Exam Name: APDCL_Assistant Manager_Electronics and Communication

Total Questions : 100

Description

Important Examination Instructions

- 1. Each question will carry 1 (One) Mark for correct answer.
- 2. There will be a negative marking of 0.25 (one-fourth) marks for wrong answer
- 3. Do not use the alt-tab, mouse or any other device to shift from examination screen to any other screen or do not try to open any other application while attempting the examination. Doing so may result in discontinuation of examination and your examination will be considered as null and void. Attempting to close the browser repeatedly will lock the exam.

How to use the system:

- 1. How to start the test: You can start the test by clicking the Declaration Check box and then 'I am ready to begin button'.
- 2. How to change the question: For the move to the next question you have to click on the 'Save And Next' button the same as for move to the back, click on the 'Previous' button.
- 3. How to answer a question: You can select any answer by clicking on the button displayed just before the answers. You have to finally click the button Save and Next to save your answer and move to the next question. In Exam Sections, the Red Circle corresponding to this question turns Green. You can go to any section / any question number by clicking the relevant control.
- 4. How to skip the question: You can click the "Next Question" control to move on the next question
- 5. How to mark a question for review: If you want to review any question later, you have to click the "Review" checkbox. This answer will be marked for review.
- 6. How to Submit your test: By clicking On last question and Submit Test button one popup window display asking for "Are you sure, you want to Submit your test?" You have to click on "YES" to submit your test.
- Circle symbols displayed at the bottom of the screen:
 - -Red Color: Current Question.
 - -Green Color: Attempted Question.
 - -White Color: Unattempted Question.
 - -Blue Color: Attempted and Reviewed Question.
 - -Violet Color: Unattempted and Reviewed Question

Q.1	The power factor in a RLC series circuit will be lagging if	
Ma	rks 1	Question ID: 2406
No	Options Details	Correct Option
1	Inductive drop is lesser than capacitive drop	
2	Inductive drop is greater than equal to capacitive drop	
3	Inductive drop is equal to capacitive drop	
4	Inductive drop is greater than capacitive drop	✓

Q.2	The superposition theorem is used when the circuit contains	
Ма	rks 1	Question ID: 2407
No	Options Details	0
1 - 1 -	Options Details	Correct Option
1	A single voltage source	Correct Option
1 2	<u> </u>	Correct Option
1	A single voltage source	Correct Option ✓

For transfer of maximum power, the relation between load resistance R internal resistance r of the voltage source is

(A) R = 2r

(B) R = r

(C) R = 1.5r

(D) R = 0.5r

Ма		Question ID: 2408
No	Options Details	Correct Option
1	A	
2	В	✓
3	C	
4	D	

Following are the hybrid parameters for a network

 $\begin{bmatrix} h_{11} & h_{12} \\ h_{21} & h_{22} \end{bmatrix} = \begin{bmatrix} 5 \\ 3 \end{bmatrix}$

Determine the 'y' parameters for the network

$$y_{11} = \frac{1}{5}s$$

$$y_{12} = \frac{-6}{5}s$$

$$y_{21} = \frac{3}{5}s$$

$$y_{22} = \frac{-24}{5}s$$

(B)
$$y_{11} = \frac{1}{5}s$$
$$y_{12} = \frac{6}{5}s$$
$$y_{21} = \frac{3}{5}s$$
$$y_{22} = \frac{24}{5}s$$

$$y_{11} = \frac{1}{5}s$$

$$y_{12} = \frac{-6}{5}s$$

$$y_{21} = \frac{3}{5}s$$

$$y_{22} = \frac{24}{5}s$$

$$y_{11} = \frac{1}{5}s$$

$$y_{12} = \frac{6}{5}s$$

$$y_{21} = \frac{-3}{5}s$$

$$y_{22} = \frac{-24}{5}s$$

Marks 1

Question ID: 2409

No	Options Details	Correct Option
1	A	
2	В	
3	С	✓
4	D	

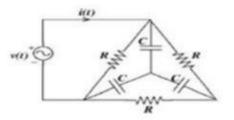
Q.5 Zero-state response is also known as

Marks 1

Question ID: 2410

No	Options Details	Correct Option
1	Free response	
2	Natural response	
3	Forced response	✓
4	Initial response	

In the circuit shown, if $V(t) = 2\sin(1000t)$ volts, $R = 1k \Omega$ and $C = 1 \mu F$, then steady state current i(t), in milli amperes (mA) is



- (A) Sin(1000t) + Cos(1000t)
- (B) 2Sin(1000t) + 2Cos(1000t)
- (C) Sin(1000t) + 3Cos(1000t)
- (D) 3Sin(1000t) + Cos(1000t)

 Marks
 1

 No
 Options Details
 Correct Option

 1
 A

 2
 B

 3
 C

 4
 D

Q.7 Which among the following belongs to the category of non-recursive systems?

Marks 1

Question ID: 2412

Question ID:

No	Options Details	Correct Option
1	Causal IIR Systems	
2	Non-causal FIR Systems	
3	Causal FIR Systems	✓
4	Non-causal IIR Systems	

The input-output relation of given continuous time systems

The input-output rel
$$y(t) = \{x(t)\} = \frac{1}{T} \int_{t-\frac{T}{2}}^{t+\frac{T}{2}} x(\tau) d\tau.$$

- (A) Linear
- (B) Time invariant
- (C) Non-causal
- (D) Linear, Time invariant and Non-causal

Marks 1

Question ID:

2413

No	Options Details	Correct Option
1	A	
2	В	
3	С	
4	D	✓

Q.9 An LTI system is said to be causal if and only if?

