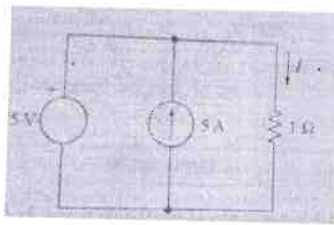
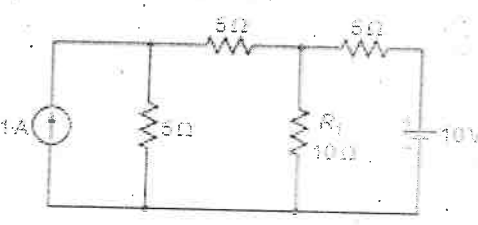


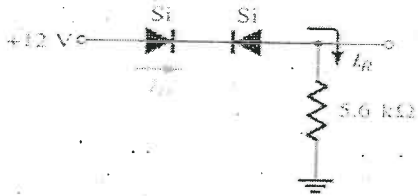
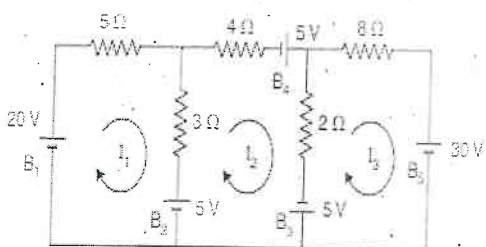
DEPARTMENT OF ECE
"T3 Examination, December-2022"

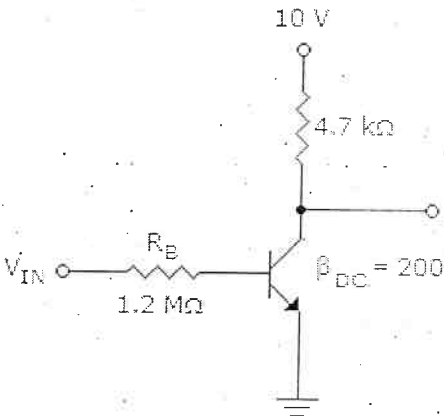
SEMESTER	I	DATE OF EXAM	21.01.2023
SUBJECT NAME	Basics of Electrical and Electronics Engineering	SUBJECT CODE	ECH 103 B-T
BRANCH	B.Tech Robotics and Artificial intelligence	SESSION	I
TIME	3 hours	MAX. MARKS	100
PROGRAM	B.Tech	CREDITS	4
NAME OF FACULTY	Dr.Yogita, Mr.Lokesh	NAME OF COURSE COORDINATOR	Dr.K.Deepa

All questions are compulsory.

Chauhan

Q.NO.	QUESTIONS	MARKS	CO ADDRESSED	BLOOM'S LEVEL	PE
PART-A	<p>Q1(A) The value of current I in $1\ \Omega$ resistor is</p>  <p>(a) 0A (b) 6A (c) 5A (d) 10A</p>	1	CO1	BT1	1.4.1
	<p>Q1(B) Which of the following is bioelectrical device? (a) Resistor (b) Diode (c) Transistor (d) LED</p>	1	CO1	BT1	1.4.1, 3.2.2
	<p>Q1(C) Current in the resistance R_1 is</p>  <p>(a) 0.625A (b) 62.5A (c) 6.25A (d) None of these</p>	1	CO1	BT1	1.4.1, 3.2.2

PART-B	Q1(D)	Series RLC circuits are also known as----- (a) Acceptor (b) Rejecter (c) Donor (d) None of these	1	CO1	BT1	1.4.1, 3.2.2
	Q1(E)	Identify the diode current in Amperes  (A) 0 (b) 2 (c) 6.7 (d) None of these	1	CO2	BT3	3.4.1
	Q1(F)	Load line analysis is used in ----- circuits (a) Nonlinear (b) Linear (c) bilateral (d) Unilateral	1	CO2	BT1	1.4.1, 3.2.2
	Q1(G)	----- means increasing the signal strength (a) Amplification (b) Attenuation (c) Biasing (d) None of these	1	CO3	BT1	3.4.1
	Q1(H)	Arrange the transistor terminals in terms of doping starting from lightly doped (a)----- (b)----- (c)-----	1	CO3	BT1	3.2.2, 3.4.1
	Q1(I)	Which of the following electrical characteristics is not exhibited by an ideal op-amp? (a) Infinite output resistance (b) Infinite bandwidth (c) Infinite voltage gain (d) Infinite slew rate	1	CO4	BT1	1.4.1
	Q1(J)	Which feedback increases the gain of the amplifier? (a) Positive (b) Negative (c) Both a and b (d) None of the above	1	CO4	BT1	1.4.1, 3.2.2
	Q2	Apply Mesh analysis for the given circuit and determine the mesh currents 	10	CO1	BT3	1.4.1, 3.2.2
	Q3	Explain the VI characteristics of PN junction diode and determine the operating point.	10	CO2	BT2	1.4.1, 3.2.2

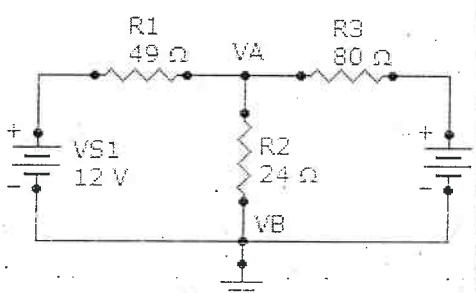
Q4	Illustrate the working of full wave rectifier with and without filter	10	CO2	BT2	1.4.1
	Solve the given transistor configuration and determine the minimum value of I_B that will produce saturation				1.4.1, 3.2.2
					
Q5		5	CO3	BT3	
Q6	Explain how does a transistor work as amplifier in CE configuration	10	CO3	BT2	1.4.1, 3.2.2
Q7	Classify and Explain in detail about the various feedback topologies	10	CO3	BT4	1.4.1, 3.2.2
Q8	List the ideal characteristics of an OP-amp	5	CO4	BT1	3.4.1
Q9	What is an oscillator? Explain any one oscillator in detail	10	CO4	BT1	1.4.1, 3.2.2
Q10	Analyze how an Operational amplifier can be used as Voltage subtractor? Derive its gain	10	CO4	BT4	3.4.1
Q11	Define the following terms (a) Barkhausen criteria for oscillations (b) Slew rate (c) Power factor (d) Zener breakdown (e) Saturation mode	10	CO4	BT1	1.4.1, 3.2.2

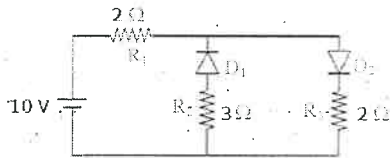
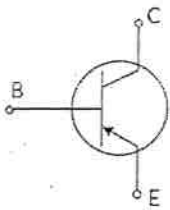
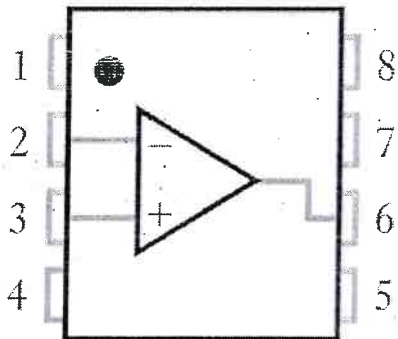
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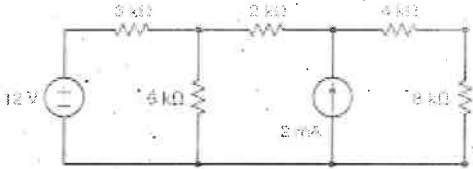
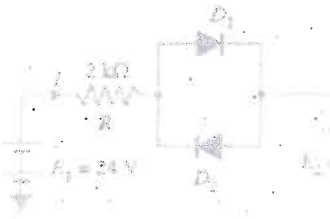
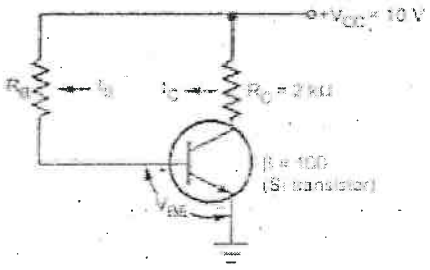
DEPARTMENT OF ECE
"T3 Examination, December-2022"

SEMESTER	I	DATE OF EXAM	12.01.2023
SUBJECT NAME	Basics of Electrical and Electronics Engineering	SUBJECT CODE	ECH 103B-T
BRANCH	B.Tech ECE-VLSI, ME, AIML, CSTI, CDA	SESSION	I
TIME	3 HOURS	MAX. MARKS	100
PROGRAM	B.Tech	CREDITS	4
NAME OF FACULTY	Dr.Yogita, Mr.Lokesh	NAME OF COURSE COORDINATOR	Dr.K.Deepa

All questions are compulsory.

Q.NO.	QUESTIONS	MARKS	CO ADDRESSED	BLOOM'S LEVEL	PT
PART-A	Q1(A) Mesh analysis method uses (a) Kirchhoff's voltage law (b) Thevenin's theorem and Ohm's law (c) Kirchhoff's current law (d) The superposition theorem and Thevenin's theorem	1	CO1	BT1	1.4.1
	Q1(B) The node voltage V_A is  (a) 4.25 V (b) 12 V (c) 9.25 V (d) 3 V	1	CO1	BT1	1.4.1, 3.2.2
	Q1(C) The circuit whose properties are same in either direction is known as -----circuit (a) Bilateral (b) Unilateral (c) Reversible (d) None of these	1	CO1	BT1	1.4.1, 3.2.2

Q1(D)	Q point is also called (a) Zener breakdown (b) Avalanche breakdown (c) point of work (d) operating point	1	CO1	BT1	1.4.1, 3.2.2
Q1(E)	Two ideal diodes are connected. The current flowing through R1 is 	1	CO2	BT3	3.4.1
Q1(F)	This is -----type of transistor 	1	CO2	BT1	1.4.1, 3.2.2
Q1(G)	For a BJT, the common – base current gain $\alpha = 0.98$ and the collector base junction reverse bias saturation current $I_{C0} = 0.6\mu A$. This BJT is connected in the common emitter mode and operated in the active region with a base drive current $I_B = 20\mu A$. The collector current I_C for this mode of operation is-----	1	CO3	BT1	3.4.1
Q1(H)	An oscillator employs feedback (a) Positive (b) Negative (c) Neither positive nor negative (d) Data insufficient	1	CO3	BT1	3.2.2, 3.4.1
Q1(I)	What signal corresponds to pin 3 of this operational amplifier? 	1	CO4	BT1	1.4.1

PART-B	Q1(J)	The gain of an amplifier without feedback is 100 db. If a negative feedback of 3 db is applied, the gain of the amplifier will become-----dB (a)5 (b)300 (c) 103 (d) 97	1	CO4	BT1	1.4.1, 3.2.2
	Q2	Apply Thevenin Theorem for the given circuit and determine the current flowing through 8K Ω resistor 	10	CO1	BT3	1.4.1, 3.2.2
PART-C	Q3	(a) Draw DC load line on VI characteristics of PN junction diode to determine Q point (5 Marks) (b) Determine the current I in the circuit shown in figure. Assume the diodes to be of silicon and forward resistance of diodes to be zero.(5 marks) 	10	CO2	BT2	1.4.1, 3.2.2
	Q4	Illustrate the working of full wave rectifier with and without filter Solve the circuit for $R_B=300k\Omega$ and $R_C=150K\Omega$. Calculate I_B I_C and V_{CE} . Also determine the region of operation 	10	CO2	BT2	1.4.1, 3.2.2
PART-C	Q5		5	CO3	BT3	1.4.1, 3.2.2
	Q6	Assume the transistor is operated in CE configuration and explain the process of amplification of a weak signal	10	CO3	BT2	1.4.1, 3.2.2
	Q7	Classify and Explain in detail about the various feedback topologies	10	CO3	BT4	1.4.1, 3.2.2

	Q8	Explain the pin configuration of an operational amplifier and discuss the concept of virtual ground.	5	CO4	BT1	3.4.1
	Q9	What is an oscillator? Explain any one oscillator in detail	10	CO4	BT1	1.4.1, 3.2.2
	Q10	Analyze how an Operational amplifier can be used as summing amplifier? Derive its gain	10	CO4	BT4	3.4.1
	Q11	Define the following terms (a) Barkhausen criteria for oscillations (b) CMRR (c) Form and peak factor (d) offset (e) ideal diode	10	CO4	BT1	1.4.1, 3.2.2
***** END *****						

1/20


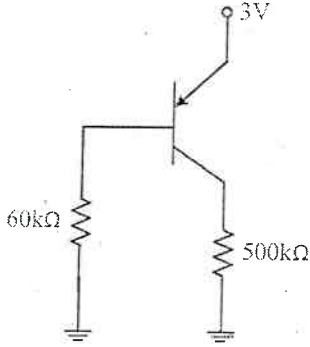
DEPARTMENT OF ECE
"T3 Examination, January-2023"

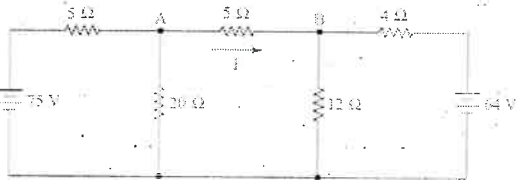
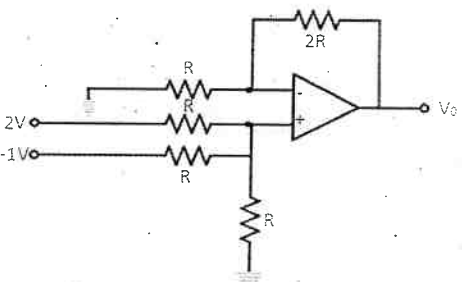
SEMESTER	I	DATE OF EXAM	12.01.2023
SUBJECT NAME	Basics of Electrical Engineering	SUBJECT CODE	ECH101B-T
BRANCH	B.Tech ECE	SESSION	I
TIME	3 hours	MAX. MARKS	100
PROGRAM	B.Tech	CREDITS	4
NAME OF FACULTY	Dr.Yogita, Mr.Lokesh	NAME OF COURSE COORDINATOR	Dr.K.Deepa

All questions are compulsory.

Chauhan

Q.NO.	QUESTIONS	MARKS	CO ADDRESSED	BLOOM'S LEVEL	PF
PART-A	<p>The Thevenin resistance for the given figure with $80\text{-}\Omega$ resistor as load resistor is</p> <p>(a) $16.1\text{ }\Omega$ (b) $10\text{ }\Omega$ (c) $73\text{ }\Omega$ (d) None of these</p>	1	CO1	BT1	1.4.1
	<p>The power factor of a purely inductive circuit is</p> <p>(a) Zero (b) lagging (c) leading (d) unity</p>	1	CO1	BT1	1.4.1, 3.2.2
	<p>Reactive power is</p> <p>(a) $S=VI$ (b) $P=VI\cos\phi$ (c) $P=VI\sin\phi$ (d) $P=VI\sin\phi$</p>	1	CO1	BT1	1.4.1, 3.2.2

Q1(D)	Series RLC circuits are also known as----- (a) Acceptor (b) Rejecter (c) Donor (d) None of these	1	CO1	BT1	1.4.1, 3.2.2
Q1(E)	Identify the diode current in Amperes  (A) 0 (b) 2 (c) 6.7 (d) None of these	1	CO2	BT3	3.4.1
Q1(F)	-----means controlling the operation of the circuit by providing power supply	1	CO2	BT1	1.4.1, 3.2.2
Q1(G)	In the circuit shown in the figure, the BJT has a current gain (β) of 50. For an emitter-base voltage $V_{EB} = 600$ mV, the emitter-collector voltage is----- 	1	CO3	BT1	3.4.1
Q1(H)	The value of negative feedback fraction is always (a) Less than 1 (b) More than 1 (c) Equal to 1 (d) None of the above	1	CO3	BT1	3.2.2, 3.4.1
Q1(I)	When negative voltage feedback is applied to an amplifier, its voltage gain (a) Is increased (b) Is reduced (c) Remains the same (d) None of the above	1	CO4	BT1	1.4.1
Q1(J)	The Op-amp can amplify (a) a.c. signals only (b) 2. d.c. signals only (c) both a.c. and d.c. signals (d) neither d.c. nor a.c. signals	1	CO4	BT1	1.4.1, 3.2.2

PART-B		Utilize Mesh analysis for the given circuit and find I					1.4.1, 3.2.2
	Q2		10	CO1	BT3		
	Q3	How will you determine the operating point of a diode and explain what is Zener breakdown	10	CO2	BT2		1.4.1, 3.2.2
PART-C	Q4	Illustrate the working of half wave rectifier with and without filter	10	CO2	BT2		1.4.1
	Q5	Explain the various Operating Mode of Transistor based on the biasing	5	CO3	BT3		1.4.1, 3.2.2
	Q6	Explain how amplification of weak signal is done using transistor	10	CO3	BT2		1.4.1, 3.2.2
	Q7	What are the four types of feedback topologies-Explain	10	CO3	BT4		1.4.1, 3.2.2
	Q8	Calculate the output voltage 	5	CO4	BT1		3.4.1
	Q9	Explain the working of RC phase shift oscillator	10	CO4	BT1		1.4.1, 3.2.2
	Q10	Illustrate how an Operational amplifier can be used as inverting amplifier? Also Discuss the ideal characteristics of opamp	10	CO4	BT2		3.4.1
	Q11	Define the following terms (a) Barkhausen criteria for oscillations (b) CMRR (c) Power factor (d) Norton theorem (e) Differential amplifier	10	CO4	BT1		1.4.1, 3.2.2
	***** END *****						

DEPARTMENT OF ECE

END TERM EXAMINATION JAN-2023

FACULTY NAME: Dr. Nitika		NAME OF COURSE COORDINATOR: Dr. Nitika		DATE OF EXAM:	
COURSE NAME: RTL Simulation and Synthesis with PLDs		COURSE CODE: ECH501B-T	CREDIT: 3	TIME DURATION: 3Hrs	12.01.2023
PROGRAM: M.Tech.-ECE		MAX. MARKS: 100	Session: I		
Q.NO.	QUESTIONS	MARKS	GO ADDRESSE D	BLOOM'S LEVEL	PI
1(A)	Sketch and Explain top-down design methodology for digital design in detail.	8	C01	L2	1.4.1, 2.2.2, 2.2.3
1(B)	Explain metastability.	4	C01	L2	1.4.1, 2.2.2, 2.2.3
1(C)	Explain need and design strategies for multi-clock domain designs.	8	C01	L3	1.4.1, 2.2.2, 2.2.3
2(A)	Design 8 to 1 multiplexer in Verilog.	8	C02	L4	1.4.1, 2.2.2, 2.2.3, 3.2.4
2(B)	Explain various loop statements in Verilog.	5	C02	L3	1.4.1, 2.2.2, 2.2.3
3(A)	Draw the state diagram for a Moore type sequence detector to detect the sequence "1001/0101". Overlapping sequences are not accepted. Also write the VHDL code for the obtained state diagram.	7	C02	L4	2.2.2, 3.2.4
4(A)	What is skew, what are problems associated with it and how to minimize it?	10	C03	L3	1.4.1, 2.2.2, 2.2.3
4(B)	What is floor planning? Explain with proper illustrations.	5	C03	L3	1.4.1, 2.2.2, 2.2.3
5(A)	What is ESD protection? Explain in details.	5	C03	L3	1.4.1, 2.2.2, 2.2.3
5(B)	Differentiate the following 1. Floor planning & placement. 2. FPGA & ASIC	10	C03	L3	1.4.1, 2.2.2, 2.2.3

PART - D	Q6(A)	Discuss I.P. in different forms.	10	C04	L3	1.4.1, 2.2.2, 2.2.3
	6(B)	Discuss Why low power VLSI design techniques is essential.	5	C04	L3	1.4.1, 2.2.2, 2.2.3
	Q7	Write short notes on the following (a) Netlist (b) Physical IP (c) Speed issues.	15	C04	L3	1.4.1, 2.2.2, 2.2.3
***** END *****						

DEPARTMENT OF ELECTRONICS & COMMUNICATION

"End Term Examination, Jan-2023"

SEMESTER	I	DATE OF EXAM	16/01/2023
SUBJECT NAME	MICROCONTROLLERS AND PROGRAMMABLE DIGITAL SIGNAL PROCESSORS	SUBJECT CODE	ECH502B-T
BRANCH	M.Tech ECE	SESSION	I
TIME	3 Hours	MAX. MARKS	100
PROGRAM	M.Tech	CREDITS	4
NAME OF FACULTY	Vijay Kumar Gill	NAME OF COURSE COORDINATOR	Vijay Kumar Gill

Chauhan

Note: All questions are compulsory.

