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## ISRO PROPULSION COMPLEX

Participant ID	
Participant Name	
Test Center Name	
Test Date	20/09/2023
Test Time	8:30 AM - 10:30 AM
Subject	Technical Assistant Electronics

Section : Technical Assistant Electronics

Q.1

The device UJT has \_\_\_\_\_ PN junctions

- a) One
- b) Two
- c) Three
- d) None of the above

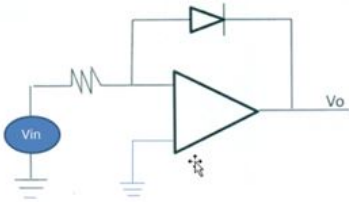
Ans  1. (a)  
 2. (b)  
 3. (c)  
 4. (d)



Question ID : 9941601621  
Option 1 ID : 9941606481  
Option 2 ID : 9941606482  
Option 3 ID : 9941606483  
Option 4 ID : 9941606484  
Status : Answered  
Chosen Option : 1

Q.2

The circuit shown in fig can be used as a.....



- a) Rectifier
- b) Logarithmic amplifier
- c) Voltage to frequency converter
- d) Frequency to voltage converter

- Ans
- 1. (a)
  - 2. (b)
  - 3. (c)
  - 4. (d)

Question ID : 9941601645  
Option 1 ID : 9941606577  
Option 2 ID : 9941606578  
Option 3 ID : 9941606579  
Option 4 ID : 9941606580  
Status : Answered  
Chosen Option : 2

Q.3

What happens to a call in fixed channel strategy, if all the channels in a cell are occupied?

- A. Queued
- B. Cross talk
- C. Blocked
- D. Delayed

- Ans
- 1. (a)
  - 2. (b)
  - 3. (c)
  - 4. (d)

Question ID : 9941601677  
Option 1 ID : 9941606705  
Option 2 ID : 9941606706  
Option 3 ID : 9941606707  
Option 4 ID : 9941606708  
Status : Answered  
Chosen Option : 2

Q.4 Which functions are performed by static timing analysis in simulation?

- A. Computation of delay for each timing path
- B. Logic analysis in a static manner
- C. Both a and b
- D. None of the above

- Ans
- 1. (a)
  - 2. (b)
  - 3. (c)
  - 4. (d)

Question ID : 9941601663  
Option 1 ID : 9941606649  
Option 2 ID : 9941606650  
Option 3 ID : 9941606651  
Option 4 ID : 9941606652  
Status : Answered  
Chosen Option : 3

Q.5 Pre emphasis is process of

- A. Generating side band in FM transmitter
- B. Detection in FM receiver
- C. Increasing amplitude of higher frequency during FM transmission
- D. Filtering of signal in FM reception

- Ans
- 1. (a)
  - 2. (b)
  - 3. (c)
  - 4. (d)

Question ID : 9941601637  
Option 1 ID : 9941606545  
Option 2 ID : 9941606546  
Option 3 ID : 9941606547  
Option 4 ID : 9941606548  
Status : Answered  
Chosen Option : 4

Q.6 What is the PCM word size of a channel with 1024 quantization levels per sample?

- A. 8 bits
- B. 10 bits
- C. 24 bits
- D. 12 bits

- Ans
- 1. (a)
  - 2. (b)
  - 3. (c)
  - 4. (d)

Question ID : 9941601671  
Option 1 ID : 9941606681  
Option 2 ID : 9941606682  
Option 3 ID : 9941606683  
Option 4 ID : 9941606684

Status : Answered  
Chosen Option : 3  
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**Q.7** A load is connected to a network. At the terminals to which the load is connected,  $R_{th}=10$  Ohms and  $V_{th}=40V$ . The maximum possible power supplied to the load is:

- A. 160W
- B. 80W
- C. 40W
- D. 1W

**Ans**  1. (a)  
 2. (b)  
 3. (c)  
 4. (d)

Question ID : 9941601613  
Option 1 ID : 9941606449  
Option 2 ID : 9941606450  
Option 3 ID : 9941606451  
Option 4 ID : 9941606452  
Status : Answered  
Chosen Option : 3

**Q.8** Companding in PCM provide

- A. Higher signal to quantization noise ratio
- B. Higher signal to noise ratio
- C. Higher gain
- D. Higher sensitivity

**Ans**  1. (a)  
 2. (b)  
 3. (c)  
 4. (d)

Question ID : 9941601643  
Option 1 ID : 9941606569  
Option 2 ID : 9941606570  
Option 3 ID : 9941606571  
Option 4 ID : 9941606572  
Status : Answered  
Chosen Option : 1

