S. S. Patil		Prof. S. S. Sutar	
Prof. P. M. Magdum		Prof. R.S. More	
Mr. R.R.Kamble		Mr. Durgesh Vhanmane	

Patil

Test In-Charge
Ms. P. D. Patil

V. L. Karade

HOD
Prof. V. L. Karade



Dr. Vasanttraodada Patil Shetkari Shikshan Mandal's
PADMABHOOSHAN VASANTRAODADA PATIL INSTITUTE OF TECHNOLOGY, BUDHGAON-416304
INSTRUMENTATION ENGINEERING DEPARTMENT
(DEGREE PROGRAMME: A.Y. 2021-22)
Mid Semester Exam
(SEM-II)

Date: 05/05/2022


Notice

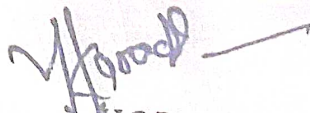
All the students from TY and B.Tech from the Instrumentation Engineering department are informed that according to planner defined by DBATU; Mid Semester Exam is arranged from 12/05/2022 to 14/05/2022. The total marks for this test are 20.

Rules & conditions for the MSE:-

- 1) Carrying any copying material, mobile phones, writing pads are strictly restricted.
- 2) Students are not allowed to enter in exam hall after 10 minutes of beginning of examination.
- 3) Students must attend total hours of examination.
- 4) Only answer books purchased from PVPIT store will be accepted.

Day & Date	Time	TY	B.Tech
Thursday 12/05/2022	11:00am to 12:00pm	IDC	--
	3:00pm to 04:00 pm	IAC	--
Friday 13/05/2022	11:00am to 12:00pm	DS	--
	3:00pm to 04:00 pm	PED	--
Saturday 14/05/2022	11:00am to 12:00pm	PEM	IAC
	3:00pm to 04:00 pm	DST	S&A


Test In-Charge
Ms. P. D. Patil


HOD
Prof. V. L. Karade



Dr. Vasanttraodada Patil Shetkari Shikshan Mandal's
PADMABHOOSHAN VASANTRAODADA PATIL INSTITUTE OF TECHNOLOGY, BUDHGAON-416304

INSTRUMENTATION ENGINEERING DEPARTMENT

(DEGREE PROGRAMME: A.Y. 2021-22)

Mid Semester Exam

(SEM-II)

Date: - 5/5/2022

Supervision slots

- 1) The supervision for the test should be done as per turns assigned.
- 2) With prior permission of H.O.D., faculty should make alternative arrangement, if they are not available for supervision due to valid reason.

Day & Date	Time	TY	B.Tech	Classroom no.1	Sign
Thursday 12/05/2022	11:00am to 12:00pm	IDC	--	R.S.More	
	3:00pm to 04:00 pm	IAC	--	S.S.Sutar	
Friday 13/05/2022	11:00am to 12:00pm	DS	--	/S.S.Patil	
	3:00pm to 04:00 pm	PED	--	/P.D.Patil	
Saturday 14/05/2022	11:00am to 12:00pm	PEM	IAC	P.M.Magdum	
	3:00pm to 04:00 pm	DST	S&A	V.L.Karade	
Saturday 14/05/2022	11:00am to 12:00pm	--	IAC	R.R.Kamble (Classroom no.2)	
	3:00pm to 04:00 pm	--	S&A	Durgesh Vhanmane (Classroom no.2)	

Test In-Charge
Ms. P. D. Patil

HOD
Prof. V. L. Karade



Dr. Vasantodada Patil Shetkari Shikshan Mandal's
PADMABHOOSHAN VASANTODADA PATIL INSTITUTE OF TECHNOLOGY, BUDHGAON-416304

INSTRUMENTATION ENGINEERING DEPARTMENT

(DEGREE PROGRAMME: A.Y. 2021-22)

Mid Semester Exam
(SEM-II)

Date: 05/05/2022

CIRCULAR

According to planner decided by DBATU, Mid Semester Exam is arranged from 12/05/2022 to 14/05/2022. The rules for this exam are as follows,

- 1) Mid Semester Exam will be of 20 Marks for each subject.
- 2) The typed question paper & solution (Hard copy & Softcopy) should be submitted on or before 09/05/2022 to Test In-charge.
- 3) Faculty should submit the following credentials of their subject to Ms. P. D. Patil, (Test In-Charge) after MSE is on or before 20/05/2022.
 - i) Attendance cum result Sheet.
- 4) Soft copy of question paper and its solution also mark sheet send on following mail ID