Q.NO.	QUESTIONS	MARKS	CO ADDRESSED	BLOOM'S LEVEL	Pt
PART-A	1. Illustrate ARM Cortex-M3 processor architecture?	20	CO1	BT4	1.1.1, 1.3.1
	2. How Stack is implemented in Cortex-M3?	10	CO1	BT2	1.1.1, 1.3.1
	3. Explain following instructions with examples: i) CLZ ii) MVN	10	CO2	BT2	1.1.1, 1.3.1
	4. How memory is mapped in ARM Cortex-M3? Explain ARM Cortex-M3 Memory System Features.	20	CO2	BT2	1.1.1, 1.3.1
	5. Illustrate architectural structure of P-DSP-MAC unit?	10	CO3	BT4	1.1.1, 1.3.1
	6. Explain the addressing modes for TMS320C6000 series processor?	10	CO3	BT1	1.1.1, 1.3.1
	7. Illustrate the functional block diagram of TMS320C25?	20	CO4	BT3	1.1.1, 1.3.1
***** END *****					

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DEPARTMENT OF ELECTRONICS & COMMUNICATION

ODD SEMESTER (AUG 2022-JAN 2023)

END SEM QUESTION PAPER STRUCTURE (QPS)

FACULTY NAME: Dr. Meenakshi Gupta

NAME OF COURSE COORDINATOR: Dr. Meenakshi Gupta

COURSE NAME: CAD OF DIGITAL SYSTEMS

COURSE CODE: ECH509B

CREDIT: 3

MAX. MARKS: 100

TIME DURATION: 3 hrs

DATE OF EXAM: 19/01/23

PROGRAM: M.Tech ECE

Session : I

SEMESTER: 1ST

Q.NO.	QUESTIONS	MARKS	CO ADDRESS	BLOOM'S LEVEL	PI
PART - A	<p>Q1 Let f be a completely specified Boolean function. Assume that x is a support variable of f, i.e. f depends upon x. State whether the following statements are TRUE or FALSE. If TRUE, prove it. Otherwise, show a counter-example. No points for just stating TRUE or FALSE.</p> <p>a) The Boolean function f can be written as $f = fx \oplus x(fx \oplus fx)$. Hint: As always, think of the Shannon's expansion. Shannon's expansion has OR's. But the expression above has XORs!</p> <p>b) The Boolean function f is given as: $f = (x + fx) \cdot (x + fx)$.</p> <p>c) If f is positive unate in x, then the complement (inverse) of f can be represented as: $f = fx + x \cdot fx$</p> <p>Here $fx = (fx)$ is the complement of the cofactor.</p> <p>d) If f is positive unate in x, then the Boolean Difference of f w.r.t. x is given by: δf $\delta x = fx \cdot fx$</p> <p>e) The function f is TAUTOLOGY if and only if both its cofactors w.r.t. any variable x are TAUTOLOGY. In other words, $f \equiv 1 \iff (fx \equiv 1) \wedge (fx' \equiv 1)$.</p>	20	CO1	L2	2.1
PART - B	<p>Q2 Let f be an arbitrary Boolean function and let c be a cube such that c is also an implicant of f. Prove that fc is TAUTOLOGY, i.e. $fc \equiv 1$. (Note that this result is valid even if we relax the condition from c being a cube to c being a set of cubes. For example, let f and g be two non-trivial Boolean functions such that $f \supset g$. Then it can be proved that $fg \equiv 1$. Also note that the expression fg is called the generalized co-factor of f w.r.t. g. It is also called the restriction of f w.r.t. g. We will consider generalized cofactors in Boolean function decomposition and don't care analysis.)</p>	20	CO2	L3	5.1, 8.2
	<p>Q3 Consider the Boolean function $f = ab + a'c + b'c'$.</p> <p>a) Identify the function g that is the smallest function, larger than f, that contains f, and does not contain b in its support.</p> <p>b) Identify the function h that is the largest function, smaller than f, that is contained in f, and does not contain b in its support.</p> <p>c) On a 3-D cube, depict the cubes of f, g, h and demonstrate the containment relationships.</p> <p>Please draw a separate cube for each of the above.</p>	20	CO3	L4	2, 8.1, '

Q4

For the circuit shown in Fig. 1, identify the set of assignments to the input variables that allow to propagate the changes on signal a to output Z.

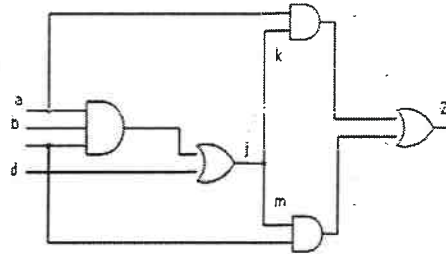


Fig. 1. Is Z sensitive to changes in a?

20

C04

L2

4.1

Q5

Let C be a circuit that represents a Boolean function f . Let x be a primary input net of C. In class, I showed you that test generation for the fault x -stuck-at-0 ($x/0$) can be computed as $x \cdot \delta f$. Here x is the fault excitation condition, and δf is the fault propagation condition. [Analogously, the test for $x/1:x' \cdot \delta f$]. In this question, you are asked to derive the result that $T_{x/0} = x \cdot \delta f$.
How to proceed: Consider Fig. 2. $T_{x/0}$ corresponds to the set of all inputs that differentiate between the faulty and fault-free output of the circuit.

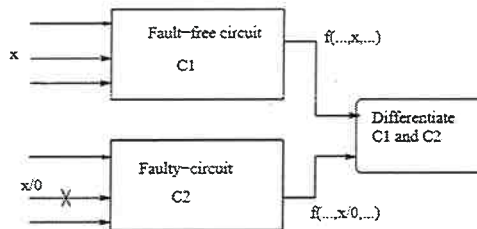


Fig. 2. Prove: $T_{x/0} = x \cdot \delta f$

20

C03

L2

3.2

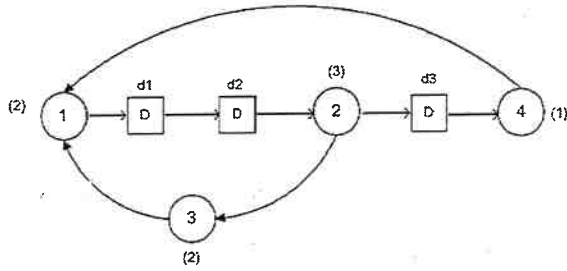
DEPARTMENT OF ELECTRONICS & COMMUNICATION

"End Term Examination, Jan-2023"

SEMESTER	I	DATE OF EXAM	21/01/2023
SUBJECT NAME	VLSI SIGNAL PROCESSING	SUBJECT CODE	ECH505B
BRANCH	M.Tech ECE	SESSION	I
TIME	3 Hours	MAX. MARKS	100
PROGRAM	M.Tech	CREDITS	3
NAME OF FACULTY	Bhanu Pratap Chaudhary	NAME OF COURSE COORDINATOR	Bhanu Pratap Chaudhary

Note: All questions are compulsory.

Bhanu Pratap Chaudhary

Q.NO.	QUESTIONS	MARKS	CO ADDRESSED	BLOOM'S LEVEL	PI
1	Define Following terms in reference to VLSI Signal Processing. I. Iteration II. Iteration Period III. Loop Bound IV. Critical Loop V. Cutset VI. Critical Path VII. Feed Forward Cutset	20	CO1	BT2	1.1.1, 1.2.1, 1.3.1, 1.4.1, 3.1.1
2	The given DFG is  Computing of iteration bound by Longest Path Matrix (LPM).	10	CO1	BT4	1.1.1, 1.3.1, 3.1.1
3	What is the need for systolic architecture design? Discuss systolic architecture design in detail.	10	CO2	BT3	1.1.1, 1.3.1,

4	What is folding? What are its applications in VLSI Signal Processing? Implement the DSP program $y(n) = a(n) + b(n) + c(n)$ with minimum number of Adders.	10	CO2	BT4	1.1.1, 1.2.1, 1.3.1
5	Discuss Cook-Toom Algorithm for fast convolution.	10	CO3	BT3	1.1.1, 1.3.1, 1.4.1
6	(A) What are the different Power Reduction Techniques available? Discuss in brief. (B) What are the essential architectural features of DSP Processors?	20	CO3	BT3	1.1.1, 1.3.1, 1.4.1
7	(A) Write a brief note on DSP Algorithms & its applications. (B) Compare Pipelining & Parallel Processing for VLSI Signal Processing.	20	CO4	BT3	1.1.1, 1.3.1, 1.4.1
***** END *****					

DEPARTMENT OF ECE

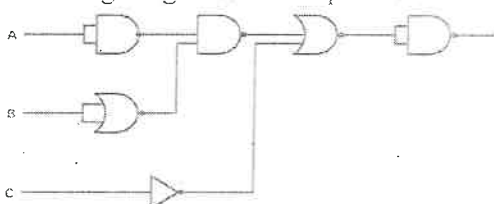
"T3 Examination, December-2022"

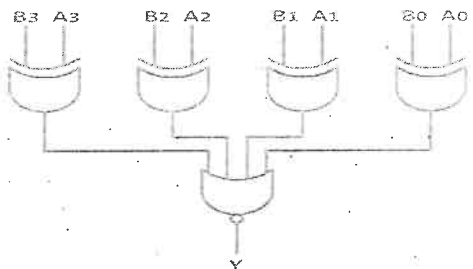
SEMESTER	III	DATE OF EXAM	17.12.2022
SUBJECT NAME	DIGITAL ELECTRONICS/ DIGITAL ELECTRONICS & CIRCUITS	SUBJECT CODE	ECH208B-T ECH213B-T
BRANCH	ECE	SESSION	1 ST
TIME	09.00AM-12.00NOON	MAX. MARKS	100
PROGRAM	ECE	CREDITS	4
NAME OF INDUSTRY	TRUECHIP	NAME OF FACULTY COORDINATOR	BHANU PRATAP CHAUDHARY

Note: All questions are compulsory

Chauhan

Q.NO.	QUESTIONS	MARKS	CO ADDRESSED	BLOOM'S LEVEL	PI
PART-A	1(A) Digital systems have _____. A. One state B. Two states C. Three states D. Four states	2	CO1	BT2	1.2.1.1. 4.1.2.1. 1.3.1.1
	1(B) What is the group of 1s in 4 cells of a K-map called? a) Pair b) Quad c) Octet d) Octave	2	CO1	BT2	1.2.1.1. 4.1.2.1. 1.3.1.1
	1(C) The result " $X + XY = X$ " follows which of these laws? a) Consensus law b) Distributive law c) Duality law d) Absorption law	2	CO1	BT2	1.2.1.1. 4.1.2.1. 1.3.1.1
	1(D) Which of the following options correctly represents the consensus law of Digital Circuits? a) $AB + A'C + BC = AB + AC$ b) $AB + A'C + BC = AB + AC$ c) $A'B + A'C + BC = AB + AC$ d) $AB + AC + BC = AB + AC$	2	CO1	BT2	1.2.1.1. 4.1.2.1. 1.3.1.1

	I(E)	1/4 as a binary number would be. _____ A. 0.01 B. 0.11 C. 0.10 D. 0.00	2	CO1	BT2	1.2.1.1. 4.1.2.1. 1.3.1.1
	I(F)	The duty cycle of a square wave is _____. A. 10% B. 25% C. 50% D. 100%	2	CO1	BT2	1.2.1.1. 4.1.2.1. 1.3.1.1
	I(G)	If a HIGH logic level is assigned a binary zero (0), and a low level is assigned a binary one (1), the logic is called _____. A. negative logic B. positive logic C. invalid logic D. assertion-level logic	2	CO1	BT2	1.2.1.1. 4.1.2.1. 1.3.1.1
	I(H)	_____ is the highest-value seven-bit binary number. A. 128 B. 127 C. 126 D. 125	2	CO1	BT2	1.2.1.1. 4.1.2.1. 1.3.1.1
	I(I)	Convert the fractional decimal number 6.75 to binary. A. 0111.1100 B. 0110.1010 C. 0110.1100 D. 0110.0110	2	CO1	BT2	1.2.1.1. 4.1.2.1. 1.3.1.1
	I(J)	Give the decimal value of binary 10000110. A. 13410 B. 14410 C. 11010 D. 12610	2	CO1	BT2	1.2.1.1. 4.1.2.1. 1.3.1.1
PART-B	Q2(A)	In 16-bit 2's complement representation, the decimal number -28	5	CO2	BT3	1.2.1.1. 4.1.2.1. 1.3.1.1
	Q2(B)	Let the representation of a number in base 3 be 210. What is the hexadecimal representation of the number?	5	CO2	BT3	1.2.1.1. 4.1.2.1. 1.3.1.1
	Q2(C)	Minimum SOP for $f(w,x,y,z)=m(1,3,6,9,11)+d(4,10,12)$ is _____ that d denotes a don't care term.	5	CO2	BT4	1.2.1.1. 4.1.2.1. 1.3.1.1
	Q2(D)	For the figure given, the output will be 	5	CO2	BT4	1.2.1.1. 4.1.2.1. 1.3.1.1

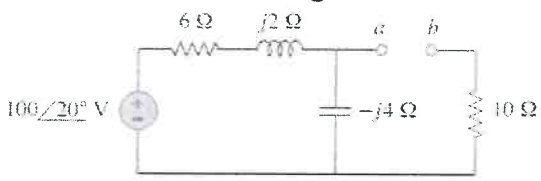
PART-C	Q2(E)	Consider $Z = X - Y$, where X, Y and Z are all in sign-magnitude form. X and Y are each represented in n bits. To avoid overflow, the representation of Z would require a minimum of: _____	5	C03	BT4	1.2.1,1. 4.1,2.1. 1
	Q2(F)	The base (or radix) of the number system such that the following equation holds is $312/20 = 13.1$	5	C03	BT4	1.2.1,1. 4.1,3.1, 1
	Q3	What is the minimal form of the $F(a,b,c,d) = \sum m(0,2,5,8) + \sum d(1,3,4,10)$	10	C03	BT4	1. 4.1,2.1, 1.3,1,1
	Q4	<p>A digital circuit which compares two numbers $A_3A_2A_1A_0$, $B_3B_2B_1B_0$ is shown in figure. To get output $Y = 0$, choose one pair of correct input numbers</p> 	10	C03	BT4	1.2.1,1. 4.1,2.1. 1.3,1,1
	Q5	What is the minimum number of 2-input NOR gates required to implement a 4-variable function expressed in sum-of-minterms form as $f = \sum(0, 2, 5, 7, 8, 10, 13, 15)$? Assume that all the inputs and their complements are available	10	C04	BT3	1.2.1,1. 4.1,2.1. 1.3,1,1
	Q6	Consider the minterm list form of a Boolean function F given below. $F(P,Q,R,S) = \sum m(0,2,5,7,9,11) + \sum d(3,8,10,12,14)$. Here, m denotes a minterm and d denotes a don't care term. The number of essential prime implicants of the function F is _____	10	C04	BT2	1.2.1, 2.2,2,2. 3.1,
	Q7	Consider the equation $(123)_5 = (x8)_y$ with x and y as unknown. The number of possible solutions is _____	10	C04	BT3	1.2.1,1. 4.1,2.1. 1.3,1,1
***** END *****						

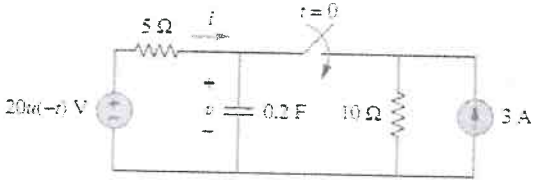
DEPARTMENT OF ECE

"T3 Examination, December-2022"

SEMESTER	III	DATE OF EXAM	15-12-2022
SUBJECT NAME	NETWORK THEORY	SUBJECT CODE	ECH202B-T
BRANCH	ECE	SESSION	1ST
TIME	09.00AM-12.00NOON	MAX. MARKS	100
PROGRAM	ECE	CREDITS	4
NAME OF FACULTY	BHANU PRATAP CHAUDHARY	NAME OF COURSE COORDINATOR	BHANU PRATAP CHAUDHARY

Note: All questions are compulsory

Q.NO.	QUESTIONS	MARKS	CO ADDRESSED	BLOOM'S LEVEL	PI
PART-A	1(A) Derive T parameter in term of h parameter.	10	CO1	BT2	1.2.1,1. 4.1,2.1. 1.3.1.1
	Q1(B) Find the Thevenin equivalent at terminal a-b for the circuit shown in Fig. 1  Fig.1	10	CO1	BT3	1.2.1,1. 4.1,2.1. 1.3.1.1
PART-B	Q2(A) A series RL circuit with R=50 Ω and L=10 H has a constant voltage of 10 V applied at t=0 sec. Determine the value of current i and voltage across inductor.	10	CO2	BT2	1.2.1,1. 4.1,2.1. 1
	Q2(B) The switch in Fig. 2 is closed at t=0. Find i(t) and v(t) for all time.	10	CO2	BT3	1.2.1,1. 4.1,2.1. 1,3,1,1