- Q.9 जब जेनर डायोड में धारा 2 के गुणांक से बढ़ा दी जाती है तो इसके सिरों के मध्य वोल्टता
- (A) आधी हो जाएगी
  - (B) दुगुनी हो जाएगी
  - (C) अपरिवर्तित रहेगी
  - (D) उपरोक्त मे से कोई नहीं

Ans  1. (a)  
 2. (b)  
 3. (c)  
 4. (d)

Question ID : 9941601606  
Option 1 ID : 9941606421  
Option 2 ID : 9941606422  
Option 3 ID : 9941606423  
Option 4 ID : 9941606424  
Status : Answered  
Chosen Option : 3

- Q.10 Which of the modulation techniques requires higher bandwidth?
- A. Coherent BASK
  - B. Coherent BFSK
  - C. Coherent BPSK
  - D. DPSK

Ans  1. (a)  
 2. (b)  
 3. (c)  
 4. (d)

Question ID : 9941601673  
Option 1 ID : 9941606689  
Option 2 ID : 9941606690  
Option 3 ID : 9941606691  
Option 4 ID : 9941606692  
Status : Answered  
Chosen Option : 2

Q.11 Degree of generator polynomial for (11,6) cyclic code is

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

Ans  1. (a)  
 2. (b)  
 3. (c)  
 4. (d)

Question ID : 9941601667  
Option 1 ID : 9941606665  
Option 2 ID : 9941606666  
Option 3 ID : 9941606667  
Option 4 ID : 9941606668  
Status : Not Answered  
Chosen Option : --

Q.12 Co channel reuse ratio for hexagonal geometry is

- A.  $\sqrt{3}N$
- B.  $3N$
- C.  $3\sqrt{N}$
- D.  $3N^2$

Ans  1. (a)  
 2. (b)  
 3. (c)  
 4. (d)

Question ID : 9941601679  
Option 1 ID : 9941606713  
Option 2 ID : 9941606714  
Option 3 ID : 9941606715  
Option 4 ID : 9941606716  
Status : Answered  
Chosen Option : 4

Q.13 एक संवर्धक का पावर आउटपुट दुगुना हो जाने पर, इसके पावर स्तर में वृद्धि dB में ----- है।

- a) 3 dB
- b) 10 dB
- c) 20 dB
- d) 40 dB

Ans  1. (a)

2. (b)

3. (c)

4. (d)

Question ID : 9941601650

Option 1 ID : 9941606597

Option 2 ID : 9941606598

Option 3 ID : 9941606599

Option 4 ID : 9941606600

Status : Answered

Chosen Option : 3

Q.14 Actual radio coverage of a cell is called \_\_\_\_\_

- A. Fingerprint
- B. Footprint
- C. Imprint
- D. Matrix

Ans  1. (a)

2. (b)

3. (c)

4. (d)

Question ID : 9941601676

Option 1 ID : 9941606701

Option 2 ID : 9941606702

Option 3 ID : 9941606703

Option 4 ID : 9941606704

Status : Answered

Chosen Option : 2



Q.15

If a body is considered as a conducting sphere of 0.5m radius its capacitance to infinity is\_\_\_\_\_

- A. 55 pF
- B. 60 pF
- C. 65 pF
- D. 75 pF

Ans  1. (a)

2. (b)

3. (c)

4. (d)

Question ID : 9941601626  
Option 1 ID : 9941606501  
Option 2 ID : 9941606502  
Option 3 ID : 9941606503  
Option 4 ID : 9941606504  
Status : Not Answered  
Chosen Option : --

Q.16

The reduction in the gain of an RC coupled amplifier at high frequency is due to\_\_\_\_\_

- a) transistor internal shunt capacitance
- b) biasing resistors
- c) coupling capacitors in the circuit
- d) output resistance of the transistor

Ans  1. (a)

2. (b)

3. (c)

4. (d)

Question ID : 9941601608  
Option 1 ID : 9941606429  
Option 2 ID : 9941606430  
Option 3 ID : 9941606431  
Option 4 ID : 9941606432  
Status : Answered  
Chosen Option : 3

Q.17 Octal to binary encoder has ---- number of output lines?