Marks 1

Question ID:

2414

No	Options Details	Correct Option
1	Impulse response is non-zero for positive values of n	
2	Impulse response is zero for positive values of n	
3	Impulse response is zero for negative values of n	✓
4	Impulse response is non-zero for negative values of n	

Q.10 Which of the following device has reverse recovery time is nearly zero

Marks 1

Question ID:

2415

No	Options Details	Correct Option
1	Zener diode	
2	Schottky diode	✓
3	PIN diode	
4	Tunnel diode	

(A) 3*10¹º cm⁻³ (B) 0.4*10⁻¹º cm⁻³ (C) 2.5*10¹º cm⁻³ (D) 2.5*10° cm⁻² (D) 2.5*10° cm² (D)	Q .1	,	Wha	t is the value of effe	ective density of s	sta	ates function in	conduction	ban
No Options Details Correct Option			(A)	$3*10^{19}cm^{-3}$	(B))	$0.4*10^{-19} cm^{-3}$		
Marks 1 2416		((C)	$2.5*10^{-19}cm^{-3}$	(D))	$2.5*10^{19} cm^{-3}$		
1	Ма	rks 1	1					1 1	
2 B 3 C 4 D 7 Q.12 At very high temperatures the extrinsic semiconductors become intrinsic because Marks 1				Options	s Details			Correct Option	
At very high temperatures the extrinsic semiconductors become intrinsic because Question ID: 2417									
Q.12									
Marks 1 Question ID: 2417 No Options Details Correct Option 1 drive in diffusion of dopants and carriers ————————————————————————————————————	4	D						✓	İ
Mo Options Details Correct Option 1 drive in diffusion of dopants and carriers Correct Option 2 impurity ionization dominants over band to band transition Joand to band transition dominants over impurity ionization 4 band to band transition is balanced by impurity ionization Joand to band transition is balanced by impurity ionization Q.13 An LED has a rating of 2 V and 10 mA. It is used along with 6V battery range of series resistance is (A) 0 to 200 Ω (B) 200 - 400 Ω (C) 200 Ω and above (D) 400 Ω and above Marks 1 No Options Details Correct Option 1 A Correct Option 2 B Correct Option	Q .1	12 A	∖t very	high temperatures the extrins	ic semiconductors becom	пе	intrinsic because	Question ID:	
1 drive in diffusion of dopants and carriers 2 impurity ionization dominants over band to band transition 3 band to band transition dominants over impurity ionization 4 band to band transition is balanced by impurity ionization Q.13 An LED has a rating of 2 V and 10 mA. It is used along with 6V battery range of series resistance is (A) 0 to 200 Ω (B) 200 - 400 Ω (C) 200 Ω and above (D) 400 Ω and above Marks 1 No Options Details Correct Option 1 A 2 B 3 C	Ма	rks 1	1					11	
Impurity ionization dominants over band to band transition Impurity ionization Im				-	s Details			Correct Option	
band transition band transition dominants over impurity ionization 4 band to band transition is balanced by impurity ionization An LED has a rating of 2 V and 10 mA. It is used along with 6V battery range of series resistance is (A) 0 to 200 Ω (B) 200 - 400 Ω (C) 200 Ω and above (D) 400 Ω and above Question ID: 2418		l .							
Impurity ionization		band trans	sition						
Q.13 An LED has a rating of 2 V and 10 mA. It is used along with 6V battery range of series resistance is (A) 0 to 200 Ω (B) 200 - 400 Ω (C) 200 Ω and above (D) 400 Ω and above An LED has a rating of 2 V and 10 mA. It is used along with 6V battery range of series resistance is (A) 0 to 200 Ω (B) 200 - 400 Ω Question ID: 2418 Options Details Correct Option A B C C C C C C C C C C C C C C C C C C		impurity io	nizatio	on				✓	
An LED has a rating of 2 V and 10 mA. It is used along with 6V battery range of series resistance is (A) 0 to 200 Ω (B) 200 - 400 Ω (C) 200 Ω and above (D) 400 Ω and above Marks 1 Options Details Correct Option A B C C C C C C C C C C C C C C C C C C	4								
(C) 200 Ω and above Question ID: 2418	Q .1			(2017) - 1 전 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		It	t is used along	with 6V bat	tery
Marks 1 No Options Details Correct Option 1 A 2 B 3 C			(A)	0 to 200 Ω	(B	3)	200 - 400 Ω		
No Options Details Correct Option 1 A 2 B 3 C			(C)	200 Ω and above	(D))	400 Ω and ab	ove	
1 A 2 B 3 C	Ma	rks 1	1					1 1 1	
2 B 3 C	No			Options	s Details			Correct Option	
3 C									
4 D ✓									
	-	C						l	!

Q.1	The change in the carrier density is due to	
		Question ID:
Ma	rks 1	2419
No	Options Details	Correct Option
1	Difference of incoming and outgoing flow of	√
	flux minus recombination	·
2	Difference of incoming and outgoing flow of flux	
3	Flow of outgoing flux	
4	Flow of incoming flux	
Q.1	15 Which among the below mentioned devices acts as a driver in CMOS Inverter Circuit?	
~	Trinon among the bolow mentioned devices date as a direct in one of inverter chedit.	
		Question ID:
Ма	rks 1	2420
No	Options Details	Correct Option
1	Bi-CMOS	
2	MOSFET	
3	NMOS	✓
4	PMOS	
Q.1	Which resistance plays a significant role in stabilization of Q-point for self-biasing circu	uit of BJT?
		Question ID:
Ma	rks 1	2421
No	Options Details	Correct Option
1	Emitter resistance	
	Emilier resistance	✓
2	Collector resistance	✓
2		✓

Q.1	7 Ideally, for linear operation, a transistor should be biased so that the Q-point is	
Ma	rks 1	Question ID: 2422
No	Options Details	Correct Option
1	near saturation.	
2	halfway between cutoff and saturation	✓
3	where IC is maximum	
4	near cutoff	