		 <p>Fig. 2</p>				
PART-C	Q3	Design a composite low-pass T-section filter having a design impedance of 600 ohm, a cut-off frequency of 2000 Hz, and a frequency of infinite attenuation of 2100 Hz.	10	CO2	BT4	1.2,1,1. 4.1,2,1. 1.3,1,1
	Q4	Design an m-derived high-pass filter having a design impedance of 500 V and a cut-off frequency of 1 kHz. Take m=0.2.	10	CO3	BT4	1.2,1,1. 4.1,2,1. 1,3,1,1
	Q5	Design a m-derived low-pass filter having cut-off frequency of 1 kHz, design impedance of 400 ohm, and the resonant frequency of 1100 Hz.	10	CO3	BT4	1.2,1,1. 4.1,2,1. 1,3,1,1
PART-D	Q6	Find the two Cauer realizations of driving-point function given by $Z(s) = \frac{10s^4 + 12s^2 + 1}{2s^3 + 2s}$	10	CO4	BT3	1.2,1,1. 4.1,2,1. 1,3,1,1
	Q7	Find the first and second Foster forms of the function $Z(s) = \frac{(s+1)(s+3)}{s(s+2)}$	10	CO4	BT4	1.2,1, 2.2,2,2. 3,1,
	Q8	Design the second Foster form of the network whose driving-point admittance is $Y(s) = \frac{3(s+2)(s+5)}{s(s+3)}$	10	CO4	BT4	1.2,1,1. 4.1,2,1. 1,3,1,1
***** END *****						

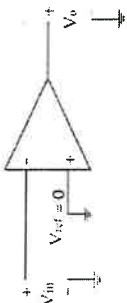


DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

END TERM EXAMINATION DEC-2022

FACULTY NAME: Dr. Shruti Vashist		NAME OF COURSE COORDINATOR: Dr. Shruti Vashist			DATE OF EXAM: 12.12.22
COURSE NAME: Analog Electronics	COURSE CODE: ECH203B-T	CREDIT: 4	MAX. MARKS: 100	TIME DURATION: 3 hrs	
PROGRAM: B.Tech Electronics and Communication / B.Tech Electronics and Communication with specialization in VLSI and Design Verification		SEMESTER: 3rd			<i>Shruti Vashist</i>
Q.NO.	QUESTIONS	MARKS	CO ADDRESSED	BLOOM'S LEVEL	PI
1(A)	Interpret the need of biasing in Transistors and what are the basic conditions which are to be fulfilled for achieving faithful amplification	2	CO1	L2	2.1
1(B)	Draw the hybrid equivalent model for common base transistor and write the expressions for all the four parameters for the same.	2	CO1	L3	2.3
1(C)	Deduce the gain for an inverting closed loop amplifier	2	CO4	L2	3.2
	<p>In Power output $P_{out}(a.c) = 0.5W$ and $P_{in}(dc) = 2W$</p> <p>i.Convert 10db to normal power ii.Convert 10db to normal voltage ratio</p> <p>For a RC Phase shift network, Given $R_1 = R_2 = R_3 = R = 500K$; $C_1 = C_2 = C_3 = C = 10-10 \text{ pF}$; Calculate the frequency of Oscillations(3) Differentiate between Voltage and Power Amplifiers Give the expressions to compute the controllability and observability values for a T flip flop with a synchronous clear input.</p>				

Part-A

P A R T -	1(D)	Define CMRR and Slew Rate in case of Op=Amp .	2	C04	L2	3.2
	1(E)	State Barkhausen Criterion for Sustained Oscillations	2	C03	L3	5.1, 8.1
	1(F)	Pin(dc)in case of a power amplifier is 100W,if efficiency is 35%,calculate the output power	2	C03	L3	9.1
	1(G)	Differentiate between JFET and BJT	2	C02	L1	5.4
	1(H)	In Power output ;Pout(a.c)=0.5W and Pin(dc)=2W i.Convert 10db to normal power ii.Convert 10db to normal voltage ratio	2	C05	L3	7.2
	1(I)	For a RC Phase shift network,Given $R_1=R_2=R_3=R=500K$; $C_1=C_2=C_3=C=10-10\text{ pF}$; Calculate the frequency of Oscillations	2	C03	L3	6.2
	1(J)		2	C04	L3	5.1
	Q2(A)	For the inverting comparator shown in the figure;sketch the output waveform Explain the working of E-MOSFET and DE-MOSFET along with the drain and transfer characteristics curve	10	C02	L3	5.1, 8.2
	2(B)	For the NMOS MOSFET,given $V_T=1.5V$, $K=0.5\text{mA/V}^2$, $V_G=4V$.Assume that the transistor is in saturation region,Calculate ID and VDS	10	C02	L4	9.1, 10,1

P A R T - C	Q3(A)	Classify various types of power amplifiers. Express the position of Q in each case and deduce the efficiency of Class B Pushpull power Amplifier	15	C03	L4	10.2, 8.1, 7.2
	3(B)	A power transistor operating in Class has input d.c. power of 8W and a.c.output power of 2W. Calculate the collector efficiency	5	C03	L2	9.2
	Q4(A)	Describe the working of RC Phase shift Oscillator and analyze the need of three RC networks. Calculate the frequency of Oscillations	15	C03,C05	L4	8.3
	4(B)	The tuned collector oscillator circuit used in the local oscillator of a radio receiver makes use of an LC tuned circuit with $L = 58.6 \mu\text{H}$ and $C = 300 \text{ pF}$. Calculate the frequency of oscillations.	5	C03	L4	7.2. 6.1
P A R T D	Q5(A)	Summarize the ideal characteristics of an operational Amplifier and discuss the working of an operational Amplifier as a integrator and Differentiator. Derive an expression for its output voltage.	15	C04	L3	3.2
	Q5(B)	Analyse the working of Schmitt Trigger and explain the concept of Hysterisis curve	5	C04,C05	L3	2.1
***** END *****						



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DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

END TERM EXAMINATION DEC-2022

SEMESTER:III

SUBJECT NAME:MIS

BRANCH:BBA(EFB/FAA/HCM/OM/BA)

TIME DURATION: 3Hrs

PROGRAM: BBA

DATE OF EXAM:19/12/2022

SUBJECT CODE:ECH212B

SESSION: I

MAX. MARKS: 80

NAME OF FACULTY: Dr.Vani Chawla

Q.NO.	QUESTIONS	MARKS	CO ADDRESSED	BLOOM'S LEVEL	PI
P A R T - A	Q1(A) Differentiate between data and information with examples. Write the characteristics and function of good information.	4	CO1	BT1,BT2	
	Q1(B) Explain Herbert Simon Model on decision making with figures	6	CO1	BT1,BT2	
	Q1(C) Define the term MIS. Discuss the three levels of management. Explain the objective and characteristics of MIS in detail.	10	CO1	BT1,BT2	
P A R T - B	Q2(A) What is an Information System ? Explain various TPS -Transaction processing system and Expert system	4	CO2	BT3,BT4	
	Q2(B) Define SAD. What is the need of system analysis and design in an organisation?	6	CO2	BT3,BT4	
	Q2(C) Explain the phases of SDLC-system development life cycle in detail.	10	CO2	BT3,BT4	
P A R T - C	Q3(A) Differentiate between (i)rational models and normative models in decision making (ii) static and dynamic model	4	CO3	BT1,BT3	
	Q3(B) What should be the ideal characteristics and capabilities of Decision support system? Explain strategic decisions, tactical decision, operational decisions	6	CO3	BT1,BT3	
	Q3(C) Define EMS . What are the roles and benefits of ERP in Supply Chain Management?	10	CO3	BT1,BT3	
P A R T - D	Q4(A) What are the keys and its types in DBMS? Explain in detail	5	CO4	BT1,BT2,BT3	
	Q4(B) Explain Entity relationship (ER) modeling in detail	5	CO4	BT1,BT2,BT4	
	Q4(C) What are the differences between DBMS and RDBMS? Explain internal view, conceptual view and external view in Database management system with neat figure	10	CO4	BT1,BT2,BT3	

***** END *****

DEPARTMENT OF ECE

"T3 Examination, December-2022"

SEMESTER	V	DATE OF EXAM	15.12.2022
SUBJECT NAME	INTERNET OF THINGS	SUBJECT CODE	ECH305B-T
BRANCH	ECE/ME-SMA	SESSION	II
TIME	1.5 HOURS	MAX. MARKS	50
PROGRAM	B.TECH	CREDITS	2
NAME OF FACULTY	DR.K.DEEPA	NAME OF COURSE COORDINATOR	DR.K.DEEPA

Note: All Questions Are Compulsory

Chauhan

Q.NO.	QUESTIONS	MARKS	CO ADDRESSED	BLOOM'S LEVEL	PI
PART-A	1(A) -----layer comprises of contains the "things", such as sensors, devices (a) Perception (b) Connectivity (c) Processing (d) None of the above	1	CO1	BT1	1.1,1.1.2.4
	1(B) ----- refers to a software component, which receives messages from one end (a) API(b) APP (c) WEB SERVICE (d) None of the above	1	CO2	BT2	1.1,1.1.2.4
	1(C) An ATM debit card is example of ----- --type of devices data.	1	CO2	BT2	1.1,1.1.2.4
	1(D) Data analysis through tableau can be done for -----type of data.	1	CO3	BT2	1.1,1.1.2.4
	1(E) An -----facilitates the use of system hardware and networking capabilities	1	CO4	BT2	1.1,1.1.2.4
PART-B	Q2 Explain the architecture of Arduino-UNO board and list the features which make Arduino boards widely used	7	CO4	BT2	1.1,1.1.2.4
	Q3 Compare COAP and MQTT Protocol	3	CO1	BT4	1.1,1.1.2.4

PART-C	Q4	Develop a conceptual design of a smart home and describe how IoT network can be developed	10	C01	BT3	1.1,1.1.2.4
	Q5	Classify and explain the types of data analysis	5	C02	BT4	1.1,1.1.2.4
	Q6	Explain the computing and communicating needs of a software	7	C02	BT3	1.1,1.1.2.4
	Q7	Classify data and write short notes about big data	3	C03	BT4	1.1,1.1.2.4
	Q8	Explain in detail about connected car technology	6	C04	BT4	1.1,1.1.2.4
	Q8	What are the characteristics of AWS, GOOGLE AND MICROSOFT based cloud services	4	C04	BT1	1.1,1.1.2.4
***** END *****						

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

(End Term Examination DEC-2022)

T3 EXAM

FACULTY NAME: DR. NIHARIKA THAKUR

NAME OF COURSE COORDINATOR: DR. NIHARIKA THAKUR

COURSE NAME: CONTROL
SYSTEMS

COURSE CODE:
ECH304B-T

CREDIT: 4

MAX. MARKS: 100

TIME DURATION: 3
HRS

DATE OF EXAM: 13.12.2022

PROGRAM: B.TECH ECE

SEMESTER: 5TH

SESSION-I

Q.NO.	QUESTIONS	MARKS	CO ADDRESSED	BLOOM'S LEVEL	PI
P A R T - A	Q1(A) Determine the transfer function $C(s)/R(s)$ from the given block diagram 	5	CO1	BT3	1.3.1, 1.4.1, 5.2.2
	Q1(B) From the given signal flow graph find the transfer function implementing Mason's Gain Formula 	5	CO1	BT3	1.3.1, 1.4.1, 2.3.1, 5.2.2
	Q2(A) Differentiate between Open Loop and Closed Loop Control Systems with relevant examples.	5	CO1	BT2	1.3.1, 1.4.1, 2.3.1, 5.2.2
	Q2(B) Why negative feedback is invariably preferred in closed loop system?	5	CO1	BT2	1.3.1, 1.4.1, 2.3.1, 5.2.2
P A R T - B	Q3(A) Plot the root locii for the given closed loop control system with $G(s) = \frac{K}{s(s+1)(s^2 + 4s + 5)}, H(s) = 1$	15	CO2	BT4	1.3.1, 1.4.1, 2.3.1, 5.2.2
	Q3(B) Consider the equation and investigate the stability using Routh Hurwitz criterion $2s^4 + 4s^2 + 1 = 0$	5	CO2	BT4	1.3.1, 1.4.1, 2.3.1, 5.2.2
P A R T - C	Q4(A) What do you understand by Compensation in Control System?	10	CO3	BT2	1.3.1, 1.4.1, 5.2.2
	Q4(B) What is the significance of Frequency Domain Analysis and Time Domain Analysis for a Control System?	10	CO3	BT4	1.3.1, 1.4.1, 5.2.2
	Q5 Sketch the polar plot for $G(s) = \frac{20}{s(s+1)(s+2)}$	10	CO3	BT4	1.3.1, 1.4.1, 5.2.2
P A R T - D	Q6(A) What is the application of PID Controller? Also Explain its working with graph.	10	CO4	BT5	1.3.1, 1.4.1, 5.2.2
	Q6(B) What are the important elements of an Industrial Automatic Controller? Explain.	10	CO4	BT1	1.3.1, 1.4.1, 5.2.2
	Q7 How do you calculate the State Transition Matrix and test the observability and Controllability of the system?	10	CO4	BT4	1.3.1, 1.4.1, 5.2.2

END



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DEPARTMENT OF Electronics and communication

ODD SEMESTER (JUL-DEC-2022)

END TERM EXAMINATION DEC-2022

FACULTY NAME: Dr. Yogita Gupta

NAME OF COURSE COORDINATOR: Dr. Yogita Gupta

COURSE NAME: CAO

COURSE CODE: ECH303B

CREDIT: 3

MAX. MARKS: 100

TIME DURATION: 3 hrs

DATE OF EXAM: 15/12/2022

PROGRAM: ECU02

SEMESTER: 5th

B.TECH - ECE

Q.NO.	QUESTIONS	MARKS	CO ADDRESSED	BLOOM'S LEVEL	PI
PART - A	1(A) Compare the characteristics of SIMD and MIMD.	2	CO1	BT2	1.3.1,2.3.1,3.1.1
	1(B) What is memory hierarchy? Why do we need it?	2	CO1	BT2	1.3.1,2.3.1,3.1.1
	1(C) Give the difference between RISC and CISC.	2	CO1, CO2	BT2	1.3.1,2.3.1,3.1.1
	1(D) Define Latency and throughput.	2	CO1, CO2	BT2	1.3.1,2.3.1,3.1.1
	1(E) What are the advantages of multiple bus organization over a single bus organization?	2	CO1, CO2	BT3	1.3.1,2.3.1,3.1.1
PART - B	2(A) What is the need for DMA transfer? Why does the DMA priority over CPU when both request memory transfer?	7	CO3, CO4	BT2	1.3.1,2.3.1,3.1.2
	2(B) With the help of a block schematic explain the basic organizational units of a	7	CO3, CO4	BT2	1.3.1,2.3.1,3.1.3
	2(C) Explain the synchronous and asynchronous I/O technique.	7	CO3, CO4	BT2	1.3.1,2.3.1,3.1.4
	2(D) How floating point numbers are represented in computer system.	7	CO1, CO3	BT3	1.3.1,2.3.1,3.1.5
PART - C	3(A) List and explain three types of system buses.	7	CO3, CO4	BT3	1.3.1,2.3.1,3.1.6
	3(B) How to construct an ALU, which perform basic arithmetic and logic operations?	10	CO3, CO4	BT2	1.3.1,2.3.1,3.1.7
	3(C) What does memory hierarchy mean? What is its significance?	7	CO1, CO2	BT2	1.3.1,2.3.1,3.1.8
	3(D) Differentiate polling and interrupt schemes in I/O techniques.	7	CO3, CO4	BT2	1.3.1,2.3.1,3.1.9
PART - D	4(A) Write notes on associative mapping function related to cache memory.	7	CO1, CO2	BT3	1.3.1,1.4.1,2.3.1,3.1.1
	4(B) Discuss different performance measures for I/O device	10	CO1, CO2	BT3	1.3.1,2.3.1,3.1.1
	4(C) Differentiate the two types of byte address assignment methods?	7	CO1, CO2	BT2	1.3.1,2.3.1,3.1.1
	4(D) Explain horizontal and vertical organization of a micro programmed control	7	CO1, CO2	BT2	1.3.1,2.3.1,3.1.1

***** END *****

DEPARTMENT OF Electronics and Communication Engineering
"T3 Examination, December-2022"

SEMESTER	V	DATE OF EXAM	17.12.2022
SUBJECT NAME	Digital Communication	SUBJECT CODE	ECH328B-T
BRANCH	ECE / ECE-VLSI	SESSION	I
TIME	09.00AM-12.00 NOON	MAX. MARKS	100
PROGRAM	B.Tech	CREDITS	4
NAME OF FACULTY	Lokesh Bhardwaj	NAME OF COURSE COORDINATOR	Lokesh Bhardwaj

Note: All questions are compulsory.

Q.NO.	QUESTIONS	MARKS	CO ADDRESS ED	BLOOM'S LEVEL	PI
PART-A	1(A) What is the nature of waveforms at each step of Source encoder?	2	CO1	BT1	1.2.1.1, 4.1.2.1.
	1(B) A bag contains 17 balls. Determine the required bits for each ball is every ball is considered to be an analogy for a discrete symbol.	2	CO4	BT2	1.2.1, 2.2.2.2.
	1(C) Quantization results in a discrete symbol. Discuss the significance of quantization noise.	2	CO1	BT3	1.2.1.1, 4.1.2.1.
	1(D) What is the impact of increase in the constellation size on peak to average power ratio?	2	CO2	BT1	1.3.1.1
	1(E) Discuss the usage of advanced prediction in DPCM.	2	CO1	BT3	1.2.1.1.
	1(F) What is the relation between the probability of bit error and probability of symbol error in M-ary orthogonal signaling?	2	CO2	BT2	1.3.1.1, 2.2.2.1
	1(G) Explain the basic difference between QPSK and QAM.	2	CO3	BT3	1.2.1, 1.3.1.1
	1(H) Briefly explain. the purpose of pulse shape in digital modulation schemes?	2	CO4	BT2	1.3.1.1
	1(I) What is the product of bandwidth and the symbol time in FSK signaling?	2	CO4	BT1	1.3.1.1

PART-B	1(J)	What is the difference between correlation based and matched filter based receivers?	2	CO3	BT1, BT2	1.3.1.1
	Q2(A)	Explain the differential pulse code modulation in detail with suitable block diagram? How the prediction for the next sample is decided in DPCM?	5	CO1	BT3	4.1,2.1, 1.3.1.1
	2(B)	The bandwidth of combined TV signal (audio+ video) is 4.5 MHz. If the signal is converted to a pulse coded modulated signal with 1024 quantization levels. Determine the bit rate of resulting signal assuming the signal is sampled at a rate 20% above the Nyquist rate.	5	CO1	BT3, BT4	1.2.1, 2.2.2,2 3.1.1
PART-C	Q3(A)	Let Π be the plane spanned by vectors $x_1 = (1, 2, 2)$ and $x_2 = (-1, 0, 2)$. (i) Find an orthonormal basis for Π .	5	CO2	BT3	1.2.1, 2.2.2,2, 3.1.1
	3(B)	Derive the probability of error for QAM signal.	5	CO2	BT4	1.2.1, 2.2.2
	Q4(A)	What are optimal detectors and state the differences between the receivers and detectors. Derive an expression for the output signal if Maximum a posteriori (MAP) detector and Maximum Likelihood (ML) detector are used.	15	CO3	BT4	4.1,2.1, 1.3.1.1
	4(B)	What are ideal and non-ideal channels? Explain in detail the impact of AWGN noise in the digital communication system.	15	CO3	BT1, BT2	3.1.1, 1.2.2.1
PART-D	Q5(A)	Find an expression for the minimum number of bits required in case of N tuples formed from 5 symbols of discrete sources. Discuss in detail, the impact of number of bits required in case of employing variable length encoding in same case.	15	CO4	BT3, BT4	1.2.1, 2.2.2, 3.1.1.1
	5(B)	What is the significance of unique decodability in source encoding? Generate a look up symbol table for a 3-bit encoded symbol at the receiver end.	15	CO4	BT4	1.3.1.1, 2.2.2.1
***** END *****						

DEPARTMENT OF ELECTRONICS & COMMUNICATION

"End Term Examination, Dec-2022"

SEMESTER	V	DATE OF EXAM	19/12/2022
SUBJECT NAME	MICROPROCESSORS & MICROCONTROLLERS	SUBJECT CODE	ECH301B-T
BRANCH	B.Tech ECE/ECE-VLSI	SESSION	I
TIME	3 Hours	MAX. MARKS	100
PROGRAM	B.Tech.	CREDITS	4
NAME OF FACULTY	Vijay Kumar Gill	NAME OF COURSE COORDINATOR	Vijay Kumar Gill

Note: All questions are compulsory.