- A. 2
- B. 3
- C. 4
- D. 8

Ans  1. (a)  
 2. (b)  
 3. (c)  
 4. (d)

Question ID : 9941601633  
Option 1 ID : 9941606529  
Option 2 ID : 9941606530  
Option 3 ID : 9941606531  
Option 4 ID : 9941606532  
Status : Answered  
Chosen Option : 1

Q.18 Modulation index of critical modulation in AM is

- A. 0.5
- B. <1.0
- C. 1.0
- D. >1.0

Ans  1. (a)  
 2. (b)  
 3. (c)  
 4. (d)

Question ID : 9941601636  
Option 1 ID : 9941606541  
Option 2 ID : 9941606542  
Option 3 ID : 9941606543  
Option 4 ID : 9941606544  
Status : Answered  
Chosen Option : 3

Q.19

In microcontroller RISC stands for

- a) Reduced instruction set computer
- b) Redefined instruction set computer
- c) Restructured instruction set computer
- d) Regional instruction set computer

Ans  1. (a)  
 2. (b)  
 3. (c)  
 4. (d)

Question ID : 9941601651  
Option 1 ID : 9941606601  
Option 2 ID : 9941606602  
Option 3 ID : 9941606603  
Option 4 ID : 9941606604  
Status : Answered  
Chosen Option : 1

Q.20 Hamming distance between two code vector  $X=10101$  &  $Y=11011$  is

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

Ans  1. (a)  
 2. (b)  
 3. (c)  
 4. (d)

Question ID : 9941601675  
Option 1 ID : 9941606697  
Option 2 ID : 9941606698  
Option 3 ID : 9941606699  
Option 4 ID : 9941606700  
Status : Answered  
Chosen Option : 4

Q.21 In a step up chopper circuit, if  $V_s$  is the source voltage and  $\alpha$  is duty cycle, then output voltage is

- a)  $\frac{V_s}{1+\alpha}$
- b)  $V_s * (1+\alpha)$
- c)  $V_s * (1-\alpha)$
- d)  $\frac{V_s}{1-\alpha}$

Ans  1. (a)  
 2. (b)  
 3. (c)  
 4. (d)

Question ID : 9941601627  
Option 1 ID : 9941606505  
Option 2 ID : 9941606506  
Option 3 ID : 9941606507  
Option 4 ID : 9941606508  
Status : Answered  
Chosen Option : 4

Q.22 In an inverting amplifier, the two input terminals of ideal operational amplifiers are at the same potential because.....

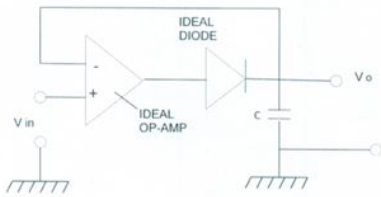
- a) The input impedance of the operational amplifier is infinite
- b) The two input terminals are directly shorted internally
- c) Open loop gain of the amplifier is infinite
- d) Common mode rejection ratio is infinite

Ans  1. (a)  
 2. (b)  
 3. (c)  
 4. (d)

Question ID : 9941601644  
Option 1 ID : 9941606573  
Option 2 ID : 9941606574  
Option 3 ID : 9941606575  
Option 4 ID : 9941606576  
Status : Answered  
Chosen Option : 2

Q.23

The circuit shown in fig can be used as a \_\_\_\_\_



- a) Half wave rectifier
- b) Logarithmic amplifier
- c) Schmitt trigger
- d) Peak detector

Ans  1. (a)  
 2. (b)  
 3. (c)  
 4. (d)

Question ID : 9941601647  
Option 1 ID : 9941606585  
Option 2 ID : 9941606586  
Option 3 ID : 9941606587  
Option 4 ID : 9941606588  
Status : Answered  
Chosen Option : 3

Q.24 Which of the following requires a load to close the circuit

- A. D.C. shunt generator
- B. D.C. series generator
- C. D.C. compound generator
- D. None of the above

Ans  1. (a)  
 2. (b)  
 3. (c)  
 4. (d)

Question ID : 9941601616  
Option 1 ID : 9941606461  
Option 2 ID : 9941606462  
Option 3 ID : 9941606463  
Option 4 ID : 9941606464  
Status : Not Answered  
Chosen Option : --

Q.25 The resistivity of a conductor depends on

- A. Area of the conductor
- B. Length of the conductor
- C. Type of material of which conductor is made
- D. All of the above

Ans  1. (a)  
 2. (b)  
 3. (c)  
 4. (d)

Question ID : 9941601618  
Option 1 ID : 9941606469  
Option 2 ID : 9941606470  
Option 3 ID : 9941606471  
Option 4 ID : 9941606472  
Status : Answered  
Chosen Option : 3

Q.26 What is the advantage of using VLSI technology?

- A. Reduced power consumption
- B. Increased processing speed
- C. Smaller chip size
- D. All of the above

Ans  1. (a)  
 2. (b)  
 3. (c)  
 4. (d)

Question ID : 9941601665  
Option 1 ID : 9941606657  
Option 2 ID : 9941606658  
Option 3 ID : 9941606659  
Option 4 ID : 9941606660  
Status : Answered  
Chosen Option : 4

Q.27 What is the name of the process used in VLSI to create patterns on the silicon wafer?