Q.18		For two identical stages in cascade, the drop-off rate in the high- and low-frequency r increased to ——— per decade.	egions has
Ма	rks	1	Question ID: 2423
No		Options Details	Correct Option
1	-3 dB		
2	-6 dB		
3	-20 dB		
4	-40 dB		✓

4	-40 dB	✓
Q.1	The ——— in the Fourier series has the same frequency as the square wave itself.	
Ma	rks 1	Question ID: 2424
No	Options Details	Correct Option
1	Fundamental harmonic	✓
2	Second harmonic	
3	Fourth harmonic	
4	Any harmonic	

Q.20 DTFT of the signal $5^{-2}x(-t-7)$ is (A) $5^{-2}e^{j7\omega}X(\omega)$ (B) $5^2 e^{j7\omega} X(\omega)$ (C) $5^2 e^{-j7\omega} X(-\omega)$ (D) $5^{-2}e^{-j7\omega}X(-\omega)$ Question ID: Marks 1 2425 No **Options Details Correct Option** Α 1 2 В 3 C 4 D Q.21 Which circuit is used to get desired part of input at the output using an Op-amp? Question ID: Marks 1 2426 No **Options Details Correct Option** 1 Peak amplifier 2 Clipper 3 Clamper 4 Sample and hold Q.22 How to minimize the response time and increase the operating frequency range of the op-amp? Question ID: Marks 1

Options Details

No

1

2

3

4

Positive halfwave rectifier with two diodes

Positive halfwave rectifier with one diode

Negative halfwave rectifier with two diodes

Negative halfwave rectifier with one diode

2427

Correct Option

Q.2	Why is self-bias circuit not used in IC amplifier?	
Ma	rks 1	Question ID: 2428
No	Options Details	Correct Option
1	To reduce power losses	
2	To reduce area used on the chip	✓
3	Stability factor reduces in the IC	
4	Voltage gain is reduced	

Q.2	24	What will be the overall gain in Darlington circuit, if individual transistor gain is 200?	
Ма	ırks	1	Question ID: 2429
No		Options Details	Correct Option
1	10000		
2	400		
3	4000		
4	40000		✓

Q.2	How to improve CMRR value?	
Ма	rks 1	Question ID: 2430
No	Options Details	Correct Option
1	Increase common mode gain	
2	Increase Open-loop gain	
3	Decrease common mode gain	✓
4	Decrease differential mode gain	

<u>2</u> 6	•				
	In Darlington pair dif	ferential amplifier, t	the	current gain	is given as 100
		[19] [12] [10] [10] [10] [10] [10] [10] [10] [10			
	(A) 0.5mA	(1	B)	2mA	
	(C) 1.5mA	(I	D)	0.15 mA	
					Question ID:
rks	1				2431
	Ор	tions Details			Correct Option
A					
С					
D					✓
					ī
rks	1				Question ID: 2432
	_	tions Details			Correct Option
	<u> </u>				
_	<u> </u>				✓
28	How a differential instrumentation controller?	n amplifier using transducer	brid	ge can be used as	a temperature
rks	1				Question ID: 2433
	Ор	tions Details			Correct Option
_	-				
Replace	thermistor by light intensity meter				
Dani	s calibrated meter with relay				
	B C D 27 rks Enhance Degrade No losse Low pov	In Darlington pair diff I _{B1} = 5 \(\alpha A \) and I _{C1} = 0.3 (A) 0.5 mA (C) 1.5 mA rks 1 Op A B C D What happens if inductors are us rks 1 Op Enhance inductor usage Degrades inductor performance No losses occur Low power dissipation 28 How a differential instrumentation controller? rks 1 Op Increase room temperature Change the bridge resistance	In Darlington pair differential amplifier, it I _{B1} = 5 \(\alpha A \) and I _{C1} = 0.35 \(\alpha A \). Determine Io (A) 0.5 mA (D)	In Darlington pair differential amplifier, the IB1 = 5 \(\alpha A \) and IC1 = 0.35 \(\alpha A \). Determine IC2 (A) 0.5 mA (B) (C) 1.5 mA (D) TKS 1 Options Details A B C D What happens if inductors are used in low frequency applications TKS 1 Options Details Enhance inductor usage Degrades inductor performance No losses occur Low power dissipation 28 How a differential instrumentation amplifier using transducer brid controller? TKS 1 Options Details Increase room temperature Change the bridge resistance	In Darlington pair differential amplifier, the current gain $I_{B1} = 5\mu A$ and $I_{C1} = 0.35\mu A$. Determine I_{C2} (A) 0.5mA (B) 2mA (C) 1.5mA (D) 0.15mA Options Details A B C D What happens if inductors are used in low frequency applications? What happens if inductors are used in low frequency applications? This is a second of the programment of the programm

Q.2	Which type of amplifier has output voltage equal to the average of all input voltages?	
		Question ID:
Ma	rks 1	2434
IVIG		2434
No	Options Details	Correct Option
1	Inverting averaging amplifier	
2	Non-inverting summing amplifier	
3	Non-inverting averaging amplifier	✓
4	Inverting scaling amplifier	
Q.3	To a non-inverting mode Schmitt trigger, an input triangular wave of 1Vp is applied. We output waveform, if the upper and lower threshold voltages are 0.25v?	hat will be the
Ма	rks 1	Question ID: 2435
No	Options Details	Correct Option
1	Square waveform	✓
2	Pulse waveform	V
3	Sawtooth waveform	
4	Cannot be determined	
Q.3		Question ID: 2436
	·	
No	Options Details	Correct Option
1	2	
2	6	
3	8	✓
4	5	
	<u> </u>	
Q.3	The representation of octal number (532.2)8 in decimal is	
Q.3		Question ID: 2437
		1
Ма	rks 1	2437 Correct Option
Ma No	rks 1 Options Details	2437
Ma No	rks 1 Options Details (346.25)10	2437 Correct Option