Chauhan

Q.NO.	QUESTIONS	MARKS	CO ADDRESSED	BLOOM'S LEVEL	PI
PART-A	1(A) Develop an algorithm and write Assembly Language Program to arrange an array of data in descending order.	10	CO1, CO2	BT4	1.1.1, 1.3.1
	1(B) Explain the addressing modes of 8085. Give atleast two examples of each addressing modes.	10	CO1, CO2	BT2	1.1.1, 1.3.1
	2(A) Connect the following memory ICs with 8085 microprocessor (i) 4K*8 ROM (ii) 8K*8 RAM Start the address from 3000H.	10	CO1, CO2	BT4	1.1.1, 1.3.1
	2(B) Draw the timing diagram of 'MVI A, 23H'.	10	CO1, CO2	BT2	1.1.1, 1.3.1
	3(A) Draw a neat block diagram of 8086 microprocessor and explain the function of each block.	10	CO3	BT2	1.1.1, 1.3.1
	3(B) Discuss the Maximum mode of Configuration in 8086 Microprocessor with suitable diagram.	10	CO3	BT1	1.1.1, 1.3.1

4(A)	Develop an algorithm and write ALP using 8086 instructions to reverse a four-digit number.	10	C03	BT3	1.1.1, 1.3.1
4(B)	Sketch the architecture of 8051 microcontroller and discuss the same in detail	10	C04	BT1	1.1.1, 1.3.1
5(A)	Assuming that XTAL = 22 MHz, Write a program to generate a square wave of 5 milliseconds pulse width on pin P1.2.	10	C04	BT3	1.1.1, 1.3.1
5(B)	Explain the following instructions giving proper format and example of each? i) PUSH & POP ii) DJNZ iii) JNB iv) SETB v) CALL & RET	10	C04	BT2	1.1.1, 1.3.1

END



DEPARTMENT OF Electronics & Communication

ODD SEMESTER (July-December-2022)

END SEM QUESTION PAPER STRUCTURE (QPS)

FACULTY NAME: Dr. Meenakshi Gupta

NAME OF COURSE COORDINATOR: Dr. Meenakshi Gupta

COURSE NAME: VLSI Testing

COURSE CODE: ECH-4114

CREDIT: 4

MAX. MARKS: 100

TIME DURATION: 3 hrs

DATE OF EXAM: 19/12/22

PROGRAM: B.Tech ECE

SEMESTER: 7th

Session - I

Q.NO.	QUESTIONS	MARKS	CO ADDRESSED	BLOOM'S LEVEL	PI
P A R T - A	1(A) State the two basic differences between combinational and sequential circuits.	2	CO1	L2	2.1
	1(B) What are the two basic steps in Test Generation using Path Sensitization method?	2	CO2	L3	2.3
	1(C) Give the expressions to compute the controllability and observability values for a T flip flop with a synchronous clear input.	2	CO2	L1	3.2
	1(D) What do you mean by BIST?	2	CO1	L3	3.2
	1(E) Give the name of two algorithms that is used for pattern generation in Embedded RAM's.	2	CO1	L1	5.1, 8.1
	1(F) State the need for Ad-hoc design in testing a digital circuit.	2	CO1	L2	9.1
	1(G) What do you mean by Pseudo Exhaustive test?	2	CO2	L1	5.4
	1(H) Draw the functional diagram of the TAP.	2	CO1	L2	7.2
	1(I) What are the components in fault diagnosis?	2	CO2	L3	6.2
	1(J) What do you mean by dynamic diagnosis?	2	CO2	L3	5.1
P A R T - B	(i) Write a note on the event driven simulation and what action an event driven true value simulator will take when it evaluates a zero-delay gate. (ii) Using functional fault modeling, determine the test sets for the following: 1.A 8-line to 1-line multiplexer 2.A 3 to 8 decoder	10	CO2	L3	5.1, 8.2
	For a 2-input CMOS NAND circuit: (i) Find a two-pattern test for each single transistor stuck-open fault. (ii) Rearrange the eight vectors in a compact set, and show that this set can be constructed from the single stuck-at faults tests for the NAND gate. For each stuck-at fault of the NAND gate, find an equivalent transistor (stuck-open, stuck-short and combination) fault.	10	CO1	L4	9.1, 10.1
P A R T - C	Q3(A) Explain in detail about LSSD with example and justify how it is specifically used to scan paths in sensitive latches.	5	CO3	L4	8.1, 7.2
	3(B) Discuss in detail about various DFT approaches used in testing a digital circuit.	5	CO3	L2	9.2
	Q4(A) Explain in detail how an LFSR can be used as a pseudo random pattern generator. If N=15 patterns are produced by an LFSR, and 2 of those patterns detect a given fault, say e stuck at 0, what is the average test length T to detect a e-stuck-at-0?	5	CO4	L4	8.3
	4(B) With neat block diagram explain BIST architecture in detail.	5	CO3	L4	7.2, 6.1
	Q5(A) Explain in detail about the methods adopted for fault diagnosis in combinational circuits.	5	CO4	L4	5.3
	5(B) Discuss in detail how self-checking method is adopted to test a circuit to diagnosis a fault.	5	CO4	L2	4.1
P A R T	Q6(A) Explain with circuit diagram, how double latch and single latch LSSD techniques to improve testability.	10	CO3	L2	3.2
	6(B) Give comparison between testing and verification.	4	CO3	L2	2.1
	Q7(A) Draw the life cycle of VLSI testing and discuss in detail.	6	CO4	L3	4.2
	7(B) Explain transistor faults in detail.	10	CO4	L4	5.2

END

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

END TERM EXAMINATION DEC-2022

SEMESTER:VII

DATE OF EXAM:12/12/2022

SUBJECT NAME:WIRELESS SENSOR NETWORKS

SUBJECT CODE:ECH403B-T

BRANCH:B.TECH CSE/DSML/DTE

SESSION: I

TIME DURATION: 3Hrs

MAX. MARKS: 100

PROGRAM: B.TECH

NAME OF COURSE COORDINATOR:

NAME OF FACULTY: Dr.Vani Chawla

DR. SHRUTI VASHIST

Q.NO.		QUESTIONS	MARKS	CO ADDRESSED	BLOOM'S LEVEL	PI
P T A - R A	Q1(A)	List and explain the applications of WSN.	4	CO1	BT1,BT2	
	Q1(B)	Discuss the working of Layered and Clustered Architecture in WSN with neat figures	6	CO1	BT1,BT2	
P A R T - B	Q2(A)	Discuss the structure of single node architecture. Explain each element in detail.	5	CO2	BT3,BT4	
	Q2(B)	Define Gateway concepts in WSN with neat figures.Explain how it is different from tunnelling?	5	CO2	BT3,BT4	
	Q2(C)	What are the basic principles used for designing network protocols for WSN.Explain any four in detail.	10	CO2	BT3,BT4	
P A R T - C	Q3(A)	What are the various challenges for Time Synchronisation ?	5	CO3	BT1,BT3	
	Q3(B)	Explain Flooding Time Synchronisation Protocol.	5	CO3	BT1,BT3	
	Q3(C)	What is the difference between Local and Global Power Management Strategies? Explain any three Local Power Managements aspects in detail.	10	CO3	BT1,BT3	
	Q3(D)	What do you understand by Dynamic Power Management? Explain Dynamic Operation Modes , Dynamic Scaling and Task Scheduling .	15	CO3	BT1,BT3	
P A R T - D	Q4(A)	What are the major issues that effect the design , deployment and performance of an Adhoc networks? Explain any four in detail.	10	CO4	BT1,BT2,BT4	
	Q4(B)	What are the issues in designing a Routing protocol for Adhoc wireless networks.Explain any four .	10	CO4	BT1,BT2,BT4	
	Q4©	Explain the concept and working of (a) DSDV (b)AODV in detail with neat figures.	15	CO4	BT1,BT2,BT4	
***** END *****						


DEPARTMENT OF ELECTRONICS & COMMUNICATION
"End Semester Examination, December-2022"

SEMESTER	5	DATE OF EXAM	09/12/2022
SUBJECT NAME	DIGITAL ELECTRONICS & MICROCONTROLLERS	SUBJECT CODE	ECH308B-T
BRANCH	B.Tech CSE- PSC	SESSION	I
TIME	3 Hours	MAX. MARKS	100
PROGRAM	B.Tech.	CREDITS	4
NAME OF FACULTY	Dr. Nitika, Mr. Bhanu Pratap Choudhary	NAME OF COURSE COORDINATOR	Dr. Nitika <i>Chande Pooni</i>

Note: All questions are compulsory.

Q.NO.	QUESTIONS	MARKS	CO ADDRESSED	BLOOM'S LEVEL	PI
PART-A	1(A) Convert $(9B2.1A)_{16}$ to its decimal equivalent.	2	CO1, CO2	BT3	1.1.1, 1.3.1
	1(B) Perform BCD addition of (125) and (376).	2	CO1, CO2	BT3	1.1.1, 1.3.1
	1(C) Minimize the Boolean expression using K-map for SOP function. $F(A,B,C,D,E) = \sum m(0,1,9,15,24,29,30) + d(8,11,31)$	6	CO1, CO2	BT3	1.1.1, 1.3.1
	1(D) Design XOR gate using NAND gate only	4	CO1, CO2	BT4	1.1.1, 1.3.1
	1(E) Reduce the following expressions using Demorgan's theorem:	2	CO1, CO2	BT3	1.1.1, 1.3.1

		$A+B[AC+(B+)D]$				
	1(F)	Express 247.6 into 8421 BCD and Excess-3 codes. Express -73.75 in 12 bit 2's complement form	4	C01, C02	BT3	1.1.1, 1.3.1
PART-B	2(A)	Design a 3 bit Binary to Gray Code Converter.	5	C01, C02	BT3	1.1.1, 1.3.1
	2(B)	Convert a JK Flip Flop to SR Flip Flop using characteristic and excitation table.	5	C03	BT3	1.1.1, 1.3.1
	2(C)	Design and explain 3 bit R-2 R ladder type Digital to Analog Converter and calculate the output voltage for a 6 bit ladder DAC if a digital input of 101001 is applied. ($V_{MAX} = 10 \text{ Volts}$)	10	C03	BT4	1.1.1, 1.3.1
PART-C	Q3 (A)	Design and Explain the working of a 3- Bit Bidirectional Register using the JK Flip Flop	10	C03	BT4	1.1.1, 1.3.1
	Q3 (B)	Design MOD 7 synchronous counter using JK Flip Flop and implement it. Also construct a timing diagram.	10	C03	BT4	1.1.1, 1.3.1
	Q4	Design and explain the working of 4 Bit Ripple UP counter with the help of waveform diagram	10	C03	BT3	1.1.1, 1.3.1
PART-D	Q5 (A)	Describe the architecture of 8051 microcontroller with the help of neat diagram.	5	C04	BT2	1.1.1, 1.3.1
	Q5 (B)	Explain the following instructions giving proper format and example of each i) DA ii) SWAP iii) DJNZ iv) JNB v) SETB	10	C04	BT2	1.1.1, 1.3.1
	Q5 (C)	Define and explain the addressing modes of 8051 microcontroller.	5	C04	BT2	1.1.1, 1.3.1

***** END *****

DEPARTMENT OF ECE
"End-Semester Examination, DEC.-2022"

SEMESTER	5th	DATE OF EXAM	9 th December 2022
SUBJECT NAME	Digital Electronics & Microcontrollers	SUBJECT CODE	ECH308B-T
BRANCH	CSE/AIIML/CSTI/CDA	SESSION	I
TIME	3 Hrs.	MAX. MARKS	100
PROGRAM	B.Tech.	CREDITS	4
NAME OF FACULTY	Dr. Nitika, Mr. Vijay Kumar Gill, Dr. Niharika, Mr. Bhanu Pratap Choudhary	NAME OF COURSE COORDINATOR	Dr. Nitika

NOTE : All Questions are compulsory.

Q.NO.	QUESTIONS	MARKS	CO ADDRESSED	BLOOM'S LEVEL	PI
PART-A	1(A) Design a MOD-10 Synchronous Up counter.	10	CO2	L4	1.4.1, 2.2.2, 2.2.3
	1(B) A 4-bit R/2R digital-to-analog (DAC) converter has a reference of 5 volts. What is the analog output for the input code 0101?	10	CO2	L3	1.4.1, 2.2.2, 2.2.3
PART-B	Q2(A) Implement the Boolean function using 8:1 MUX- $f(A,B,C,D) = \sum m(2,4,5,7,10,14)$	5	CO1	L4	1.4.1, 2.2.2, 2.2.3
	2(B) Design Full Subtractor using Demultiplexer.	5	CO1	L4	1.4.1, 2.2.2, 2.2.3
PART-C	Q3 Implement the following expressions using K-Maps: $f(A,B,C,D) = \sum m(1,3,7,11,15) + d(0,2,5)$ $f(A,B,C,D) = \prod (4,5,6,7,8,12).d(1,2,3,9,11,14)$	10	CO1	L3	1.4.1, 2.2.2, 2.2.3
	Q4(A) Define and explain the addressing modes of 8051 microcontroller.	5	CO3	L3	1.4.1, 2.2.2, 2.2.3
	4(B) Assuming that XTAL = 22 MHz. Write a program to generate a square wave of frequency 1 KHz on pin P1.2 using Timer.	5	CO3	L4	1.4.1, 2.2.2, 2.2.3

PART-D	Q5(A)	<p>Explain the following instructions giving proper format and example of each?</p> <ul style="list-style-type: none"> • DA • SWAP • CLRB • CJNE 	8	CO3	L3	1.4.1, 2.2.2, 2.2.3
	5(B)	<p>Write an assembly language program of 8051 microcontroller to find the sum of 10 numbers stored in an array. Draw the flow chart to specify the steps of the design flow.</p> <p>OR</p> <p>Write an assembly language program to convert BCD number to ASCII CODE.</p>	7	CO3	L4	1.4.1, 2.2.2, 2.2.3, 3.2.4
	Q5(C)	Draw the Architecture of 8051 Microcontroller.	5	CO3	L2	1.4.1, 2.2.2, 2.2.3
	Q7	Interface 8051 with 16X2 LCD and Write Assembly language program to display "MANAV" on LCD Screen.	15	CO4	L4	2.2.2, 3.2.4
	Q8	<p>Interface 8051 with ADC0804 Analog to Digital Convertor and Write Assembly language program to convert analog value into digital number.</p> <p>OR</p> <p>Interface 8051 with 4X4 Keyboard and Write Assembly language program to detect any switch pressed from keyboard.</p>	15	CO4	L4	2.2.2, 3.2.4
***** END *****						



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NAAC ACCREDITED A GRADE INSTITUTION

Declared as State Private University under section 21 of the UGC act, 1956

"End term Examination, 2022"

Paper ID:

Date of Exam: 13/12/2022

Subject Code: FLS 103

Session: Odd (II)

Course Nature: Hard

Max. Marks: 40

Signatures HOD/Associate HOD: *viijanka*

Roll-No: _____

Semester: III & VII

Subject: French

Branch: All

Course Type: Core

Time: 1.5 hours

Program: B.Tech/B.Sc/UG/BBA

Student Name: _____

Note: All questions are compulsory.

Section-A
COMPRÉHENSION ÉCRITE

1. Lisez le passage et répondez aux questions suivantes.
(Read the passage and answer to the questions)

Bonjour! Je m'appelle Sonia. J'ai vingt ans. J'habite à Lille. Je suis française. Je parle français, anglais et espagnol. Je suis étudiante. J'aime danser et chanter. Je déteste le poulet. Il y a quatre membres dans ma famille. Mon père est homme d'affaires. Il est fort et gentil. Ma mère est institutrice. Elle est belle et sympathique. J'ai un frère qui s'appelle Rohan. Il a dix-huit ans. Il est étudiant. J'aime ma famille.

(3)

- A. Dites vrai ou faux:
(True or False)

- a) Sonia a une sœur. _____
b) Le père de Sonia est journaliste. _____
c) Sonia parle allemande. _____

(2)

- B. Répondez aux questions.
(Answer the questions)

- a) Il y a combien de (how many) membres dans la famille de Sonia?

b) Quelle est la profession de mère de Sonia?

Expression Écrite

2. Présentez – vous (Present yourself)

Décrivez votre ami(e) (Describe your friend)

Section - C: Grammaire

3. Conjuguez les verbes.

(Conjugate the verbs)

- a) Nous _____ (être) italiens.
- b) Je _____ (aller) au parc.
- c) L'oiseau _____ (chanter) les chansons.
- d) Elles _____ (visiter) les monuments.
- e) Tu _____ (travailler) au bureau.

4. Complétez avec les articles définis.

(Complete with definite articles-le, la, l', les)

a) C'est _____ livre de Ria.
b) Ce sont _____ bonbons de Caroline.
c) _____ avion est beau.

d) C'est _____ chaise de cette classe.

(2)

5. Complétez avec les articles indéfinis.
(Complete with indefinite articles-un, une, des)

a) Nous mangeons _____ gâteaux.

b) C'est _____ fleur.

c) C'est _____ femme.

d) C'est _____ chapeau.

(3)

6. Complétez avec les nombres ordinaux.
(Complete with ordinal numbers)

a) Mai est le _____ mois de l'année.

b) Samedi est le _____ jour de la semaine.

c) Septembre est le _____ mois de l'année.

(4)

7. Quelle heure est-il ?
(What time is it?)

- a) 06 :30 _____
- b) 04 :10 _____
- c) 06 :30 _____
- d) 12:10pm _____

(3)

8. Répondez aux questions.

(Answer to the questions)

a) Quel est le mois entre juin et août?

b) Comment allez-vous?

c) Quel est le sixième jour de la semaine?

9. Reliez les colonnes.
(Match the columns)

(3)

Colonne A	Colonne B	Answers
a. Il neige	i. It is pleasant	
b. Il fait beau	ii. It is sunny	
c. Il fait du soleil	iii. Snowing	

10. Traduisez les mots en anglais.
(Translate the words in English)

(3)

- a) Merci beaucoup _____
- b) Bonne Chance _____
- c) Au revoir _____

SECTION-D CULTURE ET CIVILISATION

11. Complétez les phrases.
(Complete the sentences).

(5)

- a) _____ est un vin français.
- b) _____ est un fromage français.
- c) _____ est la monnaie unique européenne.
- d) _____, _____ et _____ sont les couleurs de drapeau français.
- e) _____ est la capitale de la France.