- A. Etching
- B. Deposition
- C. Lithography
- D. Doping

Ans  1. (a)  
 2. (b)  
 3. (c)  
 4. (d)

Question ID : 9941601662  
Option 1 ID : 9941606645  
Option 2 ID : 9941606646  
Option 3 ID : 9941606647  
Option 4 ID : 9941606648  
Status : Answered  
Chosen Option : 3

Q.28 Notch filter is a

- A. Band pass filter
- B. Band stop filter
- C. Low pass filter
- D. High pass filter

Ans  1. (a)  
 2. (b)  
 3. (c)  
 4. (d)

Question ID : 9941601640  
Option 1 ID : 9941606557  
Option 2 ID : 9941606558  
Option 3 ID : 9941606559  
Option 4 ID : 9941606560  
Status : Answered  
Chosen Option : 2

Q.29 Which one of the following purpose cannot be served by flip-flop

- A. storage register
- B. counter
- C. frequency divider
- D. Multiplexer

- Ans
- 1. (a)
  - 2. (b)
  - 3. (c)
  - 4. (d)

Question ID : 9941601630  
Option 1 ID : 9941606517  
Option 2 ID : 9941606518  
Option 3 ID : 9941606519  
Option 4 ID : 9941606520  
Status : Answered  
Chosen Option : 4

Q.30 1x2 demultiplexer in cascade with two numbers of 1x4 de multipleer can be used for selecting -----number of output lines?

- A. 1
- B. 2
- C. 4
- D. 8

- Ans
- 1. (a)
  - 2. (b)
  - 3. (c)
  - 4. (d)

Question ID : 9941601634  
Option 1 ID : 9941606533  
Option 2 ID : 9941606534  
Option 3 ID : 9941606535  
Option 4 ID : 9941606536  
Status : Not Answered  
Chosen Option : --



Q.31

Gas used in plasma display is

- A. Xenon
- B. Neon
- C. Either A or B
- D. None of the above

Ans  1. (a)  
 2. (b)  
 3. (c)  
 4. (d)

Question ID : 9941601638  
Option 1 ID : 9941606549  
Option 2 ID : 9941606550  
Option 3 ID : 9941606551  
Option 4 ID : 9941606552  
Status : Answered  
Chosen Option : 3

Q.32

Intermediate frequency in FM receiver is

- A. 10.0MHz
- B. 11.0MHz
- C. 10.7MHz
- D. 11.7MHz

Ans  1. (a)  
 2. (b)  
 3. (c)  
 4. (d)

Question ID : 9941601642  
Option 1 ID : 9941606565  
Option 2 ID : 9941606566  
Option 3 ID : 9941606567  
Option 4 ID : 9941606568  
Status : Answered  
Chosen Option : 3

Q.33 Channels responsible for initiating mobile calls are

- A. FCC and RCC
- B. FVC & FCC
- C. RVC & RCC
- D. FVC & RVC

Ans  1. (a)  
 2. (b)  
 3. (c)  
 4. (d)

Question ID : 9941601678

Option 1 ID : 9941606709

Option 2 ID : 9941606710

Option 3 ID : 9941606711

Option 4 ID : 9941606712

Status : **Not Attempted and  
Marked For Review**

Chosen Option : --

Q.34 The error correction codes used in data transmission leads to ----- of memory when the data is stored

- a. Increase
- b. Decrease
- c. Remains same
- d. Partially decreases

Ans  1. (a)  
 2. (b)  
 3. (c)  
 4. (d)

Question ID : 9941601632

Option 1 ID : 9941606525

Option 2 ID : 9941606526

Option 3 ID : 9941606527

Option 4 ID : 9941606528

Status : **Not Answered**

Chosen Option : --

Q.35

Number of IO ports in 8051 microcontroller?

- a) 1
- b) 2
- c) 3
- d) 4

Ans  1. (a)  
 2. (b)  
 3. (c)  
 4. (d)

Question ID : 9941601652  
Option 1 ID : 9941606605  
Option 2 ID : 9941606606  
Option 3 ID : 9941606607  
Option 4 ID : 9941606608  
Status : Answered  
Chosen Option : 4

Q.36

An inverting amplifier has  $R_F = 28\text{ K}$  and  $R_{IN} = 7\text{ K}$ . Its closed loop gain is .....

- a) 5
- b) 4
- c) -5
- d) -4

Ans  1. (a)  
 2. (b)  
 3. (c)  
 4. (d)

Question ID : 9941601649  
Option 1 ID : 9941606593  
Option 2 ID : 9941606594  
Option 3 ID : 9941606595  
Option 4 ID : 9941606596  
Status : Answered  
Chosen Option : 4

Q.37

\_\_\_\_\_ray is used to transfer a geometric design from an optical mask to a light-sensitive chemical (photoresist) coated on the substrate.