Γ

Q.3		s a matrix of
	squares.	
		Question ID:
Ma	rks 1	2438
No	Options Details	Correct Option
1	Cycle Diagram	
2	Venn Diagram	✓
3	Block diagram	
4	Triangular Diagram	
Q.3	Odd parity of word can be conveniently tested by	
		Question ID:
Ma	rks 1	2439
No	Options Details	Correct Option
1	OR gate	
2	AND gate	
3	NAND gate	
4	XOR gate	✓
Q.3	An important characteristic of a CMOS circuit is the	
Q.3	An important characteristic of a CMOS circuit is the	
Q.3	An important characteristic of a CMOS circuit is the	
Q.3	An important characteristic of a CMOS circuit is the	
Q.3	An important characteristic of a CMOS circuit is the	Question ID:
Q.3		Question ID:
		Question ID: 2440
	rks 1	
Ма	rks 1 Options Details	2440
Ma No	rks 1	2440
Ma No	rks 1 Options Details Noise immunity	2440 Correct Option
Ma No 1 2	rks 1 Options Details Noise immunity Symmetricity Duality	2440
No 1 2 3	rks 1 Options Details Noise immunity Symmetricity	2440 Correct Option
No 1 2 3 4	Options Details Noise immunity Symmetricity Duality Noise Margin	2440 Correct Option
No 1 2 3	Options Details Noise immunity Symmetricity Duality Noise Margin	2440 Correct Option
No 1 2 3 4	Options Details Noise immunity Symmetricity Duality Noise Margin	2440 Correct Option
No 1 2 3 4	Options Details Noise immunity Symmetricity Duality Noise Margin	2440 Correct Option
No 1 2 3 4	Options Details Noise immunity Symmetricity Duality Noise Margin	2440 Correct Option ✓
Ma No 1 2 3 4	Options Details Noise immunity Symmetricity Duality Noise Margin 66 One example of the use of an S-R flip-flop is as	2440 Correct Option ✓ Question ID:
No 1 2 3 4	Options Details Noise immunity Symmetricity Duality Noise Margin One example of the use of an S-R flip-flop is as	2440 Correct Option ✓
Ma No 1 2 3 4	Options Details Noise immunity Symmetricity Duality Noise Margin One example of the use of an S-R flip-flop is as rks 1	Question ID: 2441
Ma No 1 2 3 4 Q.3	Options Details Noise immunity Symmetricity Duality Noise Margin One example of the use of an S-R flip-flop is as rks 1 Options Details	2440 Correct Option ✓ Question ID:
Ma No 1 2 3 4 Q.3	Price of the use of an S-R flip-flop is as Options Details Noise immunity Symmetricity Duality Noise Margin One example of the use of an S-R flip-flop is as Price of the use of an S-R flip-flop is as Options Details Transition pulse generator	Question ID: 2441 Correct Option
Ma No 1 2 3 4 Q.3 Ma No 1 2	Options Details Noise immunity Symmetricity Duality Noise Margin One example of the use of an S-R flip-flop is as rks 1 Options Details Transition pulse generator Switch debouncer	2440 Correct Option ✓ Question ID: 2441
Ma No 1 2 3 4 Q.3	Price of the use of an S-R flip-flop is as Options Details Noise immunity Symmetricity Duality Noise Margin One example of the use of an S-R flip-flop is as Price of the use of an S-R flip-flop is as Options Details Transition pulse generator	Question ID: 2441 Correct Option

Ma	rks 1	Question ID: 2442
No	Options Details	Correct Option
1	Parallel data word	
2	Clock frequency	
3	Counter modulus	
4	Clock count	✓
Q.3	The group of bits 11001 is serially shifted (right-most bit first) into a 5-bit parallel outpu with an initial state 01110. After three clock pulses, the register contains	ıt shift register
Ma	rks 1	Question ID: 2443
No	Options Details	Correct Option
1	01110	
2	00001	
3	00101	✓
4	00110	
Q.ŝ	Which type of device may be used to interface a parallel data format with external equipment format?	ipment's serial
Ma	•	Question ID: 2444
No	Options Details	Correct Option