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DEPARTMENT OF FOREIGN LANGUAGE
End term Examination, 2022

Semester: 3rd & 7th
Subject: Spanish
Branch: All
Course Type: Core
Time: 90 Minutes
Program: B.Tech/Education/Law/BBA/B.Sc

Date of Exam: 13/12/2022

Subject Code: FLS 101

Session: Odd (I)

Course Nature: Soft

Max. Marks: 40

Signature: HOD/Associate HOD: *Pujarba*

Name: _____

Roll No. _____

Note: All questions are compulsory.

(5)

Ques. 1 Lee el texto y responde verdadero o falso.
Read the text and respond true or false.

¡Hola! ¡Buenas tardes!
Me llamo María, soy mexicana pero vivo en Madrid con mi familia, la capital de España. Yo tengo veintinueve años y soy directora. Tengo un primo en Madrid que se llama Juan. Él es de España, es español, Juan tiene 30 años y es camarero. Él vive en una casa muy grande.

- a. María es de Francia. V/F
- b. María vive con familia. V/F
- c. Juan es camarero. V/F
- d. Juan es de España. V/F
- e. La casa de Juan es muy grande. V/F

Ques. 2 Elige las palabras de tabla en esta imagen y hace cinco frase con números. (2.5)
Choose the words from the table in the picture and make 5 sentences using numbers.



borrador
silla
cajones
carpeta
cartel
borrador
goma
tiza
hoja
lápiz
libro
libreta
mapa
sacapuntas
mochila
ordenador
papelera
perchero
pizarra
puerta
estantería
regla
reloj

e.g. Hay seis sillas en esta clase.

- a. _____
- b. _____
- c. _____
- d. _____
- e. _____

(5)

Ques. 3 Hace cinco frases con el verbo ser usando profesión.
Make five sentences with the verb ser using profession.

- a. _____
- b. _____
- c. _____
- d. _____
- e. _____

(2.5)

Ques. 4 Busca los errores de adjetivo posesivo.
Look for the error of adjective possessive.
e.g. Nuestros escuelas son grandes.
Nuestras escuelas son grandes.

- a. Mis bolsos son caros.

- b. Sus coche es interesante.

- c. Vuestros hermanas y vuestros primas son bonitos.

- d. Nuestra padre es doctor.

- e. Tu camisetas son modernas.

Ques. 5 Completa con días, meses y estaciones.
Complete with days, months and seasons.

(4)

- a. Martes _____ Jueves.
- b. _____
- c. _____ Sábado _____ Noviembre.
- d. _____ Febrero _____ Domingo
_____ Marzo

- e. Spring- _____.
- f. Winter- _____.
- g. Abril Mayo _____.

(8)

Ques.6 Completa la serie de números.
Complete the series with numbers.

- a. Quince _____ dieciocho.
- b. Dos _____.
- c. _____ Treinta y uno _____.
- d. Cero _____.
- e. Veintinueve _____, treinta y uno _____.
- f. Cuarenta y siete _____, cuarenta y nueve _____.

(2.5)

Ques. 7 Escribe el nombre del miembro de la familia.
Write the name of the family member.

- a. La hermana de mi padre es mi _____.
- b. Los padres de mi padre son mis _____.
- c. La mujer de mi padre es mi _____.
- d. El hijo de mi tía es mi _____.
- e. La madre de mi madre es mi _____.

(2.5)

Ques. 8 Cambia las siguientes palabras a plural.
Change the words to plural.

Eg. Mesa = Mesas

- a. Rotulador _____
- b. Pez _____
- c. Lunes _____
- d. Canción _____
- e. Chico _____

(3)

Ques. 9 Lee las frases y escribe verdadero o falso.
Read the sentences and write true or false.

- a. Este casa es de Juan. _____
- b. Aquella bolso es negro. _____
- c. Esa chica es mi amiga. _____
- d. Estas mesas son nuevas. _____
- e. Esa ventana es marrón. _____
- f. Estos hermanas son bonitas. _____

579

(2.5)

**Ques. 10 Relaciona los saludos y las despedidas de español con inglés.
Match salutations from Spanish to English.**

- | | |
|------------------|--------------|
| a. Buenas noches | Thank you |
| b. Hasta pronto | Same here |
| c. Bienvenidos | See you soon |
| d. Gracias | Good night |
| e. Igualmente | Welcome |

(2.5)

**Ques.11 Completa con el artículo determinado e indeterminado.
Complete with determinate and indeterminate article.**

e.g. Una bolsa (in)

El cuaderno. (d)

- | | | |
|----|-------|------------------|
| a. | _____ | sillas (d) |
| b. | _____ | canción (in) |
| c. | _____ | bolso (d) |
| d. | _____ | estudiantes (in) |
| e. | _____ | móviles (d) |



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DEPARTMENT OF FOREIGN LANGUAGE

"End Term Examination, 2022"

Paper ID:

Semester: 3rd & 7th
Subject: German
Branch: B.Tech/BBA/Law/B.Sc/B.ed
Course Type: Core
Time: 1 hour 30 minutes
Program: All

Date of Exam: 13.12.2022

Subject Code: FLS 102

Session: Odd (II)

Course Nature: Hard

Max. Marks: 40

Signatures HOD/Associate HOD:

Student name: _____

Roll-No: _____

Note: All questions are compulsory.

Question 1.

(5 marks)

Lesen Sie den Text und antworten Sie!
(Read the text and answer the following questions)

Vorstellung

Mein Name ist Anna. Ich komme aus Österreich und lebe seit drei Jahren in Deutschland. Ich bin 15 Jahre alt und habe zwei Geschwister: Meine Schwester heißt Klara und ist 13 Jahre alt, mein Bruder Michael ist 18 Jahre alt. Wir wohnen mit unseren Eltern in einem Haus in der Nähe von München. Meine Mutter ist Köchin, mein Vater arbeitet in einer Bank.

Ich lese gerne und mag Tiere: Wir haben einen Hund, zwei Katzen und im Garten einen Teich mit Goldfischen. Ich gehe auch gerne in die Schule, mein Lieblingsfach ist Mathematik. Physik und Chemie mag ich nicht so gerne.

Nach der Schule gehe ich oft mit meinen Freundinnen im Park spazieren, manchmal essen wir ein Eis. Am Samstag gehen wir oft ins Kino. Am Sonntag schlafe ich lange, dann koche ich mit meiner Mutter das Mittagessen. Nach dem Essen gehen wir mit dem Hund am See spazieren. Sonntag ist mein Lieblingstag!

I. Beantworten Sie den folgenden Fragen:
(Answer the following questions.)

i. Wie alt ist die Schwester von Anna?

ii. Wo arbeitet der Vater von Anna?

iii. Wohingehet die Familie am Sonntag mit dem Hund spazieren?

II. Suchen Sie die Wörter aus dem Text.
(Look for the words from the text.)

- i. Sometimes- _____
- ii. Parents- _____

Question 2.

Was kannst du in der Freizeit machen oder nicht machen?

(3 Marks)

(What can you or cannot do in free time? Look at the given pictures and write complete sentence.)



- i. _____
- ii. _____
- iii. _____

Question 3.

Schreiben Sie über eins der folgenden Themen, circa 60 Wörter.
(Write on any one of the topics given below.)

(6 Marks)

- i. Mein Freund/Meine Freundin
- ii. Meine Familie

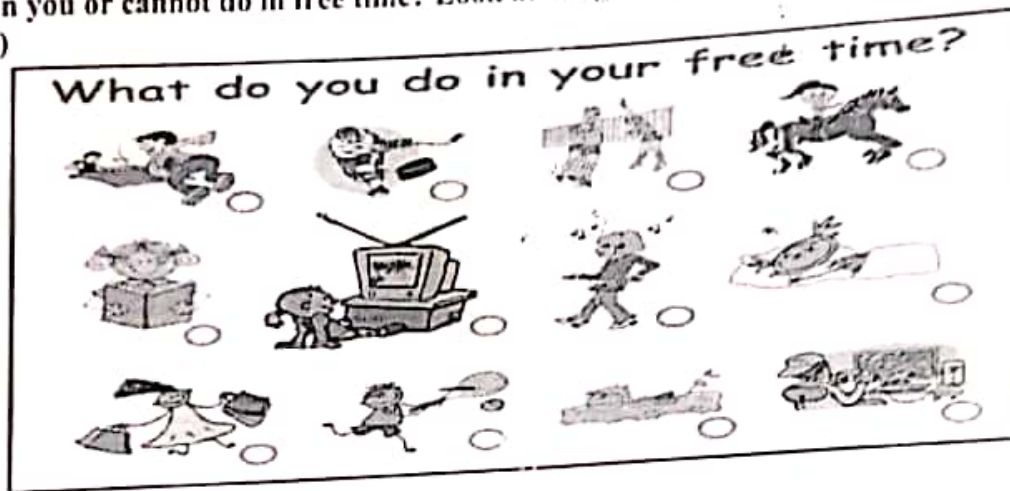
II. Suchen Sie die Wörter aus dem Text.
(Look for the words from the text.)

- i. Sometimes- _____
ii. Parents- _____

Question 2.

Was kannst du in der Freizeit machen oder nicht machen?
(What can you or cannot do in free time? Look at the given pictures and write complete sentence.)

(3 Marks)



i. _____

ii. _____

iii. _____

Question 3.

Schreiben Sie über eins der folgenden Themen, circa 60 Wörter.
(Write on any one of the topics given below.)

(6 Marks)

- i. Mein Freund/Meine Freundin
ii. Meine Familie

Question 4.

Übersetzen Sie auf Englisch.
(Translate into English)

(4 Marks)

i. Im Winter schneit es

ii. Eine Woche hat Sieben Tage

iii. Mein Geburtstag ist am siebzehnten Juni.

iv. Der Unterricht beginnt um elf uhrvierzig.

Question 5.

Wer ist das?
(Who is this?)

(2 Marks)



i.

sie ist _____.



ii.

Er ist _____.

Question 6.**(5 Marks)****Ergänzen Sie die richtige verben.****(Fill in the blanks with appropriate verb forms.)****(ist/kauft/bekommst/hat/bringt)**

- i. Er _____ zwei Kilo Tomaten.
- ii. Was _____ du heutzum Geburtstag?
- iii. Tina _____ eine Cola und eine Limonade mit.
- iv. Sie _____ die Mutter von Tina und Marx.
- v. Mein Freund _____ zwei Geschwister.

Question 7.**Schreiben Sie den Artikel (der/die/das)? —****(3 marks)****(Write the correct article.)**

- i. _____ Bleistift
- ii. _____ Heft
- iii. _____ Freundin
- iv. _____ Kuli
- v. _____ Lineal
- vi. _____ Tasse

Question 8.**Welches Wort past hier?****(5 Marks)****(Fill in the blank with suitable word in German.)****(ist/bin/wohne/mein/in/meine/heißt/in/wohnt/E-mail adresse)**

Servus, _____ Name ist Roland Maurer Ich _____ 30 jahre alt. Ich _____ in Linz. Linz liegt _____ Österreich. _____ — Freundin _____ Anna. Sie _____ in Pasing. Das liegt _____ München. Ihre Telefonnummer _____ 0897654323
Meine _____ ist roland.maurer@gmail.com.

Question 9.**Welcher Tag oder Monat fehlt?****(2 marks)****(Which day or month is missing?)**

- i. Heute ist Dienstag, Morgen ist _____.
- ii. Es ist Herbst. Die Monate sind _____, _____.

Question 10.**Ergänzen Sie.****(5 Marks)****(Fill in the blank with the appropriate information about Germany):**

Question 6.

Ergänzen Sie die richtige verben.

(5 Marks)

(Fill in the blanks with appropriate verb forms.)

(ist/kauft/bekommst/hat/bringt)

- i. Er _____ zwei Kilo Tomaten.
- ii. Was _____ du heutzum Geburtstag?
- iii. Tina _____ eine Cola und eine Limonade mit.
- iv. Sie _____ die Mutter von Tina und Marx.
- v. Mein Freund _____ zwei Geschwister.

Question 7.

Schreiben Sie den Artikel (der/die/das)?

(3 marks)

(Write the correct article.)

- i. _____ Bleistift
- ii. _____ Heft
- iii. _____ Freundin
- iv. _____ Kuli
- v. _____ Lineal
- vi. _____ Tasse

Question 8.

Welches Wort past hier?

(5 Marks)

(Fill in the blank with suitable word in German.)

(ist/bin/wohne/mein/in/meine/heißt/in/wohnt/E-mail adresse)

Servus, _____ Name ist Roland Maurer Ich _____ 30 jahre alt. Ich _____ in
Linz. Linz liegt _____ Österreich. _____ Freundin _____ Anna. Sie _____ in
Pasing. Das liegt _____ München. Ihre Telefonnummer _____ 089 765 4323
Meine _____ ist roland.maurer@gmail.com.

Question 9.

Welcher Tag oder Monat fehlt?

(2 marks)

(Which day or month is missing?)

- i. Heute ist Dienstag, Morgen ist _____.
- ii. Es ist Herbst. Die Monate sind _____, _____.

Question 10.

Ergänzen Sie.

(5 Marks)

(Fill in the blank with the appropriate information about Germany):

- A. When does the Oktoberfest start? _____
i. early November
ii. mid-September
- B. Famous eatable in Oktoberfest is? _____
i. Wurstchen
ii. Ginger Heart Bread
- C. Capital of Germany is _____
i. Wien
ii. Berlin
- D. The famous river of Germany is _____
i. Rhein
ii. Hudson
- E. Lara kommt aus _____. Sie spricht Türkisch.
i. Polen
ii. Die Türkei

ALLES GUTE!



MANAV RACHNA
UNIVERSITY
Declared as State Private University vide Therapies Act 24 of 2014

"End Semester Examination, Jan' -2023"

Semester: 1
Subject Code: CDO501
Roll No:

Subject: Skill Enhancement-I
Time: 60 Mins
Max Marks: 50

NAME:
Dt 24/01/2023
Branch: MBA-BA

Instructions: All questions are compulsory. Each question carries multiple options.
No negative marking. Calculator is not allowed. **Answers are to be filled in the answer table only.**
Answers written outside the answer table won't be considered.

Answer Table:

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50

- Find the number of factors of 250?
A. 8 B. 16 C. 24 D. 32
- Find the number of even factors of 340?
A. 8 B. 6 C. 4 D. 2
- Find the product of factors of 280?
A. 280^{18} B. 280^{24} C. 280^8 D. 280^9
- Find the sum of factors of 4004?
A. 4004^3 B. 5444 C. 9000 D. 9408
- Find the number of prime factors of 2187?
A. 1 B. 2 C. 4 D. 8
- How many factors of $2^7 \cdot 3^6 \cdot 5^2 \cdot 9^2 \cdot 10^2$ are multiples of 18?
A. 496 B. 480 C. 405 D. 505
- Find the sum of even factors of 370?
A. 656 B. 456 C. 756 D. 750
- Find the unit digit of $21^{15} \cdot 784^{125} \cdot 582^{6586}$?
A. 2 B. 0 C. 6 D. 8
- Find the last digit of $554^{782} \cdot 983^{581}$?
A. 8 B. 1 C. 6 D. 3
- Find the unit digit of $(257^{445} + 881^{858}) \cdot (323^{825} + 445^{954})$?
A. 0 B. 1 C. 2 D. 4
- Find the last digit of $(276^{122} \cdot 126^{842})$?
A. 0 B. 6 C. 2 D. 3
- What percent of 50 are 90?
A. 125% B. 150% C. 175% D. 180%
- If y exceeds x by 125%, then x is less than y by?
A. 44.44% B. 55.55% C. 66.66% D. 77.77%
- How much 75% of 60 is greater than 75% of 20?
A. 80 B. 30 C. 50 D. 20

15. How much is 80% of 140 is greater than $\frac{4}{5}$ of 80?
 A. 48 B. 36 C. 49 D. 32
16. 40% of a number is more than 60% of 650 by 190. Find the number?
 A. 1650 B. 1640 C. 1450 D. 1440
17. 50% of a number is added to 280, the result is the same number. Find the number?
 A. 560 B. 570 C. 580 D. 590
18. 50 is subtracted from 50% of a number, the result is 50. Find the number?
 A. 150 B. 200 C. 250 D. 300
19. What is the fraction value of 55.55%?
 A. $\frac{2}{9}$ B. $\frac{1}{13}$ C. $\frac{2}{13}$ D. $\frac{5}{9}$
20. What is the fraction value of 71.4%?
 A. $\frac{2}{9}$ B. $\frac{4}{7}$ C. $\frac{5}{7}$ D. None of these
21. What is the fraction value of 30.76%?
 A. $\frac{4}{7}$ B. $\frac{3}{8}$ C. $\frac{3}{7}$ D. $\frac{4}{13}$
22. Two numbers are respectively 25% and 40% more than a third number. The percentage that is first of the second is?
 A. 82.82% B. 85.85% C. 89.28% D. 57.76%
23. The salary of a typist was at first raised by 20% and then the same was reduced by 25%. If he presently draws Rs.540. What was his original salary?
 A. 450 B. 600 C. 540 D. 750
24. A candidate got 63% of the votes polled and he won to his rival by 4680 votes. How many votes were cast?
 A. 15000 B. 18000 C. 17000 D. 16000
25. A fruit seller had some apples. He sells 60% apples and still has 420 apples. Originally, he had:
 A. 1000 B. 1100 C. 1050 D. 1500
26. An engineering student has to secure 35% marks to pass. He gets 118 marks and fails by 22 marks. The maximum marks that can be obtained by him is?
 A. 300 B. 400 C. 350 D. 500
27. If the cost price of 12 pens is equal to the selling price of 8 pens, the gain percent is ?
 A. 12% B. 30% C. 50% D. 23%
28. A discount series of 20%, 20% and 40% is equal to a single discount of
 A. 50% B. 61.60% C. 61% D. 66.8%
29. A shopkeeper allows a discount of 20% on an article and still makes a profit of 25%. What does he pay for an article whose marked price is ₹800?
 A. 492 B. 800 C. 512 D. 640
30. A shopkeeper purchased pens in bulk for Rs.28 each. He sold each for Rs.40. What was his profit percentage?
 A. 14.28% B. 7.14% C. 21.85% D. 47.78%
31. Silva Reddy walked 2 km west of his house and then turned south covering 4 km. Finally, He moved 3 km towards east and then again 1 km west. How far is he from his initial position?
 A. 10 km B. 9 km C. 2 km D. 4 km
32. A man went 10 kms towards South. Then turned East and covered 10 kms and turned to the right. Again after 10 kms, he turned to left and covered 10 kms to reach the destination. How far is he from his starting point?
 A. 18.8 km B. 28.28 km C. 16 km D. 20 km