- A. Ultraviolet light
- B. Infrared
- C. Gamma
- D. Heat

Ans  1. (a)

2. (b)

3. (c)

4. (d)

Question ID : 9941601659

Option 1 ID : 9941606633

Option 2 ID : 9941606634

Option 3 ID : 9941606635

Option 4 ID : 9941606636

Status : Answered

Chosen Option : 1

Q.38

4) A  $2\Omega$  resistor carrying current of 5A will dissipate power of

- A. 10Watts
- B. 20Watts
- C. 50Watts
- D. 100Watts

Ans  1. (a)

2. (b)

3. (c)

4. (d)

Question ID : 9941601612

Option 1 ID : 9941606445

Option 2 ID : 9941606446

Option 3 ID : 9941606447

Option 4 ID : 9941606448

Status : Answered

Chosen Option : 3

Q.39

In 8051 microcontroller, the instruction MOV A, @R1 is used to \_\_\_\_\_

- a) Copy the content of R<sub>1</sub> to accumulator
- b) Copy the content of accumulator to R<sub>1</sub>
- c) Copy the content of memory location whose address is specified in R<sub>1</sub> to the accumulator
- d) Copy the content of accumulator to a memory whose address is specified in R<sub>1</sub>

- Ans
- 1. (a)
  - 2. (b)
  - 3. (c)
  - 4. (d)

Question ID : 9941601658  
Option 1 ID : 9941606629  
Option 2 ID : 9941606630  
Option 3 ID : 9941606631  
Option 4 ID : 9941606632  
Status : Answered  
Chosen Option : 3

Q.40

Which of the following is not a characteristic of symmetrical network?

- A. Input and output terminal can be interchanged
- B. Propagation constant
- C. Terminal impedances on both sides are not equal
- D. Characteristic impedance

- Ans
- 1. (a)
  - 2. (b)
  - 3. (c)
  - 4. (d)

Question ID : 9941601639  
Option 1 ID : 9941606553  
Option 2 ID : 9941606554  
Option 3 ID : 9941606555  
Option 4 ID : 9941606556  
Status : Answered  
Chosen Option : 3

Q.41

The voltage induced in an inductor is represented as,

- A. Product of its inductance and current through it.
- B. Ratio of its inductance to current through it.
- C. Ratio of current through it to its inductance.
- D. Product of its inductance and rate of change of current through it.

- Ans
- 1. (a)
  - 2. (b)
  - 3. (c)
  - 4. (d)

Question ID : 9941601611  
Option 1 ID : 9941606441  
Option 2 ID : 9941606442  
Option 3 ID : 9941606443  
Option 4 ID : 9941606444  
Status : Answered  
Chosen Option : 4

Q.42

The negative resistance in the tunnel diode is available \_\_\_\_\_

- a) in reverse bias condition
- b) between peak and valley point
- c) in forward characteristic curve up to peak point
- d) None of the above

- Ans
- 1. (a)
  - 2. (b)
  - 3. (c)
  - 4. (d)

Question ID : 9941601602  
Option 1 ID : 9941606405  
Option 2 ID : 9941606406  
Option 3 ID : 9941606407  
Option 4 ID : 9941606408  
Status : Answered  
Chosen Option : 2

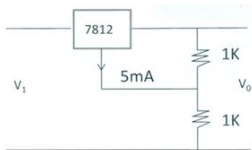
Q.43 Value of coupling coefficient  $k$  in case of magnetic coupling is

- A.  $k > 1$
- B.  $1 < k$
- C.  $0 < k < 1$
- D.  $0 > k > 1$

Ans  1. (a)  
 2. (b)  
 3. (c)  
 4. (d)

Question ID : 9941601610  
Option 1 ID : 9941606437  
Option 2 ID : 9941606438  
Option 3 ID : 9941606439  
Option 4 ID : 9941606440  
Status : Answered  
Chosen Option : 3

Q.44 A 12 volt monolithic regulator is adjusted to obtain a higher output voltage as shown in fig. The output voltage  $V_o$  will be.....