The parallel outputs of a counter circuit represent the

Q.37

UART

Key matrix

Memory chip

Series in Parallel out

1

2

4

Q.4	Dynamic memory cells use as the storage device.	
		Question ID:
Ma	rks 1	2445
No	Options Details	Correct Option
1	The reactance of a transistor	
2	The impedance of a transistor	
3	The capacitance of a transistor	✓
4	The inductance of a transistor	
		I
Q.4	The input devices use to store the data received	
Q.4	The input devices use ——— to store the data received	
		Overtion ID:
Ma	mlan d	Question ID:
Ma	rks 1	2446
No	Ontions Dataile	Correct Option
	Options Details	Correct Option
2	Primary Memory Buffer	
3		✓
4	Secondary Memory	
	External Manager	
4	External Memory	
	External Memory	
Q.4		
		Question ID:
	The flash type A/D converters are called as	Question ID: 2447
Q.4	The flash type A/D converters are called as	
Q.4	The flash type A/D converters are called as	
Q.4	The flash type A/D converters are called as rks 1	2447
Q.4	The flash type A/D converters are called as rks 1 Options Details	2447
Q.4 Ma	The flash type A/D converters are called as rks 1 Options Details Parallel non-inverting A/D converter	2447
Ma No 1 2	The flash type A/D converters are called as rks 1 Options Details Parallel non-inverting A/D converter Parallel counter A/D converter	2447
Q.4 Ma No 1 2 3	The flash type A/D converters are called as rks 1 Options Details Parallel non-inverting A/D converter Parallel counter A/D converter Parallel inverting A/D converter	2447
Q.4 Ma No 1 2 3 4	The flash type A/D converters are called as Options Details Parallel non-inverting A/D converter Parallel counter A/D converter Parallel inverting A/D converter Parallel comparator A/D converter Parallel comparator A/D converter	2447
Q.4 Ma No 1 2 3	The flash type A/D converters are called as rks 1 Options Details Parallel non-inverting A/D converter Parallel counter A/D converter Parallel inverting A/D converter Parallel comparator A/D converter Parallel comparator A/D converter	2447
Q.4 Ma No 1 2 3 4	The flash type A/D converters are called as Options Details Parallel non-inverting A/D converter Parallel counter A/D converter Parallel inverting A/D converter Parallel comparator A/D converter Parallel comparator A/D converter	2447
Q.4 Ma No 1 2 3 4	The flash type A/D converters are called as Options Details Parallel non-inverting A/D converter Parallel counter A/D converter Parallel inverting A/D converter Parallel comparator A/D converter Parallel comparator A/D converter	2447
Q.4 Ma No 1 2 3 4	The flash type A/D converters are called as Options Details Parallel non-inverting A/D converter Parallel counter A/D converter Parallel inverting A/D converter Parallel comparator A/D converter Parallel comparator A/D converter	2447 Correct Option ✓
Q.4 Ma No 1 2 3 4	The flash type A/D converters are called as Options Details Parallel non-inverting A/D converter Parallel counter A/D converter Parallel inverting A/D converter Parallel comparator A/D converter Parallel comparator A/D converter Which of the following is an example of an open loop system?	2447 Correct Option ✓ Question ID:
Q.4 Ma No 1 2 3 4	The flash type A/D converters are called as Options Details Parallel non-inverting A/D converter Parallel counter A/D converter Parallel inverting A/D converter Parallel comparator A/D converter Parallel comparator A/D converter Which of the following is an example of an open loop system?	2447 Correct Option ✓
Q.4 Ma No 1 2 3 4	The flash type A/D converters are called as Options Details Parallel non-inverting A/D converter Parallel counter A/D converter Parallel inverting A/D converter Parallel comparator A/D converter Parallel comparator A/D converter Which of the following is an example of an open loop system?	Correct Option ✓ Question ID: 2448
Q.4 No 1 2 3 4 Ma No	The flash type A/D converters are called as Options Details Parallel non-inverting A/D converter Parallel counter A/D converter Parallel inverting A/D converter Parallel comparator A/D converter Parallel comparator A/D converter Which of the following is an example of an open loop system? rks 1 Options Details	2447 Correct Option ✓ Question ID:
Q.4 No 1 2 3 4 No 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	The flash type A/D converters are called as Options Details Parallel non-inverting A/D converter Parallel counter A/D converter Parallel inverting A/D converter Parallel comparator A/D converter Parallel comparator A/D converter Which of the following is an example of an open loop system? Is Options Details Household Refrigerator	Correct Option ✓ Question ID: 2448
Q.4 No 1 2 3 4 Ma No	The flash type A/D converters are called as Options Details Parallel non-inverting A/D converter Parallel counter A/D converter Parallel inverting A/D converter Parallel comparator A/D converter Parallel comparator A/D converter Parallel omparator A/D converter Options Details Household Refrigerator Stabilization of air pressure entering into the	Correct Option ✓ Question ID: 2448
Q.4 No 1 2 3 4 Ma No 1	The flash type A/D converters are called as Options Details Parallel non-inverting A/D converter Parallel counter A/D converter Parallel inverting A/D converter Parallel comparator A/D converter Parallel comparator A/D converter Which of the following is an example of an open loop system? Is Options Details Household Refrigerator	Correct Option ✓ Question ID: 2448

Γ

If the characteristic equation of closed loop system is $s^2 + 2s + 2 = 0$, then system is

(A) Critically damped

(B) Undamped

(C) Over damped

(D) Under damped

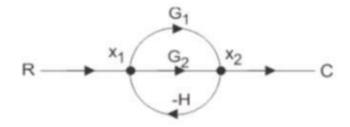
Question ID:

Question ID:

Ma	rks 1	2449	
No	Options Details	Correct Option]
1	A		1
2	В		1
3	C		1

Q.45

Use mason's gain formula to find the transfer function of the given figure:



(A) G1+G2

(B) G1+G1/1-G1H+G2H

(C) G1+G2/1+G1H+G2H

(D) G1-G2

Ма	rks 1	2450
No	Options Details	Correct Option
1	A	
2	В	
3	С	✓
4	D	

Q.4	16	A control system with excessive noise, is likely to suffer from			
			Question ID:		
Ma	rke	1	1		
IVIA	IVO		2451		
Nia		Ontione Details	Correct Ontion		
No	0:	Options Details	Correct Option		
1		on in amplifying stages	✓		
2	Loss of (
3	Vibration				
4	Oscillatio	ons			
Q.4	17	For getting 100% modulation, carrier amplitude should			
Q.2	+ /	For getting 100% modulation, carrier amplitude should			
			Question ID:		
Ma	rks	1	2452		
No		Options Details	Correct Option		
1	exceed s	signal amplitude	•		
2		to signal amplitude	✓		
3	-	r than signal amplitude	•		
	De lesse				
. /1	ho ogua	4 be equal to zero			
4	be equa	to zero			
4	be equa	to zero			
Q.4	· · · · · · · · · · · · · · · · · · ·				
	· · · · · · · · · · · · · · · · · · ·	Modem is considered as high speed if data rate is			
	· · · · · · · · · · · · · · · · · · ·				
	· · · · · · · · · · · · · · · · · · ·				
	· · · · · · · · · · · · · · · · · · ·		Question ID:		
Q.4	18	Modem is considered as high speed if data rate is	Question ID:		
	18		Question ID: 2453		
Q.4	18	Modem is considered as high speed if data rate is 1	2453		
Q.4 Ma	ł8 rks	Modem is considered as high speed if data rate is	1		
Q.4 Ma	rks	Modem is considered as high speed if data rate is 1	2453		
Ma No 1 2	rks 10000 20000	Modem is considered as high speed if data rate is 1	2453		
Q.4 Ma	rks 10000 20000 5000	Modem is considered as high speed if data rate is 1	2453		
Ma No 1 2	rks 10000 20000	Modem is considered as high speed if data rate is 1	Correct Option		
Q.4 Ma No 1 2 3	rks 10000 20000 5000	Modem is considered as high speed if data rate is 1	2453 Correct Option		
Q.4 Ma No 1 2 3 4	rks 10000 20000 5000 30000	Modem is considered as high speed if data rate is 1 Options Details	2453 Correct Option ✓		
Q.4 Ma No 1 2 3	rks 10000 20000 5000 30000	Modem is considered as high speed if data rate is 1	2453 Correct Option ✓		
Q.4 Ma No 1 2 3 4	rks 10000 20000 5000 30000	Modem is considered as high speed if data rate is 1 Options Details	2453 Correct Option ✓		
Q.4 Ma No 1 2 3 4	rks 10000 20000 5000 30000	Modem is considered as high speed if data rate is 1 Options Details	2453 Correct Option ✓		
Q.4 Ma No 1 2 3 4	rks 10000 20000 5000 30000	Modem is considered as high speed if data rate is 1 Options Details	2453 Correct Option ✓		
Q.4 Ma No 1 2 3 4	rks 10000 20000 5000 30000	Modem is considered as high speed if data rate is 1 Options Details	2453 Correct Option ✓		
Q.4 Ma No 1 2 3 4	rks 10000 20000 5000 30000	Modem is considered as high speed if data rate is 1 Options Details A 400W carrier wave is modulated to a depth of 65%. Find the total power of modulated	2453 Correct Option ✓ ed wave?		
Q.4 Ma No 1 2 3 4	rks 10000 20000 5000 30000	Modem is considered as high speed if data rate is 1 Options Details	2453 Correct Option ✓ ed wave?		
Q.4 Ma No 1 2 3 4	rks 10000 20000 5000 30000	Modem is considered as high speed if data rate is 1 Options Details A 400W carrier wave is modulated to a depth of 65%. Find the total power of modulated	2453 Correct Option ✓ ed wave? Question ID: 2454		
Q.4 No 1 2 3 4 Ma No	rks 10000 20000 5000 30000	Modem is considered as high speed if data rate is 1 Options Details A 400W carrier wave is modulated to a depth of 65%. Find the total power of modulated	2453 Correct Option ✓ ed wave?		
Q.4 No 1 2 3 4 No 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	rks 10000 20000 5000 30000	Modem is considered as high speed if data rate is 1 Options Details A 400W carrier wave is modulated to a depth of 65%. Find the total power of modulated	2453 Correct Option ✓ ed wave? Question ID: 2454		
Q.4 No 1 2 3 4 Ma No	rks 10000 20000 5000 30000	Modem is considered as high speed if data rate is 1 Options Details A 400W carrier wave is modulated to a depth of 65%. Find the total power of modulated	2453 Correct Option ✓ ed wave? Question ID: 2454		

Q.ŧ	50	The intermediate frequency of a super heterodyne receiver is 500KHz. What is the im	age frequency at
Q.50		1200 KHz?	age frequency at
			Question ID:
Ма	rks	1	2455
No		Options Details	Correct Option
1	700KHz		✓
2	500KHz		
3	650KHz		
4	200KHz		
Q.5	51	Shot noise is generated in	
			Question ID:
Ма	rks	1	2456
No		Options Details	Correct Option
1	resistors		
2	inductors		
3		rs and diodes	✓
4	capacito	rs	
Q.5	52	Determine the Bandwidth of a FM wave when the maximum deviation allowed is 75KH	z and the
		modulating signal has a frequency of 10KHz.	
			Question ID:
Ma	rks	1	2457
No		Options Details	Correct Option
	470 1411		
1	170 KHz		✓

107 KHz 106 KHz

Q.5	Choosing a discrete value that is near but not exactly at the analog signal level leads t	0		
Ma	rks 1	Question ID: 2458		
No	Options Details	Correct Option		
1	PCM error	Correct Option		
2	Quantization error	✓		
3	PAM error	•		
4	Sampling error			
Q.5	Which reduces the dynamic range of quantization noise in PCM?			
Ма	rks 1	Question ID: 2459		
No	Options Details	Correct Option		
1	Adaptive quantizer	✓		
2	Non-uniform quantizer			
3	Uniform quantizer			
4	Vector quantizer			
Q.5	is the mechanism of sending data bits multiple times to ensure consistency.			
Ма	rks 1	Question ID: 2460		
No	Options Details	Correct Option		
1	Repetition	✓		
2	Duplication			
3	Mirroring			
4	Redundancy			
Q.5	Q.56 Find the current density of a material with resistivity 20 units and electric field intensity 2000 units.			
Ма	Marks 1			
No	Options Details	Correct Option		
1	400			
'				
2	200			
3 4	200 300 100			

Q.5	Find the angle at which the potential due a dipole is measured, when the distance from 12cm and that due to other is 11cm, separated to each other by a distance of 2cm.	one charge is
Ма	ks 1	Question ID: 2462
No	Options Details	Correct Option
1	15	
2	30	
3	45 60	
4	00	✓
Q.ŧ	8 The depth of penetration of a wave in a lossy dielectric increase with increasing	
Ма	ks 1	Question ID: 2463
No	Options Details	Correct Option
1	Conductivity	
3	Permeability Wavelength	
4	Permittivity	✓
	1 Ormitavity	
Q.59 Consider a transmission line of characteristic impedance 50 ohm. Let it be terminated at one end b +j50 ohm. The VSWR produced by it in the transmission line will be		at one end by
Ма	ks 1	Question ID:
		2404
No	Options Details	Correct Option
1	+j	
1 2	+j 0	
1	+j	