Mail ID: pdpatil.instru@pvpitsangli.edu.in

Name of the Faculty	Sign	Name of the Faculty	Sign
Prof. S. S. Patil		Prof. S. S. Sutar	
Prof. P. M. Magdum		Prof. R.S. More	
Mr. R.R.Kamble		Mr. Durgesh Vhanmane	

Test In-Charge
Ms. P. D. Patil

HOD
Prof. V. L. Karade



Dr. Vasantodada Patil Shetkari Shikshan Mandal's
PADMABHOOSHAN VASANTODADA PATIL INSTITUTE OF TECHNOLOGY, BUDHGAON-416304

INSTRUMENTATION ENGINEERING DEPARTMENT

(DEGREE PROGRAMME: A.Y. 2021-22)

Mid Semester Exam
(SEM-II)

Date: - 5/5/2022

Supervision slots

- 1) The supervision for the test should be done as per turns assigned.
- 2) With prior permission of H.O.D., faculty should make alternative arrangement, if they are not available for supervision due to valid reason.

Day & Date	Time	TY	B.Tech	Classroom no.1	Sign
Thursday 12/05/2022	11:00am to 12:00pm	IDC	--	R.S.More	
	3:00pm to 04:00 pm	IAC	--	S.S.Sutar	
Friday 13/05/2022	11:00am to 12:00pm	DS	--	/S.S.Patil	
	3:00pm to 04:00 pm	PED	--	/P.D.Patil	
Saturday 14/05/2022	11:00am to 12:00pm	PEM	IAC	P.M.Magdum	
	3:00pm to 04:00 pm	DST	S&A	V.L.Karade	
Saturday 14/05/2022	11:00am to 12:00pm	--	IAC	R.R.Kamble (Classroom no.2)	
	3:00pm to 04:00 pm	--	S&A	Durgesh Vhanmane (Classroom no.2)	

Test In-Charge
Ms. P. D. Patil

HOD
Prof. V. L. Karade



Dr. Vasantodada Patil Shetkari Shikshan Mandal's
PADMABHOOSHAN VASANTODADA PATIL INSTITUTE OF TECHNOLOGY, BUDHGAON-416304

INSTRUMENTATION ENGINEERING DEPARTMENT
(DEGREE PROGRAMME: A.Y. 2021-22)

Mid Semester Exam
(SEM-II)

Date: 14/05/2022


Notice


All the students from SY from the Instrumentation Engineering department are informed that according to planner defined by DBATU; Mid Semester Exam is arranged from 23/05/2022 to 25/05/2022. The total marks for this test are 20.

Rules & conditions for the MSE:-

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- 3) Students must attend total hours of examination.
- 4) Only answer books purchased from PVPIT store will be accepted.

Day & Date	Time	SY
Monday 23/05/2022	11:00am to 12:00pm	DE
	3:00pm to 04:00 pm	FCS
Tuesday 24/05/2022	11:00am to 12:00pm	MBC
	3:00pm to 04:00 pm	IME
Wednesday 25/05/2022	11:00am to 12:00pm	EEM