- a) 13 V
- b) 15 V
- c) 17 V
- d) 24 V

Ans  1. (a)  
 2. (b)  
 3. (c)  
 4. (d)

Question ID : 9941601609  
Option 1 ID : 9941606433  
Option 2 ID : 9941606434  
Option 3 ID : 9941606435  
Option 4 ID : 9941606436  
Status : Not Answered  
Chosen Option : --

Q.45 In DPSK technique, the technique used to encode bits is

- A. AMI
- B. Differential code
- C. Unipolar RZ format
- D. Manchester format

Ans  1. (a)  
 2. (b)  
 3. (c)  
 4. (d)

Question ID : 9941601672  
Option 1 ID : 9941606685  
Option 2 ID : 9941606686  
Option 3 ID : 9941606687  
Option 4 ID : 9941606688  
Status : Answered  
Chosen Option : 2

Q.46 When a common emitter (CE) amplifier operates with  $I_C = V_{CC}/R_L$ , the amplifier is said to be in \_\_\_\_\_

- a) cut off
- b) active region
- c) saturation
- d) class A operation

Ans  1. (a)  
 2. (b)  
 3. (c)  
 4. (d)

Question ID : 9941601605  
Option 1 ID : 9941606417  
Option 2 ID : 9941606418  
Option 3 ID : 9941606419  
Option 4 ID : 9941606420  
Status : Not Answered  
Chosen Option : --



Q.47

In Minimum shift keying (MSK) the frequency deviation among signals is

- A. Twice bit rate
- B. Half of the bit rate
- C. One fourth of bit rate
- D. One bit rate

Ans  1. (a)  
 2. (b)  
 3. (c)  
 4. (d)

Question ID : 9941601674  
Option 1 ID : 9941606693  
Option 2 ID : 9941606694  
Option 3 ID : 9941606695  
Option 4 ID : 9941606696  
Status : Answered  
Chosen Option : 2

Q.48

Which of the following is not a property of TRAP interrupt in 8085 microprocessor?

- a) it is maskable interrupt
- b) it is of highest priority
- c) it is vectored interrupt
- d) None of the above

Ans  1. (a)  
 2. (b)  
 3. (c)  
 4. (d)

Question ID : 9941601656  
Option 1 ID : 9941606621  
Option 2 ID : 9941606622  
Option 3 ID : 9941606623  
Option 4 ID : 9941606624  
Status : Answered  
Chosen Option : 1

Q.49

Converter circuit is used for converting \_\_\_\_\_

- a) DC to AC
- b) AC to DC
- c) AC to AC
- d) None of the above

- Ans
- 1. (a)
  - 2. (b)
  - 3. (c)
  - 4. (d)

Question ID : 9941601622  
Option 1 ID : 9941606485  
Option 2 ID : 9941606486  
Option 3 ID : 9941606487  
Option 4 ID : 9941606488  
Status : Answered  
Chosen Option : 1

Q.50

The emitter of a transistor is ..... doped

- a) heavily
- b) moderately
- c) lightly
- d) none of the above

- Ans
- 1. (a)
  - 2. (b)
  - 3. (c)
  - 4. (d)

Question ID : 9941601601  
Option 1 ID : 9941606401  
Option 2 ID : 9941606402  
Option 3 ID : 9941606403  
Option 4 ID : 9941606404  
Status : Answered  
Chosen Option : 1

Q.51

If  $\alpha = 0.97$ , calculate the  $\beta$  of the transistor

- a) 19
- b) 32
- c) 49
- d) 99

Ans  1. (a)  
 2. (b)  
 3. (c)  
 4. (d)

Question ID : 9941601603  
Option 1 ID : 9941606409  
Option 2 ID : 9941606410  
Option 3 ID : 9941606411  
Option 4 ID : 9941606412  
Status : Answered  
Chosen Option : 2

Q.52 A PMMC meter can be used as voltmeter by connecting a ..... to it

- A. Shunt resistor
- B. Capacitor
- C. Inductor
- D. Series resistor

Ans  1. (a)  
 2. (b)  
 3. (c)  
 4. (d)

Question ID : 9941601614  
Option 1 ID : 9941606453  
Option 2 ID : 9941606454  
Option 3 ID : 9941606455  
Option 4 ID : 9941606456  
Status : Answered  
Chosen Option : 4

Q.53

What is the binary equivalent of the octal number 74?

- A. 111100
- B. 101111
- C. 110111
- D. 100101

Ans  1. (a)  
 2. (b)  
 3. (c)  
 4. (d)

Question ID : 9941601629  
Option 1 ID : 9941606513  
Option 2 ID : 9941606514  
Option 3 ID : 9941606515  
Option 4 ID : 9941606516  
Status : Answered  
Chosen Option : 1

Q.54

Inter symbol interference occurs when

- A. Channel bandwidth is higher than signal bandwidth
- B. Channel bandwidth is same as signal bandwidth
- C. SNR is lower
- D. Multiple signals of same power is transmitted

Ans  1. (a)  
 2. (b)  
 3. (c)  
 4. (d)