Q.6	Q.60				
		The product of the phase and the group veloc	cities is given by	tne	
		$(A) Square \ of \ the \ speed \ of \ light \qquad \qquad (B)$	(speed of light)	/4	
		(C) $2 \times Speed of light$ (D)	Speed of light/	2	
				Question ID:	
Ма	rks	1		2465	
No		Options Details		Correct Option	
1	Α			✓	
2	В				
3	C D				
4	D				
Q.6	61	The average age of 6 students is 11 years. If two more student find their average age.	s of age 14 years and	16 Years Join	
		mid them dverdge age.			
				Question ID:	
Ма	rks	1		2466	
No		Options Details		Correct Option	
1	12 Years			✓	
2	15 Years				
3	13 Years				
4	22 Years				
Q.6	62	30 Pens and 75 pencils were purchased for Rs.510. If the average price of a pen	age price of a pencil w	as Rs. 2/- find	
		the average price of a pen			
				Question ID:	
Ma	rks	1		2467	
No		Options Details		Correct Option	
1	Rs. 15/-				
2	Rs. 12			✓	
3 4	Rs. 12 Rs. 16 Rs. 18			✓	

Q.6	A: B = 5: 7 and B: C = 6: 11 so find A: B: C?	
Ма	rks 1	Question ID: 2468
No	Options Details	Correct Option
1	42 : 30 : 77	
2	30 : 42 : 77	✓
3	26:40:25	
4	30 : 44 : 77	

Q.6	64	Find 10% of 5% of 320	
Ма	ırks	1	Question ID: 2469
No		Options Details	Correct Option
1	7/5		
2	9/5		
3	8/5		✓
4	6/5		

Q.6	Find the gain or loss if selling price (sp) = Rs. 585 and cost price (CP) Rs. 485	
Ma	rks 1	Question ID: 2470
No	Options Details	Correct Option
1	Rs. 95 gain	
2	10 gain	
3	105 gain	
4	100 gain	✓

Q.6	66	A man purchased a table for Rs. 653 at what price should he sell it to gain Rs. 57?	
Ма	rks	1	Question ID: 2471
No		Options Details	Correct Option
1	Rs. 700		
2	725		
3	710		✓
4	705		

Q.6	Q.67 Find the amount if principal = Rs. 8000 rate = 10% perannum (pa) and time 5 Years		
Ma	rks	1	Question ID: 2472
No		Options Details	Correct Option
1	12000/-		✓
2	11000/-		
3	10000/-		
4	11500/-		

Q.6	Q.68 A man borrows Rs. 500 and Pays back after 18 months at 14% per annum. Find the sin		imple Interest.
			Question ID:
Ma	ırks	1	2473
No		Options Details	Correct Option
1	Rs. 100		
2	105		✓
3	101		
4	120		

Q.6	As 'Fan' is related to "breeze' in the same way 'Electricity' is related to which?	
Ма	rks 1	Question ID: 2474
No	Options Details	Correct Option
1	Dark ness	
2	Current	
3	Light	✓
4	Attraction	

Q.7	70	Find the distance covered by a man walking for 12 main at a speed of 3.5 KM	
Ma	rks	1	Question ID: 2475
No		Options Details	Correct Option
1	500 M		
2	200 M		
3	800 M		
4	700 M		✓

Q.7	71	Sound travels at the speed of 330 m/s How many kilometres will it travel in one hour	
Ма	rks	1	Question ID: 2476
No		Options Details	Correct Option
1	1080		
2	1133		
3	1188		✓
4	1180		

Q.7	72	A train covers a distance of 200 Km with a speed of 10 Km/h what time is t this distance?	aken by the train to cover
Ма	ırks	1	Question ID: 2477
No		Options Details	Correct Option
1	30 h		
2	25 h		
3	20 h		✓
4	35 h		

Q.73 Length of rectangle = 300 m breadth = 50m then find area b) 14002 m² a) 15002 m² d) 15000 m² c) 15500 m² Question ID: Marks 2478 1 **Correct Option** No **Options Details** 1 Α В 2 3 С 4 D

Q.74		The side of a square room is 12 meter. Find the cost of carpeting the room at the rate square meter?	e of Rs. 5 per
Ма	rks	1	Question ID: 2479
No		Options Details	Correct Option
1	700		
2	720		✓
3	725		
4	750		
Q.7	7 5	107 Cm is equivalent to	
			Question ID:
Ma	rks	1	2480
No		Options Details	Correct Option
1	10.7m	Options Details	Correct Option
2	1.07m		-
3	0.107m		▼
4	1070		
Q.7	76	1 Km is equivalent to	
			Question ID:
Ma	rks	1	2481
No		Options Details	Correct Option

√

2

3

4

100000 m

10000 mm

1000000 mm

Q.:	77	what time is 3h 40 min before 2.30PM?	
			Question ID:
Ma	rks	1	2482
No		Options Details	Correct Option
1	11.00am		
2	10.50am		✓
3	11.30am		
4	11.55am		
Q.:	78		
		The value of 185 degree centigrade in Fahrenheit is?	
			Question ID:
Ma	rks	1	1
IVIA	IIKS		2483
No		Options Details	Correct Option
1	365		✓
2	360		
3	270		
4	400		
Q.7	79		
		A student was asked to find the arithmetic mean of the numbers 3,11,7,9,15,13,8,19,1 He found the mean to be 12 what should be the number in place of X.	7,21,14, and X.
		The found the mean to be 12 what should be the number in place of A.	
			Question ID:
Ma	rks	1	2484
	<u> </u>		
No		Options Details	Correct Option
1	3		
	7		_

Q.8	80	9572 - 4018 - 2164=?	
Ma	ırks	1	Question ID: 2485
IVIG		·	2465
No		Options Details	Correct Option
1	3300		
2	3390		✓
3	3570		
4	7718		
	•		