33. Rajesh's school bus is facing North when reaches his school. After starting from Rajesh's house, it turning twice right and then left before reaching the school. What direction the bus facing when it left the bus stop in front of Rajesh's house?
 A. East B. North C. South D. West
34. Anil wants to go the university. He starts from his house which is in the East and comes to a crossing. The road to his left ends in a theatre, straight ahead is the hospital. In which direction is the University?
 A. East B. North C. South D. West
35. If South-East becomes North, North-East becomes West and so on, what will West become?
 A. North B. East C. South-East D. North-West
36. A man walks 1 km towards East and then he turns to South and walks 5 km. Again he turns to East and walks 2 km, after this he turns to North and walks 9 km. Now, how far is he from his starting point?
 A. 10 km B. 9 km C. 5 km D. 4 km
37. I am facing South. I turn right and walk 20 m. Then I turn right again and walk 10 m. Then I turn left and walk 10 m and then turning right walk 20 m. Then, I turn right again and walks 60 m. In which direction am I from the starting point?
 A. North-East B. North-West C. North D. West
38. Pointing to a girl in the photograph, Umesh said, "Her mother's brother is the only son of my mother's father." How is the girl's mother related to Umesh?
 A. Mother B. Sister C. Aunt D. Grandmother
39. X introduces Y saying "He is the husband of the granddaughter of the father of my father". How is Y related to X?
 A. Brother B. Son C. Brother-in-law D. Nephew
40. Pointing to a woman, Manish said, "She is the daughter of the only child of my grandmother." How is the woman related to Manish?
 A. Sister B. Niece C. Cousin D. Data inadequate
41. Pointing to a person, a man said to a woman, "His mother is the only daughter of your father." How was the woman related to the person?
 A. Aunt B. Mother C. Wife D. Daughter
42. K and L are brothers. M and N are sisters. K's son is N's brother. How is L related to M?
 A. Father B. Brother C. Grandfather D. Uncle
43. Pointing to a person, Deepak said, "His only brother is the father of my daughter's father". How is the person related to Deepak?
 A. Father B. Grandfather C. Uncle D. Brother-in-law
44. Pointing to a photograph Anjali said, "He is the son of the only son of my grandfather." How is the man in the photograph related to Anjali?
 A. Brother B. Uncle C. Son D. Data is inadequate
45. Amit said - "This girl is the wife of the grandson of my mother". How is Amit related to the girl?
 A. Brother B. Grandfather C. Husband D. Father-in-law
46. If VICTORY is coded as YLFWRUB, how can SUCCESS be coded?
 A. VXEEIVV B. VXFFHVV C. VYEEHVV D. VYEFIVV
47. In a certain code, TOGETHER is written as RQGRJCT. In the same code, PAROLE will be written as
 A. NCPQJG B. NCQPJG C. RCPQJK D. RCTQNC
48. If BOMBAY is written as MYMYMY, how will TAMIL NADU be written?
 A. TIATITIA B. MNUMNUMNU C. IATITATAT D. ALDALDALD
49. If FRIEND is coded as HUMJTK, how is CANDLE written in that code?
 A. EDRIRL B. DCQHQQ C. ESJFME D. FYOBOC
50. In a code if COUNSEL is coded as BITIRAK, how is GUIDANCE written?
 A. EOHYZKBB B. FOHYZJBB C. FPHZZKAB D. HOHYBJBA

Handwritten signature
 Director CDC



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FOUNDED BY MANAV RACHNA GROUP OF INSTITUTIONS
MANAV, WILL BEGETTER OF URBAN INSTITUTIONS
(Established as Manav Rachna University under section 31 of the UOE Act, 1986)

Career Development Centre "End Semester Examination, Jan' -2023"

Semester: I Subject: Professional Communication-I NAME:.....
Subject Code: CDO105 Time: 60 Mins Section:.....
Branch: Education/LAW (9AM - 10 AM) Roll No:.....
Dt : 24/01/2023 Session - I

Instructions: All questions are compulsory. Each question carries multiple options. No negative marking. Calculator is not allowed. *Answers are to be filled in the answer table only. Answers written outside the answer table won't be considered.*

Answer Table:

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
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31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50

Q1. The _____ language is well known for being the language of international communication in the world.

- A) English B) Spanish C) French D) German

Q2. Learning English will be invaluable in both your _____ and professional lives.

- A) Formal B) Personal C) General D) Public

Q3. _____ is a term exclusive to English Spoken by a particular locality.

- A) Indianism B) Neutral C) Localism D) Hinglish

Q4. Localism refers to the way a sentence has been structured as if it was literally _____ from a local language.

- A) taken B) Spoken C) used D) translated

Q5. What is your _____ name? This is a typical thoughtless translation from Hindi – Aap ka shubh naam kya hai?

- A) good B) bad C) ugly D) beautiful

Q6. When one completes one's degree at an educational institution, they _____ from that institution, you do not, "pass out" from that institution.

- A) master's B) graduate C) tenth D) High school

Q7. Birth and Berth is a classic example of _____.

- A) antonyms B) synonyms C) homophones D) localism

Q8. Words that have same pronunciation, but different spelling and different meanings are called _____.

- A) homophones B) antonyms C) synonyms D) homographs

Q9. Which of the sentence is correct:

- A) Arnav likes to rap, nap and eating snacks. B) Arnav likes raping, nap and snacking.
C) Arnav likes to rap, nap and snack. D) Arnav likes to rap, napping and eat snacks.

Q10. Parallelism is used with elements in lists or in a _____. For example, This task can be done individually, in pairs, or in groups of four.

- A) series B) disorder C) programme D) sitcom

- Q11. Parallelism is used with elements joined by _____ words. For example, the teacher wants his students not only to keep quiet but also to do the task.
 A) joining B) linking C) faulty D) difficult
- Q12. Tautological Error is the error of, "_____". It is the error of writing the same thing twice.
 A) redundancy B) repeating C) important D) multiple
- Q13. A _____ is a word, phrase, or clause that adds detail or description to a sentence.
 A) order B) modifier C) altar D) static
- Q14. Words, phrases, or clauses that are "out of place" are often called _____ modifiers.
 A) not in place B) in place C) misplaced D) disorder
- Q15. Comparisons should be made between two _____ things.
 A) different B) not in order C) inappropriate D) similar
- Q16. Few is used before the _____ nouns while less is used before the uncountable nouns.
 A) numbered B) countable C) plenty D) scanty
- Q17. Collective nouns usually take a _____ verb.
 A) singular B) plural C) definite D) indefinite
- Q18. Two infinitives separated by and take a _____ form.
 A) singular B) plural C) definite D) indefinite
- Q19. Titles of books, _____, novels, etc. are treated as singular.
 A) documentaries B) pictures C) movies D) animation
- Q20. All of the chickens _____ laid eggs.
 A) some B) have C) has D) many
- Q21. Only _____ affects the verb.
 A) subject B) predicate C) noun D) pronoun
- Q22. The word Tense is derived from Latin word "tempus" which means _____.
 A) space B) time C) place D) thing
- Q23. Janet _____ lived abroad for five years.
 A) have B) has C) is D) if
- Q24. Word Classes _____ the ways in which a word can be used in grammar.
 A) paraphrase B) describe C) summarize D) elaborate
- Q25. There are _____ major word classes.
 A) 5 B) 6 C) 7 D) 8
- Q26. There are nouns for things that don't physically exist are called _____ nouns.
 A) abstract B) proper C) common D) countable
- Q27. The words that describe nouns and tell you more about them is called _____.
 A) adverb B) adjective C) pronoun D) verb
- Q28. Verbs describe _____.
 A) action B) reaction C) in action D) no action
- Q29. The person or thing that does the action of the verb is the _____. It always comes before the verb.
 A) verb B) adverb C) subject D) predicate
- Q30. Adverbs tell you how, when, where and how _____ a thing is done. Adverbs are mostly connected to verbs.
 A) often B) few C) more D) many
- Q31. Adverbs can be categorized into manner, _____ and place.
 A) money B) space C) time D) speed

- Q32. Words used instead of a noun are called _____.
 A) verb B) adverb C) adjective D) pronoun
- Q33. We use prepositions to show how different _____ relate to each other in a sentence.
 A) noun B) verb C) adverb D) conjunctions
- Q34. The children are playing with a ball _____ the yard.
 A) on B) in C) at D) to
- Q35. Some sentences are simple and give one idea. To join more than one idea together in the same sentence, we use _____ to link the ideas.
 A) interjections B) prepositions C) conjunctions D) pronouns
- Q36. An _____ is a single word that expresses a thought or feeling.
 A) conjunction B) pronouns C) preposition D) interjections
- Q37. Attitude changes _____.
 A) something B) few things C) nothing D) everything
- Q38. Cognitive, _____ and behaviour are the 3 components of attitude.
 A) emotional B) spiritual C) Intellectual D) physical
- Q39. Attitude is a human trait and _____ is an inborn attribute.
 A) emotion B) behaviour C) physical D) psychological
- Q40. There are _____ types of attitudes.
 A) 5 B) 4 C) 3 D) 2
- Q41. _____ behaviour helps maintain positive inter-personal relationships.
 A) polite B) angry C) offensive D) rude
- Q42. Learn to respect other's time. Use _____ language.
 A) negative B) appropriate C) unsuitable D) not good
- Q43. Social intelligence includes reading _____ cues.
 A) non verbal B) spoken C) talking D) ignoring
- Q44. Tact, timing, and trust describe _____ intelligence.
 A) spiritual B) common C) emotional D) special
- Q45. Saying thank you, please, speaking positively about others, being a good listener and _____ often, contribute to social grace.
 A) gossiping B) whining C) rude D) smiling
- Q46. High quality work relations, job satisfaction, job performance, organizational commitments are all outcomes of _____.
 A) inclusion B) exclusion C) diversity D) integrity
- Q47. _____ harassment is where the person is subjected to annoying behaviour while working.
 A) party B) personal C) public D) workplace
- Q48. Gender _____ refers to inequality between people of opposite gender.
 A) inclusion B) discrimination C) acceptance D) behaviour
- Q49. _____ is one of the biggest challenges for physically challenged people.
 A) problem B) help C) stereotyping D) simple
- Q50. _____ influences results.
 A) fixed B) negative C) thought D) mindset


 Dy. Director EDC



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PROGRESS THROUGH KNOWLEDGE
WISDOM, INTEGRITY & COURAGE

Career Development Centre "End Semester Examination, Jan' -2023"

Semester: I
Subject Code: CDO105
Branch: Engineering

Subject: Professional Communication-I
Time: 60 Mins
Max Marks:- 50
Series - I

NAME:.....
Section:.....
Roll No:-
66 24/01/2023

Instructions: All questions are compulsory. Each question carries multiple options. No negative marking. Calculator is not allowed. *Answers are to be filled in the answer table only. Answers written outside the answer table won't be considered.*

Answer Table:

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50

- How a person thinks or feels about something is called his
A. Behavior B. Attitude C. Courtesy D. Chivalry
- Feelings, sentiments and moods of emotions are represented by which component of attitude?
A. Cognitive B. Behavioral C. Emotional/ Affective D. None of these
- Factors affecting the formation of attitude are:
A. Intellectual development B. Social Development C. Ethical development D. All of these
- The predisposition that results in desirable outcomes for individuals and organizations
A. Attitude B. Positive Attitude C. Negative Attitude D. None of these
- The formation of attitudes due to observance to one's own self is called
A. Exposure B. Associative Learning C. Self-Perception D. Functional reasons
- Cognitive Dissonance is:
A. Self-Perception B. Change via internal discrepancy C. Persuasion D. None of these
- Showing good behavior, actions, and manners when one communicates while dealing with people is called
A. Courtesy B. Manners C. Behavior D. Attitude
- The degree to which an employee is accepted and treated as an insider by others in a work system is called
A. Courtesy B. Diversity C. Inclusion D. Chivalry
- Outcomes of inclusion are:
A. Improved work relations B. Job satisfaction C. Both of these D. None of these
- The biggest barrier for people with disability is how the society disables them by way of:
A. Disability discrimination B. Gender Discrimination C. Sexual Harassment D. Racial Discrimination
- Bullying, inappropriate promise of rewards in exchange of sexual favors is called
A. Disability discrimination B. Gender Discrimination C. Sexual Harassment D. Racial Discrimination
- The dress appropriate to wear for interview or for a professional work environment is
A. Party wear B. Sports wear C. Formal wear D. Casual wear
- Best color for trousers to wear in an interview would be:
A. White B. Navy Blue C. Light Green D. Purple
- The LGBTQ individuals face a number of challenges because of:
A. Family expectations B. Social Stigma C. Discrimination D. All of these

15. Professional behavior at workplace includes:

- A. Civility B. Courtesy C. Social grace D. All of these

16-Direction: Read the following sentence and pick out the underlined part which is neither a Noun nor a Pronoun?

I want to pursue my career in advertising.

- A. I B. pursue C. career D. advertisement

17-Direction: Read the following sentence and pick out the underlined part which is neither a Noun nor an Adjective

The principal always helped the needy students.

- A. principal B. helped C. needy D. students

18-20-Direction: Read the following sentence and choose the correct option as to which parts of speech the underlined word is?

18. He is the fan of cricket?

- A. Adverb B. Pronoun C. Preposition D. Verb

19. Fruits and vegetables are good for health.

- A. Verb B. Adverb C. Interjection D. Preposition

20. The student wrote an application to his teacher.

- A. Adverb B. Noun C. Pronoun D. Verb

21-25 Direction: Choose the correct form of tenses from the options given below.

21. I _____ working all afternoon and have just finished the assignment.

- A. have been B. had been C. shall be D. am

22. Rohan _____ the movie before he read the review.

- A. watches B. have watched C. had watched D. was watching

23. He _____ in the States but he still does not have a command over the English language.

- A. have been living B. has been living C. have lived D. living

24. "Shyam and his brothers" _____ a famous sweet shop in our neighbourhood.

- A. are B. have been C. is D. have

25. You should not _____ the worst.

- A. assumed B. assuming C. assume D. assumes

26-30 Direction: Choose the correct form of Verbs from the options given below.

26. The teacher _____ completed this chapter.

- A. have B. has C. is D. are

27. Ram and Shyam _____ business partners.

- A. have B. has C. are D. had

28. She _____ her office by 9 a.m. daily.

- A. reach B. reaches C. reached D. reaching

29. Rahul and his friends _____ also invited to the party.

- A. is B. was C. had D. were

30. Neither you nor your sister should _____ to them.

- A. talk B. talks C. talked D. talking

31-32 Decide whether the sentence has parallelism or not?

31. She decided to leave her job and travelling the world.

- A. Parallel B. Not Parallel C. Can't say D. None of these

32. He started the engine, released the hand break, and checked the mirror.

- A. Parallel B. Not Parallel C. Can't say D. None of these

33-34 Read the following questions and choose the correct options from the options given below.

33. Which of the following sentences is correct?

- A. Mia likes playing Ludo, carroms, and chess. B. Mia likes playing Ludo, play carroms, and to play chess.
C. Mia likes to play Ludo, carroms, and playing chess. D. Mia likes playing Ludo, carroms, and play chess.

34. Amal has _____.

- A. a car, a bike, and a cycle. B. a car, a bike, and she has a cycle.
C. a car and a bike, and she has a cycle. D. None of the above.

35. In a group discussion, one must communicate with

- A. Hostility B. Ignorance C. Courtesy D. Arrogance

36. Which of these must be avoided in a group discussion?
 A. Speaking Facts B. Counter questioning C. Speaking with clarity D. Speaking on the topic
37. In a group discussion a person who begins the discussion is called
 A. Initiator B. Starter C. Beginner D) Moderator
38. In recruitment, Group Discussion is used as a tool of:
 A. Presentation B. Workshop C. Lecture D. Elimination
39. Which of the following is incorrect way to initiate your self-introduction?
 A. I am B. My name is C. Myself D. None of these
40. What is Self- introduction?
 A. Your one minute self-sales pitch for the interviewer B. Your personality description
 C. Description of daily routine D. Description of family information
41. Which of the following greeting is inappropriate in formal introduction?
 A. Hello B. Good Morning C. Hey, What's up? D. None of the above
42. Which of the following CANNOT be considered as a good telephonic etiquette?
 A. Speak slowly so as to be understood B. Listen to what other person has to say
 C. Talking loudly if you are unable to hear the other speaker D. End the call with a polite Good bye or Thank You
43. The most appropriate grooming tip for an interview should include:
 A. Take care of the body odor B. Display of tattoos to give contemporary look
 C. The arms of the shirt should be folded D. None of the above
44. What do you do if you find someone not able to speak in a GD?
 A. Utilize this opportunity to continue B. Invite the person to put forward his/her views
 C. Make fun of the person D. All of the above
45. A well-crafted and well-practiced Self Introduction helps you to
 A. Present your first answer with poise and confidence. B. Do away with fillers like umm, well, I guess etc.
 C. Set a strong foundation for the rest of the interview. D. All of the above
46. The third branch of phonetics apart from articulatory, acoustics is
 A. Resounding Phonetics B. Auditory Phonetics
 C. Assimilatory Phonetics D. None of them
47. "Tell me something about yourself" should be answered with
 A. Telling about your strengths only B. Talking about your areas of improvement
 C. Talking briefly about your education, industrial training, co-curricular activities, and work experience
 D. None of the above.
48. Variation in a language done by native speaker of the language is called
 A. Dialect B. Accent C. Tone D. None of these
49. Variation in a language by non-native speaker of the language is called
 A. Accent B. Dialect C. Tone D. None of these
50. Impure vowels are called
 A. Diphthongs B. Monophthongs C. Both of them D. None of them


 Director - CDC

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Declared as State Private University under section 29 of the UCEP Act, 1998

Career Development Centre

"End Semester Examination, Dec'-2022"

Semester: 3 Subject: Professional competency Enhancement-I

Subject Code: CD0201

Max Marks: 50

Time: 60 Mins

On 20/12/2022 Session - II

NAME:.....

Roll No:.....

Branch: CST/ME/ECE

Instructions: All questions are compulsory. Each question carries multiple options. No negative marking. Calculator is not allowed. Answers are to be filled in the answer table only. Answers written outside the answer table won't be considered.

Answer Table:

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
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31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50

Q1. There are 36 boys and 44 girls in a class. The average score of boys is 40 points and girls is 35 points. Then what will be the average score of the class?

A) 37.25 B) 22.5 C) 52.85 D) 65.78

Q2. The average of 15 numbers is 15. If the average of first five numbers is 14 and that of other 9 numbers is 16, then find the middle number.

A) 9 B) 11 C) 7 D) 11

Q3. The average age of five members is 27. If one of them is excluded the average decreases by 2. The age of excluded person is:

A) 20 B) 25 C) 35 D) 45

Q4. What is the largest 4 digit number exactly divisible by 88?

A) 9944 B) 9956 C) 2000 D) 9955

Q5. Which one of the following can't be the square of a natural number?

A) 128245 B) 128248 C) 128242 D) 128248

Q6. In an election between two candidates, one got 55% of the total valid votes, 20% of the votes were invalid. If the total number of votes was 7500, the number of valid votes that the other candidate got, was:

A) 2700 B) 2900 C) 3000 D) 5000

Q7. How many factors of 1080 are perfect squares?

A) 4 B) 7 C) 5 D) 6

Q8. A student has to obtain 33% of the total marks to pass. He got 125 marks and failed by 40 marks. The maximum marks are:

A) 500 B) 750 C) 550 D) 850

Q9. The sum of a series, $27+36+45+\dots+162$ is 1512. What is the number of terms in the series?