Question ID : 9941601670  
Option 1 ID : 9941606677  
Option 2 ID : 9941606678  
Option 3 ID : 9941606679  
Option 4 ID : 9941606680  
Status : Answered  
Chosen Option : 3

Q.55

TRIAC is equivalent to two SCRs connected in \_\_\_\_\_

- a) Parallel
- b) Series
- c) Inverse parallel
- d) Inverse series

- Ans
- 1. (a)
  - 2. (b)
  - 3. (c)
  - 4. (d)

Question ID : 9941601623  
Option 1 ID : 9941606489  
Option 2 ID : 9941606490  
Option 3 ID : 9941606491  
Option 4 ID : 9941606492  
Status : Answered  
Chosen Option : 3

Q.56

In a pseudo noise sequence, the pulse type is

- A. NRZ
- B. RZ
- C. RZ-AMI
- D. None of the above

- Ans
- 1. (a)
  - 2. (b)
  - 3. (c)
  - 4. (d)

Question ID : 9941601668  
Option 1 ID : 9941606669  
Option 2 ID : 9941606670  
Option 3 ID : 9941606671  
Option 4 ID : 9941606672  
Status : Answered  
Chosen Option : 1

Q.57 What is the total capacitance when 10 nos of capacitors each of  $20\mu\text{F}$  is connected in series

- A.  $200\mu\text{F}$
- B.  $0.5\mu\text{F}$
- C.  $0.05\mu\text{F}$
- D.  $2.0\mu\text{F}$

Ans  1. (a)  
 2. (b)  
 3. (c)  
 4. (d)

Question ID : 9941601617  
Option 1 ID : 9941606465  
Option 2 ID : 9941606466  
Option 3 ID : 9941606467  
Option 4 ID : 9941606468  
Status : Answered  
Chosen Option : 4

Q.58 What causes channel noise?

- A. Thermal noise
- B. Noise from other users
- C. Noise from switching circuits
- D. All of the above

Ans  1. (a)  
 2. (b)  
 3. (c)  
 4. (d)

Question ID : 9941601669  
Option 1 ID : 9941606673  
Option 2 ID : 9941606674  
Option 3 ID : 9941606675  
Option 4 ID : 9941606676  
Status : Answered  
Chosen Option : 4

Q.59 Adjacent channel interference in cellular networks results from

- A. Imperfect filter at receiver
- B. Reuse of same frequency
- C. More power transmitted in adjacent channel
- D. Large coverage area

Ans  1. (a)  
 2. (b)  
 3. (c)  
 4. (d)

Question ID : 9941601680  
Option 1 ID : 9941606717  
Option 2 ID : 9941606718  
Option 3 ID : 9941606719  
Option 4 ID : 9941606720  
Status : Answered  
Chosen Option : 2

Q.60 Calculate the Nyquist rate for sampling when a continuous time signal is given by

$$x(t) = 5 \cos 300\pi t + 10 \cos 400\pi t - 15 \cos 600\pi t$$

- A. 300Hz
- B. 600Hz
- C. 800Hz
- D. 1200Hz

Ans  1. (a)  
 2. (b)  
 3. (c)  
 4. (d)

Question ID : 9941601641  
Option 1 ID : 9941606561  
Option 2 ID : 9941606562  
Option 3 ID : 9941606563  
Option 4 ID : 9941606564  
Status : Answered  
Chosen Option : 2

Q.61

DC output voltage drops from 42 V with no load to 40V at full load. The percentage of load regulation is \_\_\_\_\_

- a) 1.0 %
- b) 2.0 %
- c) 5.0 %
- d) 8.0%

Ans  1. (a)  
 2. (b)  
 3. (c)  
 4. (d)

Question ID : 9941601604

Option 1 ID : 9941606413

Option 2 ID : 9941606414

Option 3 ID : 9941606415

Option 4 ID : 9941606416

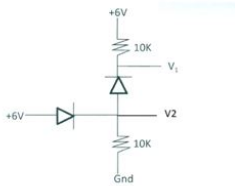
Status : Answered

Chosen Option : 3

Q.62

The voltage at point  $V_1$  and  $V_2$  of the circuit shown in fig will be.....