Test In-Charge
Ms. P. D. Patil


HOD
Prof. V. L. Karade

**MID SEM EXAM
A.Y.2021-22(Sem-II)**

Roll No	Enrollment Number	Full Name	PDP	SSP	RSM	PMM	RHJ
			DE	FCS	MBC	IME	EEM
2101	2062691466010	OMKAR SURESH DALAVI	14	8	18	13	11
2102	2062691466007	DIVYA NAGNATH KUMBHAR	18	20	14	12	12
2103		ANIKET DADASO LOHAR	8	2	8	8	5
2104	2062691466005	ARJUN RAMA HONAKANDE	17	19	18	13	17
2105		NIMISHA NARESH PHADNIS	15	20	18	18	12
2106		AJAY PANDURANG MALI	5	11	11	10	13
2107	2062691466001	AARTI ANIL KOLI	15	20	19	9	12
2108	2062691466015	VINAYAK BALASAHEB MALI	12	11	18	16	11
2109	2062691466002	ADITYA DATTATRAYA JAGTAP	10	20	18	13	13
2110	2062691466017	ATHARV RAMESH PATIL	7	9	18	11	10
2111	2062691466016	ANIKET BALASAHEB KOLI	13	15	18	9	9
2112	2062691466011	SHIVANI BAJARANG OLEKAR	17	16	16	11	12
2113	2062691466013	SUPRIYA MAHESH PAWAR	13	12	18	10	10
2114		TUSHAR SHANKAR PAWAR	10	10	11	11	8
2115	2062691466008	NIKITA SANJAY KHICHADE	13	13	19	13	10
2116		SHRIDHAR SOPAN SHINDE	8	8	15	11	11
2117	2162691466513	MANISH MAHESH SHETE	10	11	15	11	12
2118	2162691466506	MAHESH DASHRATH SALUNKHE	10	9	15	10	9
2119		AKSHAY UTTAM ATHAVALE	0	0	0	0	0
2120		ROHIT DHONDIRAM BHOSALE	6	8	10	9	9
2121		VITTHAL BHARAT HAKKE	12	6	10	13	7
2122		VISHVAJEET RAVINDRA KHICHADE	0	0	0	0	0
2123		RUSHIKESH RAMESH AWALE	5	7	8	8	8
2124	2162691466508	RUSHIKESH GORAKH KALE	0	0	0	0	0
2125	2162691466511	SANIKA APPASO PAILWAN	16	20	16	11	10
2126	2162691466509	PAVAN BABU SAKATE	12	8	18	10	8
2127	2162691466504	RUSHABH CHANDRAKANT SHINDE	14	10	12	10	7
2128		ASHISH RAMESH CHAVAN	8	8	16	10	12
2129	2062691466006	DANISH IMRAN SHAIKH	10	11	12	11	10
2130	2162791466501	PARTH PRAKASH GHORPADE	13	15	10	13	11
2131		TEJAS MILIND SHINDE	9	10	10	11	9
2132		PRASHANT SUDAM NANGARE	0	0	0	0	0
2133	2162691466503	DHANANJAY BALU SHINDE	5	4	9	9	5
2134		KAUSTUBH SUDHIR GHONGADI	8	7	9	9	7

MID SEM EXAM
A.Y.2021-22(Sem-II)

Class:-T.Y.

Sr.No	Enrollment Number	Full Name	IDC	IAC	DS	PED	PEM	DST
1	PRN:1962691466004	PAWAR PRATIK PRAKASH	16	13	9	10	16	14
2	PRN:1962691466007	MAGAR HARSHAD MANIK	16	13	11	11	16	15
3	PRN:1962691466015	NALAWADE AJINKYA DATTATRAY	18	14	10	18	18	15
4	PRN:1962691466016	MOHITE NIKITA PRADIP	18	11	9	14	18	16
5	PRN:1962691466032	PATIL SHUBHAM JAYSING	15	14	5	10	15	16
6	PRN:1962691466033	MALI VISHAL SANJAY	15	15	5	10	17	14
7	PRN:1962691466034	SHEKH MAHANMADIJAJ MAHANMADRAFIQ	17	13	14	10	16	17
8	PRN:1962691466036	NANDIWALE VISHAL KAKASO	17	12	14	17	15	13
9	PRN:1962691466042	KULKARNI PARAG HARSHAL	16	12	10	7	14	15
10	PRN:1962691466054	PATIL RUTURAJ SADASHIV	18	12	10	12	15	14
11	PRN:1962691466062	NANDRE PRATIK ADINATH	16	13	8	12	15	16
12	PRN:2062691466001	RUSHIKESH DIPAK KOPARDE	13	11	8	6	15	15
13	PRN:2062691466002	PATIL SUDARSHAN SHAHAJI	17	9	19	5	17	16
14	PRN:2062691466003	BHOSALE NINAD RAMDAS	18	12	13	16	16	18
15	PRN:2062691466004	MAHANUR ASAWARI SAMBHAJI	18	10	16	12	19	16
16	PRN:2062691466005	PAWAR VAISHNAVI SANJAY	15	11	13	12	17	16
17	PRN:2062691466006	DALAVI SANKET DILIP	17	11	11	14	17	16
18	PRN:2062691466007	HULLE SOURABH SHITAL	18	12	16	14	17	17
19	PRN:2062691466008	JAYAPPA SURAJ RAJARAM	17	12	12	12	16	15
20	PRN:2062691466009	KUPWADE MAYURI RAVINDRA	17	13	15	11	15	14
21	PRN:2062691466010	PATIL NIKITA ANIL	17	16	13	17	17	18
22	PRN:2062691466011	PATIL ABOLI PRAKASH	17	12	14	12	17	15
23	PRN:2062691466012	PATIL AVIRAJ SAMBHAJI	15	14	14	14	15	14
24	PRN:2062691466013	WAKSHE GANESH MOHAN	17	10	12	9	13	14
25	PRN:2062691466014	SURYAWANSHI VARAD SUNIL	19	15	14	15	18	16
26	PRN:2062691466015	YELAVIKAR PAVAN JANARDAN	16	12	12	12	13	14
27	PRN:2062691466016	DASHARATH MAHADEV DHERE	8	8	8	8	8	8
28	PRN:2062691466017	PAWASKAR VALLARI SUSHIL	18	14	16	16	19	16
29	PRN:2062691466018	DESAI PRAFULLA PRAKASH	18	13	14	12	18	12
30	PRN:2062691466019	RAJOPADHYE SHUBHAM VASUDEV	17	12	10	12	16	13
31	PRN:2062691466020	KOTHAWALE AASHPAK IQBAL	13	10	13	7	14	15
32	PRN:2062691466021	PATIL SWAPNIL TUKARAM	17	12	14	6	13	16
33	PRN:2062691466023	MANE VIDNYAN PRAKASH	AB	AB	15	AB	8	8
34	PRN:2062691466024	PATIL PRANAV MAHADEV	AB	AB	0	0	AB	
35	PRN:2062691466022	PATIL PRATHAMESH	9	8	11	AB	17	13