A) 15 B) 16 C) 12 D) 10

- Q10. If the product and H.C.F. of two numbers are 4107 and 37 respectively, then find the greater number.
 A) 111 B) 135 C) 150 D) 170
- Q11. Pointing to a person, a man said to a woman, "His mother is the only daughter of your father." How was the woman related to the person?
 A) Uncle B) Aunt C) Father D) Mother
- Q12. If Ranveer Singh finds that he is 13th from the right in a line of boys and 8th from the left, how many boys should be included in the line such that there are 30 boys in the line?
 A) 10 B) 19 C) 12 D) 14
- Q13. Krishna ranked sixteenth from the top and twenty ninth from the bottom among those who passed an examination. Six boys did not participate in the competition and five failed in it. How many boys were there in the class?
 A) 48 B) 55 C) 65 D) 51
- Q14. One morning after sunrise, Suresh was standing facing a pole. The shadow of the pole fell exactly to his right. To which direction was he facing?
 A) South B) North C) East D) West
- Q15. Find the logarithm of 144 to the base $2\sqrt{3}$
 A) 8 B) 9 C) 6 D) 4
- Q16. The unit digit in the product $(784 \times 618 \times 917 \times 463)$ is
 A) 2 B) 3 C) 4 D) 5
- Q17. Find the number of factors of 9321?
 A) 8 B) 5 C) 7 D) 3
- Q18. K is 40 m South-West of L. If M is 40 m South-East of L, then M is in which direction of K?
 A) South B) East C) North D) West
- Q19. G is the grandfather of S. B has only two sons E and F. A and B are the only sons of G. Who is the father of S?
 A) A B) B C) E D) F
- Q20. If A is the brother of B; B is the sister of C; and C is the father of D, how D is related to A?
 A) Can't be determined B) Sister C) Uncle D) Aunt
- Q21. During assembly the students are standing in a line. Salman Khan is 21st in order from both the ends. How many boys are there in the class?
 A) 40 B) 41 C) 44 D) 45
- Q22. If Rocky finds that he is 31st from the right in a line of boys and 8th from the left, how many boys should be included in the line such that there are 60 boys in the line?
 A) 7 B) 8 C) 20 D) 12
- Q23. How many 4's are there preceded by 7 but not followed by 3?
 5 9 3 2 1 7 4 2 6 9 7 4 6 1 3 2 8 7 4 1 3 8 3 2 5 6 7 4 3 9 5 8 2 0 1 8 7 4 6 3
 A) Four B) Six C) Two D) One
- Q24. How many such pairs of digits are there in the number 421579368 each of which has as many digits between them in the number as when they are arranged in ascending order?
 A) One B) Three C) Two D) Six
- Q25. In a class of 50 students M is eighth from top. H is 20th from bottom. How many students are there between M and H?
 A) 18 B) 20 C) 21 D) 22

Q26. Find the sum of the first 10 numbers of this arithmetic series: 1, 11, 21, 31...

- A) 500 B) 480 C) 420 D) 460

Q27. If 11th term is 47 and first term is 7. What is common difference between them?

- A) 3 B) 4 C) 3 D) 2

Q28. The sum of the first 3 terms in an AP is 6 and that of the last 3 terms is 16. If the AP has a total of 13 terms, what is the sum of the middle three terms?

- A) 11 B) 10 C) 8 D) 9

Q29. Priya cycles 5 km North, then turns East and cycles 4 km, then turns South and cycles 5 km, then turns to her right and cycles 6 km. Where is she now with reference to her starting position?

- A) 2 km East B) 2 km West C) 10 km West D) 10 km East

Q30. A man walks 5 km toward south and then turns to the right. After walking 3 km he turns to the left and walks 4 km. And then he goes back 10 km straight. Now in which direction is he from the starting place?

- A) North-West B) South C) East D) West

Q31. _____ involves the development of action plan designed in order to motivate and guide a person or group towards a goal.

- A) Decision B) Goal Setting C) Self-awareness D) Hard work

Q32. Locke and Latham's Goal setting theory includes clarity, challenge, commitment, feedback and _____.

- A) Complexity B) Simplicity C) Difficulty D) Problem

Q33. SMART goals abbreviation stands for specific, measurable, achievable, realistic and _____.

- A) time framed B) time limit C) target date D) time bound

Q34. If there are no _____ there is no progress.

- A) dare B) difficulties C) challenges D) problems

Q35. Knowing _____ is the beginning of all wisdom.

- A) yourself B) others C) himself D) herself

Q36. Body's reaction to a change that requires a physical, mental or emotional adjustment or response is called _____.

- A) tension B) strain C) stress D) trauma

Q37. Fear, anger, loneliness, worry are some of the symptoms of _____ stress.

- A) Cognitive B) Physical C) Behavioral D) Emotional

Q38. _____ stress enables concentration, increases performance and it energizes you.

- A) distress B) eustress C) neutral D) good

Q39. In ABC strategy A stands for awareness, B is for Balance and C is for _____.

- A) control B) command C) change D) charge

Q40. "If your _____ does not include yourself, it is incomplete". Jack Kornfield

- A) care B) concern C) compassion D) empathy

Q41. Negative stress results in reduced effectiveness, loss of motivation, _____ and mental problems and behavioral problems.

- A) physical B) emotional C) cognitive D) spiritual

Q42. Right frame of mind, right technique and right _____ contributes to managing time better.

- A) motivation B) a volition C) successful D) distraction

Q43. Managing time better increases effectiveness and _____.

- A) efficiency B) order C) planning D) productivity

Q44. Perfectionism, insecurity, clutter, being unorganized could be the reasons for _____.

- A) delaying tactics B) stalling C) procrastination D) dragging

Q45. Personal approach to handling time could be developing a positive attitude, ownership for time loss and aiming for _____.

- A) excellence B) supremacy C) merit D) perfection

Q46. Handling time in a better way helps reducing stress and increases _____.

- A) creativity B) problem C) busyness D) stress

Q47. _____ is the first stage of team formation.

- A) storming B) norming C) forming D) performing

Q48. "Humanity to others", is the English translation of which ancient African word?

- A) Ubuntu B) hakuna matata C) swahili D) zulu

Q49. Building bond, creating understanding, trust, resolving conflict, overcoming obstacles, achieving growth together can be termed as a _____.

- A) distance B) team C) class D) troupe

Q50. Ubuntu means there is no ME without _____.

- A) you B) her C) him D) them


Dr. Director CDC



MANAV RACHNA UNIVERSITY

Declared as State Private University vide Haryana Act 26 of 2014

Semester: 5

Subject Code: CDO301

Max Marks: 50

Session - II

Subject: PCE-III

Time: 60 Mins

dt. 14/12/2022

NAME:.....

Roll No:.....

Branch: CST/ME/ECE

Instructions: All questions are compulsory. Each question carries multiple options.

No negative marking. Calculator is not allowed. **Answers are to be filled in the answer table only.**

Answers written outside the answer table won't be considered.

Answer Table:

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
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31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50

1. A man sitting in a train travelling at the rate of 100 km/hr observes that it takes 18 seconds for a goods train travelling in the opposite direction to pass him. If the goods train is 375 m long, find its speed?
A. 25 kmph B. 40 kmph C. 35 kmph D. 36 kmph
2. Two trains, 130 m and 110 m long, are going in the same direction. The faster train takes one minute to pass the other completely. If they are moving in opposite directions, they pass each other completely in 3 seconds. Find the speed of the faster train?
A. 38 m/s B. 46 m/s C. 42 m/s D. None of these
3. Two trains running in opposite directions cross a man standing on the platform in 54 seconds and 34 seconds respectively and they cross each other in 46 seconds. The ratio of their speeds is?
A. 1 : 3 B. 3 : 2 C. 3 : 4 D. None of these
4. A boat running upstream covers a distance of 10 km in 30 minutes and while running downstream, it covers the same distance in 25 min. What is the speed of the river current (in kmph)?
A. 2.5 kmph B. 2.2 kmph C. 2 kmph D. Can't say
5. Ram goes downstream from one port to another in 4 h. He covers the same distance upstream in 5 h. If the speed of the stream is 2 km/h, find the distance between the two ports?
A. 50 km B. 60 km C. 70 km D. 80 km
6. Two boats, travelling at 7 km/h and 8 km/h, head directly towards each other. They begin at a distance of 20 km from each other. How far apart are they (in km) one minute before they collide?
A. 1/12 km B. 1/6 km C. 1/4 km D. 1/3 km
7. At his usual rowing rate, Mohit can travel 12 miles downstream in a certain river in six hours less than it takes him to travel the same distance upstream. But if he could double his usual rowing rate for this 24 mile round trip, the downstream 12 miles would then take only one hour less than the upstream 12 miles. What is the speed of the current in miles per hour?
A. 7/3 B. 4/3 C. 5/3 D. 8/3
8. A boat's speed in still water is 15 km/h. While river is flowing with a speed of 6 km/h and time taken to cover a certain distance upstream is 2 h more than time taken to cover the same distance downstream. Find the distance?
A. 30.5 km B. 31 km C. 31.5 km D. 32 km
9. To complete a work, A and B take 30 days, B and C take 24 days, and C and A take 20 days. They all start together and work for 5 days after which B and C leave. How many days will A take to finish the remaining work?
A. 11 B. 28 C. 33 D. 18

10. A can do a job in 20 days, B in 30 days and C in 60 days. If A is helped by B and C every 3rd day. How long will it take for them to complete the job?

- A. 12 days B. 4 days C. 15 days D. 18 days

11. If a soldier fires 7 shots from a gun in 12 minutes then find the total number of shots fired by the man in $\frac{3}{2}$ hrs.

- A. 45 B. 44 C. 46 D. 47

12. A woman fills a bucket in 6 minutes. 1845 buckets have to be filled from 8 am. to 9:30 am. How many woman employees should be employed for this task?

- A. 111 B. 117 C. 139 D. 123

13. A group of men decided to do a job in 4 days. But since 20 men dropped out every day, the job completed at the end of the 7th day. How many men were there at the beginning?

- A. 240 B. 140 C. 280 D. 150

14. C is twice efficient as A, B takes thrice as many days as C. A takes 12 days to finish the work alone. If they work in pairs (i.e., AB, BC, CA) starting with AB on the first day then BC on the second day and AC on the third and so on, then how many days are required to finish the work?

- A. $6\frac{1}{5}$ B. 4.5 C. 8 D. $5\frac{1}{9}$

15. The work done by a man, a woman and a child is in the ratio of 3 : 2 : 1. There are 20 men, 30 women and 36 children in a factory. Their weekly wages amount to Rs 780, which is divided in the ratio of work done by the men, women and children. What will be the wages of 15 men, 21 women and 30 children for 2 weeks?

- A. Rs 1170 B. Rs 292.5 C. Rs 585 D. Rs 900

16. P can complete a work in 12 days working 8 hours a day. Q can complete the same work in 8 days working 10 hours a day. If both p and Q work together, working 8 hours a day, in how many days can they complete the work?

- A. $\frac{60}{11}$ B. $\frac{61}{11}$ C. $\frac{71}{11}$ D. $\frac{72}{11}$

Directions (17-21): Study the following table carefully to answer the given questions

Classification of 50 Students based on the marks obtained by them in Quants & Reasoning in Prelim exam

Subject	Mark Out of 100				
	80 and above	70 and above	50 and above	30 and above	0 and above
Quants	23	28	37	43	50
Reasoning	12	32	35	39	50
Average(Aggregate)	15	22	38	40	50

17. The number of students scoring less than 30% marks in aggregate is?

- A. 15 B. 2.5 C. 20 D. 10

18. If it is known that at least 20 students were eligible for main exam, then the minimum qualifying marks in Reasoning for eligibility to attend the main exam(Top 20 students only can attend main exam)?

- A. 70-80 B. above 80 C. 70-60 D. 50-70

19. The percentage of number of students scored 70% marks in Quants is what percentage of number of students scored 30% marks in aggregate?

- A. 60% B. 70% C. 50% D. 75%

20. If at least 50% marks in aggregate are required for interview, how many students will be eligible to attend interview?

- A. 50 B. 40 C. 20 D. 38

21. What is the different between the number of students passed with 80 as cut-off marks in Quants and 30 as cut-off marks in aggregate together to no of students passed with 70 as cut-off marks in aggregate and 50 as cut off in Reasoning?

- A. 11 B. 5 C. 8 D. 6

Direction (22-24) Study the following information carefully to answer the given questions

'Online tests for IT Company interview' is written as '54 260 120 101 308'

'Questions for the Interview' is written as '54 90 120 213'

'Prepare for the Interview test' is written as '156 54 260 90 120'

'Interview for IT company' is written as '120 308 54 210'

22. What is the code for 'test' in the given code language?

- A. 120 B. 260 C. 101 D. 308

23. 308 is the code for which of the following?

- A. Interview B. IT Company C. Online D. for

24. What is the code for 'prepare questions for test'?

- A. 120 54 101 54 B. 260 308 54 120 C. 90 120 101 213 D. 156 213 54 260

25. If 3rd December, 1990 is Sunday, What day is 3rd January 1991?

- A. Sunday B. Monday C. Tuesday D. Wednesday

26. What was the day of the week on 28th May, 2006?

- A. Sunday B. Friday C. Wednesday D. Tuesday

27. On 8th Dec, 2007 Saturday falls. What day of the week was it on 8th Dec, 2006?

- A. Saturday B. Friday C. Monday D. Tuesday

28. A clock is set right at 8 a.m. The clock gains 10 minutes in 24 hours will be the true time when the clock indicates 1 p.m. on the following day?

- A. 48 min. past 12. B. 46 min. past 12. C. 45 min. past 12. D. 47 min. past 12.

29. Find the angle between the hour hand and the minute hand of a clock when the time is 3.25

- A. 47.5 degrees B. 57.5 degrees C. 45.5 degrees D. 55.5 degrees

30. An accurate clock shows 8 o'clock in the morning. Through how many degrees will the hour hand rotate when the clock shows 2 o'clock in the afternoon?

- A. 360 B. 180 C. 90 D. 60

31. Though the raids on Spanish ships and towns were on a small scale, Sir Francis Drake achieved _____ success, adding gold and silver to England's treasury and diminishing Spain's supremacy.

- A. Insignificant B. Temporary C. Significant D. Ineffective

Choose a synonym for the word in BOLD in the following sentences:

32. If you don't **curtail** your spending, you'll be broke in no time at all.

- A. Reduce B. Follow C. Behind D. Buy

33. We have rather **lofty** expectations for you, son! You will attend college, become rich and famous, and be elected as President of the United States before you turn forty.

- A. High B. Shaky C. Small D. Lowly

34. How can we **concentrate** on serious issues if you keep dragging us towards the petty issues?

- A. Improved B. Healthy C. Focus D. Happy

Directions for questions 35-38: Spot the part of the sentence that contains an error. Mark option D if there is no error.

35. A. A big bouquet of flowers

C. arrived at the venue.

36. A. Why do we insist on using

C. when we know that animals suffer because of this?

B. were given to the chief guest, who

D. No error.

B. accessories made from leather

D. No error.

37. A. A farmer who owns cows
C. who owns sheep.

38. A. Strong winds and heavy rains
C. as an aftermath of hurricane Katrina.

Choose the correct options:

39. Every pale tomato slice, wilted pickle, and brown lettuce leaf _____ an extra 25 cents at Bernie's Burger Emporium.

- A. Costs
B. Cost

40. The Smiths, along with Tonya, _____ to avoid indigestion after eating these weird muffins.

- A. Hopes

41. Grandpa claims that Martian measles _____ green and purple spots to erupt all over a person's body.

- A. causes

42. Each of these women _____ that she had read the care instructions before washing the delicate and expensive dresses.

- A. wishes
B. wish

Are the modifiers in these sentences correct or misplaced?

43. Place the plate in front of the diner with the meat, not the vegetables, facing the person.

- A. Correct

44. We had almost thrown all our snowballs when our fort was charged by two frenzied redheads from the opposing team.

- A. Correct
B. Misplaced

45. The computer system almost cost \$2,000, but Michel had enough money saved from his fire-eating gigs to pay the bill in full.

- A. Correct
B. Misplaced

Choose the correct options from the options given below:

46. The employee thought that the CEO _____.

- A. cheating
B. is cheat
C. cheated

47. See, how beautifully they _____.

- A. are dancing
B. is dancing
C. are danced

48. The train _____ when I arrived at the station.

- A. is just left
B. is just leaving
C. had just left

49. She _____ two miles before reaching the post office.

- A. will have jogged
B. will have jog
C. will had jogged

50. This servant (work) with us for ten years.

- A. works
B. has been working
C. is working

- B. is considered poorer than a farmer
D. in this part of the country.
B. are likely to make life miserable
D. no error.

- D. Had cost.

- D. Had hoped

- D. had caused

- D. would wish

- D. None of these

- D. None of these

- D. None of these

- D. None of these

- D. None of these

- D. had cheated

- D. have dancing

- D. has just left

- D. will jogged

- D. does work

Hanus
Director CDC

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Semester: 5
Subject Code: CDS305B
Max Marks: 50

Subject: PDP V
Time: 60 Mins

NAME:.....
Roll No:.....
Branch: FAA/EFB/HCM/BA/GOM

Instructions: All questions are compulsory. Each question carries multiple options.
No negative marking. **Answers are to be filled in the answer table only.**

Answers written outside the answer table won't be considered.

Answer Table:

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50

Choose the correct option in the following

- In a group discussion, one must communicate with
A. Hostility B. Ignorance C. Knowledge D. Arrogance
- Which of these must be avoided in a group discussion
A. Speaking Facts B. Asking questions C. Speaking with clarity D. Deviating from the topic
- In a group discussion a person who begins the discussion is called
A. Initiator B. Starter C. Beginner D. Moderator
- Which of the following is more interactive and solution oriented
A. Seminar B. Chalk board instruction
C. Lecture D. Group Discussion
- The best way to apply for a job is to submit a resume that is
A. Suitable for any job B. Self-recommending
C. Specifically written for a particular job D. Personal information only
- The application letter and the resume perform
A. Two different tasks B. Overlapping tasks C. The same task D. Two opposite tasks
- The résumé of a fresh graduate is generally
A. One page long B. Two pages long C. Half a page D. Three pages long
- The cover letter is
A. A foreword B. A summary of your qualifications and experiences
C. A description of your core strengths and suitability for the job D. A statement of your job objective
- A summary placed at the beginning of the resume acts as a
A. synopsis B. Career objective C. Preface D. Letter of recommendation
- In an interview when you do not know an answer, you should
A. Keep guessing B. Bluff C. Admit that you do not know the answer D. Remain quiet

Fill up the blanks with appropriate option.

- The teacher _____ completed this chapter.
A. have B. has C. is D. are
- Ram and Shyam _____ business partners.
A. have B. has C. are D. had
- She _____ her office by 9 a.m. daily.
A. reach B. reaches C. reached D. reaching
- Rahul and his friends _____ also invited to the party.
A. is B. was C. had D. were

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15. A bouquet of flowers ----- required for the event.