Q.8	"Long Walk to Freedom" was written by	
Ма	rks 1	Question ID: 2486
No	Options Details	Correct Option
1	Sachin Tendulkar	
2	Nelson Mandela	✓
3	M.K. Gandhi	
4	Gopalakrishna Gokhale	

Q.8	2018 Winter Olympics were held in	
Ма	rks 1	Question ID: 2487
No	Options Details	Correct Option
1	Japan	
2	England	
3	Russia	
4	South Korea	✓

Q.8	Car (Petrol) was invented by	
Ма	rks 1	Question ID: 2488
No	Options Details	Correct Option
1	Carrier	
2	Jean Lumiere	
3	Rudolf Diesel	
4	Karl Benz	✓

Q.8	Expand 'CAA'	
		Question ID:
Ma	rks 1	2489
No	Options Details	Correct Option
1	Civil Authority of Aviation	
2	Control Accounts and Audit	
3	Civil Aviation Authority	✓
4	Civil Aviation Association	
		1

Q.8	Which state of India is exempted from right to information act of India 2005?	
Ма	rks 1	Question ID: 2490
No	Options Details	Correct Option
1	Assam	
2	Meghalaya	
3	Jammu & Kashmir	✓
4	None of the above	

Q.8	The first Corona case was registered in India officially on	
		Question ID:
Ма	rks 1	2491
No	Options Details	Correct Option
1	January 30, 2020	✓
2	February 15, 2020	
3	March 20, 2020	
4	April 16, 2020	

Q.8	Martyr's Day is celebrated in Memory of this National Leader					
Ma	rks 1	Question ID: 2492				
No	Options Details	Correct Option				
1	Subhash Chandra Bose					
2	Bhagath Singh					
3	Mahatma Gandhi					
4	Bala Gangadhar Tilak					

Q.8	First recipient of Muppavarepu Venkaiah Naidu National Award (2020) is					
Ma	rks 1	Question ID: 2493				
No	Options Details	Correct Option				
1	M.S. Swaminathan	✓				
2	K. Gopal Rao					
3	G. Viswanathan					
4	Ravi Dube					

Q.8	39 "The Reminiscence" was written by	
Ма	irks 1	Question ID: 2494
No	Options Details	Correct Option
1	Sarojini Naidu	
2	Ravindranath Tagore	✓
3	A.B. Vajpayee	
4	Kuldip Nair	

Q.9	ITF World Championship for men was given to	
Ма	rks 1	Question ID: 2495
No	Options Details	Correct Option
1	Novac Djokovie	
2	Sainia Mirza	
3	Rafel Nadal	✓
4	Andy Murray	

Q.91							
	Company of the Compan	an power is the means of converting the other resource ake mankind's use and benefit.					
	Pick out the most appropria blank to make the above sent	te word from the below given words to tence meaningfully complete.					
	(A) insuperable	(B) indispensible					
	(C) indomitable	(D) innocent					
Marks	1	Question ID: 2496					
10	Options De	ails Correct Option					
1 A							
.		✓					
2 B 3 C							

Q.9)2		
		but to carry — their officer's ord	
		Choose the appropriate ph	ase.
		(A) out	(B) on
		(C) through	(D) away
Ma	arks	1	Question ID: 2497
No		Options	Details Correct Option
1	А		
2	В		
3	С		
4	D		

Q.	,,							
	Find out which part of the sentence has an error.							
		On my request / scientist.	Sarala introduced	me/ to	his	friend / v	who is	singer
		A	В		C		D	
Ma	rks	1					Question 2498	n ID:
No			Options Details				Correct C	Option
1	Α							
2	В							
3	C							
4	ט						✓	
Ma	rks	1					Question 2499	ı ID:
No			Options Details				Correct C	ption
1	crop							
2	ripple							
3	give						✓	
4	develop							
Q.9	95	The antonym of the word,	, conquest, is					
Ма	rks	1					Question 2500	ı ID:
No			Options Details				Correct C	Option
1	victory							
2	surrende	er						

3

4

compare rejoice

an

Q.96		The m	eaning of t	he idiom, once	in a blue m	noon, means				
Ma	rks	1								Question ID: 2501
No				Oı	ptions Deta	nils				Correct Option
1	rare occa	sions		<u> </u>						✓
2		e in a month								
3	everyday									
4	bi-weekly	/								
Q.9	97	Fill	in the b	lanks with	the app	oropriate v	word			
		He r	nade —		— his bu	ingalow to	o an o	rphanage		
		(A)	up				(B)	out		
		(C)	off				(D)	over		
Ma	rks	1								Question ID: 2502
No				O _I	ptions Deta	nils				Correct Option
2	A B									
3	С									
4	D									✓
										· ·
Q.9	98	0.00000		e sentence ave at Che			iate w	ord for		
		(C)	on				(D)	about		
Ma	rks	1								Question ID: 2503
No				Ol	ptions Deta	nils				Correct Option
1	Α						_			
2	В									✓
3	C D									
•										

Q.9	99					
		Fill in	the blanks with the app	propriate word		
		In	zoo, I saw —	oi	ne-eyed beggar.	3
		(A) a	,a	(B)	the, a	
		(C) a	, the	(D)	the, the	
						Question ID:
Ма	ırks	1				2504
No			Options Deta	ils		Correct Option
1	A					
3	B C					✓
4	D					
Q.	100	Fill in	the blanks with the app	ropriate word		
		The tea	acher warned the boy bu	ıt he ———	— to misbeh	ave.
		(A) co	ntinue	(B)	continues	
		(C) is	continuing	(D)	continued	
Ма	ırks	1				Question ID: 2505
No			Options Detail	ils		Correct Option
1	Α					
2	В					
3	С					
4	D					✓