MID SEM EXAM
A.Y.2021-22(Sem-II)

Class:-B.Tech.

Roll No	Full Name	IAC	S&A
1	Raut Anuj Jalindar	8	9
2	Mohite Sushant Kisan	9	10
3	/Khot Pradnya Rajendra	12	15
4	Mohite Prasad Maruti	11	15
5	Desai Sanket Ganpati	14	15
6	Patil Shrenik Annaso	13	14
7	Kamble Abhishek Popat	11	11
8	Patil Sharvil Rajendra	9	11
9	Jadhav Harshad Rajesh	14	18
10	Yadav Omkar Pandurang	11	15
11	Kadam Saurabh Shrikant	14	14
12	Patil Sumedh Bharat	11	14
13	Kulkarni Shubham Raghavendra	13	14
14	Kalubramhe Rohit Dagadu	9	14
15	Sutar Ruturaj Jaywant	10	11
16	Suryawanshi Niranjana Rajkumar	11	13
17	Patil Prathmesh Gulabrao	8	15
18	Thakur Gouravsing Mahendrasing	16	16
19	/Gurav Vaishnavy Mukund	12	16
20	/Awati Tanvi Vaibhav	14	16
21	Subhedar Abhinav Abaso	15	16
22	Patil Dhiraj Satish	9	11
23	Aundhe Saurabh Ajay	11	14
24	Ghabak Balasaheb Shubham	13	15
25	Pawar Sagar Mukundrao	13	15
26	/Mane Tejaswini Prakash	11	16
27	Sawant Pawan Ashok	10	15
28	Patil Omkar Jaysing	10	13
29	Kalandre Amit Ananda	14	15
30	/Kartiki Ganpat Ghatge	14	11
31	/Gala Sharvi Manoj	14	13
32	/Basutkar Vaishnavi Abhay	13	15
33	/Patil Mayuri Ravindra	12	15
34	Gharge Pranav Suresh	13	14
35	Kulkarni Avadhoot Vivek	12	14
36	Mule Prathmesh Uday	14	11
37	Anande Digambar Deepak	12	10
38	Shinde Kiran Ashok	12	11
39	/Patil Nikita Balaso	13	14
40	/Salagare Revati Rajaram	8	12

41	Rapelli Prem Vitthal	13	12
42	Patil Saurabh Sambhaji	13	16
43	Ponkshe Mihir Sanjay	14	12
44	Pawar Nikhil Shivaji	11	11
45	Ghadage Roshan Anil	12	13
46	Patil Nikhil Rajendra	12	9
47	Kamble Akash Ananda	9	10
48	Tithe Tushar Shankar	12	14
49	Dhanwade Vinayak Namdev	13	12
50	Patil Saurabh Mahadev	13	13
51	/Mujawar Anisa Raju	13	14
52	/Shikalgar Jasmin Jamal	10	13
53	Doddamani Santosh Mahadev	14	11
54	/Sanmukh Utakarsha Vikram	14	14
55	/Kishrsagar Akshta Bhalchandra	15	15
56	Kharmate Gopal Shamrao	AB	
57	Patil Akshay Dinkar	12	14
58	Nitish Shekhar Pujari	13	13
59	Mane Purushottam Anil	AB	AB
60	/Awale Shradhha Ramesh	11	11
61	/Patil Ankita Sarjerao	13	15
62	Suraj Chandrakant Shinde	13	14
63	/Karande Harshita Dhananjay	10	13
64	Rathi Harsh Sanjay	9	15
65	Lad Digvijay Kiran	13	14
66	Khichade Aatmaj	11	11
67	Bhosale Dilip Aniket	10	12
69	Bhatia Viren Ranjit	AB	8
70	Shinde Pareshu Vijay	12	14