- A. are B. have C. has D. is

16. Twenty years ----- the minimum age to fill this form.

- A. are B. is C. has D. have

17. Much ----- been said in the news reports.

- A. were B. have C. has D. was

18. Either of the two dresses shall ----- good.

- A. looking B. look C. looks D. looked

Choose the correct option

19. At the time of interview, jewellery should be kept to a minimum

- A. True B. False C. Can't say D. None of these

20. We should be aware of all the following grooming tips, except for

- A. face should be clean or well-maintained.
B. brush your teeth and have fresh breath
C. firm handshake as the best gesture for good impression
D. hands and nails should be well maintained.

21. What should not be included in your self- introduction

- A. Very personal Information B. Your weakness C. Your failures D. All of the above

22. Shoes for both men and women should be:

- A. Steel-toed for protection B. Open-toed for comfort C. Brightly colour D. Clean and polished

23. Time management refers to a range of skills, tools, and techniques used to manage time when accomplishing specific tasks, projects, and goals.

- A. True B. False C. Can't Say D. None of these

24. Which word means- " the time by which something must be completed"?

- A. Chore B. Consequence C. Goal D. Deadline

25. Using a planner or making a "to-do" list every day.

- A. Is a waste of paper B. Helps keep things "in sight, in mind"
C. Takes too long to fill out D. None of the above

26. To spend your time productively, you need to have set some

- A. Possibilities B. Ideas C. Boundaries D. Goals

27. Efficient time management includes

- A. Doing the best tasks first, and the worst tasks last
B. Having a very structured schedule and not leaving any room to be flexible
C. Being flexible
D. Doing the worst tasks first while you're alert and not tired

28. For a student, time management in college would mean

- A. You have to learn to manage your extra time more efficiently.
B. You have limited time in hand
C. You have too many activities at a time in hand
D. All of the above are true.

29. Using spare time wisely includes limiting the time you spend on the internet, using a cell phone, etc..

- A. True B. False

30. What is NOT included in the body language?

- A. Body movements B. Listening C. Gestures D. Facial expressions

31. Body language can communicate

- A. Feelings B. Intentions C. Emotions D. All of these

32. A head positioned forward facing someone indicates

- A. Interest B. Superiority C. Disrespect D. Disinterest

33. What should not be done at the time of interview?

- A. Reaching late B. Misquoting facts
C. Going unprepared D. All of the above

34. What should you do while preparing for an interview?
 A. Research the company
 B. Learn the company's vision and mission
 C. Practice top interview questions and answers
 D. All of the above
35. Who should be greeted in a friendly and respectful manner?
 A. The receptionist
 B. The secretary
 C. The Interviewer
 D. All of the above
36. When answering interview questions, it is important to
 A. Be specific
 B. Be general
 C. Stretch the facts to look good
 D. Misquoting facts
37. In every answer you give, the employer is looking for
 A. How you will save them time
 B. How you will save them money
 C. How you will solve their problem(s)
 D. All of the above
38. Which of the following is not a step in the preparation of an interview?
 A. Analyzing Yourself
 B. Identifying your skills
 C. Being negative
 D. Revising your subject
39. At the start of an interview, you should
 A. Try to find common interests.
 B. Look around the office for things.
 C. Greet the interviewer with a smile.
 D. All of the above
40. While attending the online interview you should not
 A. Dress casually
 B. Keep your camera on
 C. Keep the microphone off
 D. should be sitting at a well-lit place and attend
41. Interviews are conversations with
 A. Fun
 B. Purpose
 C. Friendliness
 D. Informality
42. Which of these is not a type of interview?
 A. Screening interview
 B. Stress interview
 C. Music interview
 D. Lunch interview
43. The best way to dress to impress for the interview is to
 A. Wear jeans and T-shirt
 B. Wear a jogging suit wear
 C. A business suit
 D. It doesn't matter what you wear
44. Gesture, posture, eye contact are examples of communication that is
 A. Verbal
 B. Non-verbal
 C. Aggressive
 D. Polite
45. "You should be authentic in an interview" means to be
 A. False
 B. Invalid
 C. surprising
 D. Realistic
46. Before your interview in a company you should
 A. Sit Idle
 B. Get worked up
 C. Research
 D. None of the above
46. Should you answer interview questions in complete sentences or give one word answer?
 A. Complete sentences
 B. One word answers
 C. Both
 D. Neither
47. Which of the following is not the part of a resume?
 A. Religious affiliation
 B. Employment History
 C. Contact Information
 D. Education
48. Which of the following is the safest email address style to use on your resume?
 A. lovln_ladies123@emailprovider.com
 B. j_smith@emailprovider.com
 C. partyallthetime@emailprovider.com
 D. none of these
49. Which of the following methods is the best to know more about the person and his/her fitment for a role?
 A. Observation
 B. Interview
 C. Case Study
 D. Survey Method
50. What is the rule to decide the colour of the belt (for men)?
 A. always wear black
 B. the belt should match the colour of the shoe
 C. the belt should match the colour of trousers
 D. the belt should match the colour of the tie

Handwritten signature
 Dy. Director



MANAV RACHNA UNIVERSITY

Declared as State Private University vide Haryana Act 26 of 2014

Semester: 5
Subject Code: CDO303
Max Marks: 50

Subject: Career Skills-II
Time: 60 Mins
Date - 17/12/2022

NAME:.....
Roll No:.....
Branch: Phy/Chem/Maths Session - II

Instructions: All questions are compulsory. Each question carries multiple options.
No negative marking. Calculator is not allowed. **Answers are to be filled in the answer table only.**
Answers written outside the answer table won't be considered.

Answer Table:

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50

1. If a bus travels 320 km in 8 hrs and a train travels 640 kms in 10 hours at uniform speed, then what is the ratio of distance travelled by them in one hour?
A. 8 : 5 B. 5 : 8 C. 4 : 5 D. 1 : 2
2. Mohan reaches his factory 3 minutes late if his speed from his house of the factory is 5 km/hr. If he walks at a speed of 6 km/hr, then he reaches the factory 7 minutes early. The distance of the factory from his house is?
A. 6 km B. 5 km C. 7 km D. 8 km
3. If a train runs at 20 km/hr, it reaches its destination late by 22 min. but if it runs at 30 km/hr it is late by 10 min. only. The correct time for the train to complete its journey is?
A. 14 min. B. 10 min. C. 19 min. D. 21 min.
4. A person crosses a 1200 m long street in 10 minutes. What is his speed in kmph?
A. 3.6 kmph B. 7.2 kmph C. 8.4 kmph D. 10 kmph
5. A train covers a distance in 50 minutes, if it runs at a speed of 48 kmph on an average. The speed at which the train must run to reduce the time of journey to 40 mins is?
A. 70 kmph B. 60 kmph C. 55 kmph D. 65 kmph
6. A car travels the first one-third of a certain distance with a speed of 10 km/hr, the next one-third distance with a speed of 20 km/hr and the last one-third distance with a speed of 60 km/hr. The average speed of the car for the whole journey is?
A. 18 kmph B. 24 kmph C. 30 kmph D. 36 kmph
7. A train travels at a certain average speed for a distance of 63 km and then travels a distance of 72 km at an average speed of 6 kmph more than its original speed. If it takes 3 hours to complete the total journey, what is the original speed of the train in kmph?
A. 24 kmph B. 33 kmph C. 42 kmph D. 66 kmph
8. If a flight of 600 km an aircraft was slowed down due to bad weather. Its average speed for the trip was reduced by 200 kmph and the time of flight increased by 30 minutes. The duration of the flight is?
A. 1 hr B. 2 hr C. 3 hr D. 4 hr

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9. A car covers four successive 6 km stretches at 20 km/hr, 40 km/hr, 60 km/hr and 80 km/hr respectively. Its average speed over this distance is?

- A. 20 kmph B. 30 kmph C. 35.5 kmph D. 40 kmph

10. M, N and O can complete the work in 18, 36 and 54 days respectively. M started the work and worked for 8 days, then N and O joined him and they all worked together for some days. M left the job one day before completion of work. For how many days they all worked together?

- A. 4 B. 5 C. 3 D. 6

11. Paul and Bipin together can do a piece of work in 8 days. If Paul alone can do the same work in 12 days, then Bipin alone can do the same work in?

- A. 20 days B. 16 days C. 24 days D. 28 days

12. To complete a work, a person Ram takes 10 days and another person Bikas takes 15 days. If they work together, in how much time will they complete the work?

- A. 2 days B. 6 days C. 4 days D. 8 days

13. Two friends Aman and Raghav working together can complete an assignment in 4 days. If Aman can do the assignment alone in 12 days, in how many days can Raghav alone do the assignment?

- A. 2 days B. 6 days C. 4 days D. 8 days

14. P can do a piece of work in 4 days. Q can do it in 5 days. With the assistance of R they completed the work in 2 days. Find in how many days can R alone do it?

- A. 10 days B. 20 days C. 5 days D. 4 days

15. After working for 6 days, Ashok finds that only $\frac{1}{3}$ rd of the work has been done. He employs Ravi who is 60% as efficient as Ashok. How many days more would Ravi take to complete the work?

- A. 19 days B. 10 days C. 20 days D. 12 days

16. Three taps A, B and C can fill a tank in 12, 15 and 20 hours respectively. If A is open all the time and B and C are open for one hour each alternately, the tank will be full in:

- A. $20\frac{2}{3}$ hours B. 6 hours C. $15\frac{1}{2}$ hours D. 7 hours

17. A large tanker can be filled by two pipes A and B in 60 minutes and 40 minutes respectively. How many minutes will it take to fill the tanker from empty state if B is used for half the time; A and B fill it together for the other half?

- A. 15 min B. 20 min C. 27.5 min D. 30 min

18. Three pipes A, B and C can fill a tank in 6 hours. After working at it together for 2 hours, C is closed and A and B can fill the remaining part in 7 hours. The number of hours taken by C alone to fill the tank?

- A. 10 B. 12 C. 14 D. 16

19. Two pipes can fill a tank in 25 and 30 minutes respectively and a waste pipe can empty 3 gallons per minute. All the three pipes working together can fill the tank in 15 minutes. The capacity of the tank is:

- A. 250 gallons B. 450 gallons C. 120 gallons D. 150 gallons

20. Two pipes P and Q can fill a tank in 15 minutes and 40 minutes respectively. Both the pipes are opened together but after 4 minutes, pipe P is turned off. What is the total time required to fill the tank?

- A. 10 min 10 sec B. 25 min 20 sec C. 29 min 20 sec D. 20 min 10 sec

21. If in a certain language, COUNSEL is coded as BITIRAK, how is GUIDANCE written in that code?

- A. OHYFZJBB B. OFHBJZYB C. BJZYBHFO D. FOHYZJBB

22. If in a certain code, TWENTY is written as 863985 and ELEVEN is written as 323039, how is TWELVE written in that code?

- A. 203863 B. 368302 C. 863203 D. 320368

23. In a certain code language, '851' means 'good sweet fruit', '783' means 'good red rose' and '341' means 'rose and fruit'. Which of the following digits stands for 'sweet' in that language?

- A. 2 B. 3 C. 4 D. 5

24. In a certain code language, 'col tip mot' means 'singing is appreciable', 'mot baj min' means 'dancing is good' and 'tip nop baj' means 'singing and dancing', then, which of the following means 'good' in that code language?

- A. Mot B. Baj C. Min D. Nop

25. If DELHI is coded as CCIDD, how would you encode BOMBAY?

- A. AJMTVT B. AMJXVS C. MIXVSU D. WXYZAX

26. If in a certain language, SHIFT is coded as RFFBO, which word would be coded as LKUMB?

- A. MMXQG B. MLVNC C. KJVLA D. MJVLC

27. In a certain code, RIPPLE is written as 613382 and LIFE is written as 8192. How is PILLER written in that code?

- A. 318826 B. 318286 C. 618826 D. 338816

28. If PALAM could be given the code number 43, what code number can be given to SANTACRUZ?

- A. 75 B. 85 C. 120 D. 123

29. If 'gnr tag zog qmp' stands for 'Seoul Olympic Organising committee', 'hyto gnr emf' stands for 'summer Olympic games' and 'esm sdr hyto' stands for 'modern games history', what would be the code for 'summer'?

- A. hyto B. gnr C. emf D. zog

30. If Z = 52 and ACT = 48, then BAT will be equal to

- A. 39 B. 41 C. 44 D. 46

Direction (31-35) Choose the correct form of Verb that is in agreement with the subject-

31. She _____ her office by 9 a.m. daily.

- A. reach B. reaches C. reached D. reaching

32. The information which _____ obtained from the business owners _____ relevant to be included in the study.

- A. has, is B. had, has C. has, have D. is, is

33. The student or the committee members _____ everyday and each of the members _____ most welcome for that.

- A. write, are B. write, is C. writes, is D. write, were

34. Shubham as well as his brothers _____ coming today.

- A. are B. had been C. is D. have been

35. Prachi is one of the students who _____ passed the exam.

- A. have B. has C. had been D. would have

Direction (36-39) Choose the correct answer from the options given below-

36. Why _____, you should be listening to me?

- A. you talk B. you are talking C. do you talk D. are you talking

37. You _____ into things and break them. How can someone be so clumsy?

- A. are always bumping B. always bumps C. always bumping D. always bump

38. I _____ working all afternoon. I have just finished the assignment.

- A. have been B. had been C. shall be D. am

39. By the next month, we shall _____ the project.

- A. has completed B. completing C. completed D. have completed

Direction (40-41) Choose the correct sentence.

40. A. When I woke up, he has already eaten breakfast.

B. When I woke up, he had already eaten breakfast.

C. When I had woken up, he had already eaten breakfast.

D. When I had woken up, he has already eaten breakfast.

41. A Monika likes playing Ludo, carroms, and play chess.
 B. Monika likes playing Ludo, play carroms, and to play chess
 C. Monika likes playing Ludo, carroms, and chess
 D. Monika likes to play Ludo, carroms, and playing chess.

Direction (42-45) Choose the correct answer from the options given below-

42. The art studio is spacious, pleasantly cluttered, _____.
 A. and has good lighting B. and being well-lit C. and is lit well D. and well-lit

43. For lunch I would like _____.
 A. fried eggs and to bake potatoes. B. baked potatoes and to fry eggs.
 C. to fry eggs and bake potatoes. D. None of the above.

44. A way to avoid misplaced modifiers is to place the modifier close to the word it modifies.
 A. True B. False C. Can't say D. None of these

45. Which word is being modified? His costume, which was quite original, was just a cardboard box.
 A. costume B. large C. cardboard D. original

In the following the questions choose the word which best expresses the meaning of the given word.

46. CORPULENT-
 A. Lean B. Gaunt C. Emaciated D. Obese

47. Brief-
 A. Limited B. Small C. Little D. Short

48. Alert-
 A. Energetic B. Watchful C. Intelligent D. Observant

Each sentence below consists of a word or a phrase which is underlined. It is followed by four words or phrases. Select the word or phrase which is the OPPOSITE in the meaning of the word or phrase underlined.

49. The inhabitants of the island were barbarians.
 A. civilized B. cruel C. uncivilized D. bad
50. The members thought that the task was feasible.
 A. unfeasible. B. impossible C. difficult D. impracticable

(Signature)
 Dy. Director CDC

DEPARTMENT OF CHEMISTRY
End term Examination January 2023

SEMESTER	I st	DATE OF EXAM	23-01-2023
SUBJECT NAME	Environmental Sciences	SUBJECT CODE	CHH137
BRANCH	B.Sc. B.Ed./B.A. B.Ed.	SESSION	I
TIME	09:00 AM to 11:00 AM	MAX. MARKS	50
PROGRAM	B.Sc. B.Ed / B.A. B.Ed	CREDITS	4
NAME OF FACULTY	Dr Meena Kapahi	NAME OF COURSE COORDINATOR	Dr Meena Kapahi

Note: All questions are compulsory. Marks are indicated against each question.

Q.NO.	QUESTIONS	MARKS	CO ADDRESS ED	BLOOM'S LEVEL	PI
PART-A	Q1(A) In a population pyramid, the vertical axis is represents i. Male population ii. Female population iii. Age groups of population iv. Total number of population	1	CO2	L1	
	Q1(B) Choose the correct statement i. Ozone is a pollutant in the stratosphere. ii. Ozone saves us from UV rays in the stratosphere and is a pollutant in our immediate environment iii. CO ₂ is responsible for stratospheric ozone layer depletion iv. None of the options	1	CO2 CO2	L2	
	Q1(C) Thermal pollution is a kind of i. Water pollution ii. Air pollution iii. Soil pollution iv. None of the above	1	CO2	L1	
	Q1(D) Which statement is correct? i. A large proportion of children in a population is a result of high life expectancy ii. A large proportion of children in a population is a result of high birth rates iii. A large proportion of children in a population is a result of high replacement level iv. A large proportion of children in a population is a result of high death rates	1	CO2	L2	
	Q1(E) Which of the following is a renewable source of energy? i. Ocean currents ii. Solar energy	1	CO2	L1	

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		iii. Biomass iv. All of the above				
	Q1(F)	Which of the following is not a primary pollutant? i. Oxygen ii. Ground-level ozone iii. Carbon monoxide iv. Carbon dioxide	1	C04	L2	
	Q1(G)	Assertion: Polythene bags and plastic containers are non-biodegradable substances. Reason: They can be broken down by microorganisms in natural simple harmless substances. i. Both 'A' and 'R' are true and 'R' is correct explanation of the Assertion. ii. Both 'A' and 'R' are true but 'R' is not correct explanation of the Assertion. iii. 'A' is true but 'R' is false. iv. 'A' is false but 'R' is true. Select the appropriate choice from the (i) - (iv)	1	C03	L1	
	Q1(H)	An extensive number of chains interlinked in an ecosystem forms a: i. Food chain ii. Food web iii. Carbon cycle iv. Nitrogen cycle	1	C02	L1	
	Q1(I)	Botanical garden is an example of: (i) Ex-situ conservation (ii) In-situ conservation (iii) Both of the above (iv) None of the above	1	C02	L2	
	Q1(J)	Which of the following is an example of biotic resource? (i) Coal (ii) Crude oil (iii) Biogas (iv) All of the above	1	C02	L2	
	Q2	Briefly explain the structure of an ecosystem. Discuss.	2.5	C03	L1	
PART-B	Q3	In order to solve/tackle environmental issues and provide complete solutions, we require a multidisciplinary approach. Comment giving suitable examples (at least 2).	5	C04	L3	
	Q4	What are the necessary actions we should take when floods are predicted?	5	C02	L4	
	Q5	What are the effects of thermal pollution? What measures would you suggest to control water pollution around you?	2+3 =5	C03	L1	
	Q6	Differentiate between species diversity and ecological diversity.	2.5	C03	L2	
	Q7	How does agriculture run-off effect ecosystems? How does this change move through the food web?	2+3 =5	C02	L1	
RT-						

Q8	What are the causes and effects of global warming?	5	C03	L3
Q9	Which of the following according to you is the major cause for loss of biodiversity amongst the four main causes of loss of biodiversity (Habitat loss and fragmentation, alien species invasion, over-exploitation and co-extinctions)? Justify your pick.	2.5	C03	L3
Q10	Explain the ecosystem service. Write any three ecosystem services rendered by the natural ecosystem.	2+3 =5	C04	L3
Q11	What can we infer from the population pyramids? Explain.	2.5	C04	L2