(Diode drop = 0.7 V)



- a) 6 V and 5.3 V
- b) 5.3 V and 6 V
- c) 0 V and 5.3 V
- d) 6 V and 0 V

Ans  1. (a)  
 2. (b)  
 3. (c)  
 4. (d)

Question ID : 9941601607

Option 1 ID : 9941606425

Option 2 ID : 9941606426

Option 3 ID : 9941606427

Option 4 ID : 9941606428

Status : Answered

Chosen Option : 1



Q.63 CMOS technology is used in developing which of the following?  
a) microprocessors  
b) microcontrollers  
c) digital logic circuits  
d) all of the mentioned

- Ans  1. (a)  
 2. (b)  
 3. (c)  
 4. (d)

Question ID : 9941601660  
Option 1 ID : 9941606637  
Option 2 ID : 9941606638  
Option 3 ID : 9941606639  
Option 4 ID : 9941606640  
Status : Answered  
Chosen Option : 4

Q.64 In a current mirror configuration, if gate-source potentials of two identical MOS transistors are equal, then the channel currents should be \_\_\_\_\_.  
a. Different  
b. Equal  
c. cannot be equal  
d. None of the above

- Ans  1. (a)  
 2. (b)  
 3. (c)  
 4. (d)

Question ID : 9941601664  
Option 1 ID : 9941606653  
Option 2 ID : 9941606654  
Option 3 ID : 9941606655  
Option 4 ID : 9941606656  
Status : Answered  
Chosen Option : 2

Q.65

For frequencies below resonant frequency fr

- A. Circuit behaves as inductive circuit
- B. Inductive circuit XL is higher
- C. More current will flow thro' capacitor
- D. Current leads behind applied voltage

- Ans
- ✓ 1. (a)
  - ✗ 2. (b)
  - ✗ 3. (c)
  - ✗ 4. (d)

Question ID : 9941601615  
Option 1 ID : 9941606457  
Option 2 ID : 9941606458  
Option 3 ID : 9941606459  
Option 4 ID : 9941606460  
Status : Answered  
Chosen Option : 4

Q.66 Which of the following factors are to be considered while selecting a micro controller

1. Memory requirement
2. Processing speed
3. Number of IO pins

- a) 1 and 2 only
- b) 2 and 3 only
- c) 3 and 1 only
- d) 1, 2 and 3

- Ans
- ✗ 1. (a)
  - ✗ 2. (b)
  - ✗ 3. (c)
  - ✓ 4. (d)

Question ID : 9941601654  
Option 1 ID : 9941606613  
Option 2 ID : 9941606614  
Option 3 ID : 9941606615  
Option 4 ID : 9941606616  
Status : Answered  
Chosen Option : 4

Q.67 What is that value of current below which the SCR switches from the conduction state to the forward blocking region under stated conditions?

- A. Holding current
- B. Forward current
- C. Reverse current
- D. Trigger current

Ans  1. (a)

2. (b)

3. (c)

4. (d)

Question ID : 9941601625  
Option 1 ID : 9941606497  
Option 2 ID : 9941606498  
Option 3 ID : 9941606499  
Option 4 ID : 9941606500  
Status : Answered  
Chosen Option : 1

Q.68 High background noise and crackling sound is present in

- A. Carbon microphone
- B. Condenser microphone
- C. Piezo electric microphone
- D. Capacitive microphone

Ans  1. (a)

2. (b)

3. (c)

4. (d)

Question ID : 9941601635  
Option 1 ID : 9941606537  
Option 2 ID : 9941606538  
Option 3 ID : 9941606539  
Option 4 ID : 9941606540  
Status : Not Answered  
Chosen Option : --

Q.69

An SCR combines the feature of \_\_\_\_\_

- A. a rectifier and transistor
- B. a rectifier and resistance
- C. a rectifier and capacitor
- D. a rectifier and inductor

Ans  1. (a)

2. (b)

3. (c)

4. (d)

Question ID : 9941601624  
Option 1 ID : 9941606493  
Option 2 ID : 9941606494  
Option 3 ID : 9941606495  
Option 4 ID : 9941606496  
Status : Answered  
Chosen Option : 1

Q.70 What is the octal equivalent of the decimal number 168?

- A. 240
- B. 250
- C. 260
- D. 270

Ans  1. (a)

2. (b)

3. (c)

4. (d)

Question ID : 9941601631  
Option 1 ID : 9941606521  
Option 2 ID : 9941606522  
Option 3 ID : 9941606523  
Option 4 ID : 9941606524  
Status : Answered  
Chosen Option : 2

Q.71

What is the resolution of 8 bit Analog to Digital converter for full scale value of 10V

- a) 0.0097 V
- b) 0.019 V
- c) 0.039 V
- d) 0.078 V

- Ans
- 1. (a)
  - 2. (b)
  - 3. (c)
  - 4. (d)

Question ID : 9941601657  
Option 1 ID : 9941606625  
Option 2 ID : 9941606626  
Option 3 ID : 9941606627  
Option 4 ID : 9941606628  
Status : Answered  
Chosen Option : 3

Q.72

If a D.C. motor is connected across the AC. supply, it will

- A. Run at normal speed
- B. Not run
- C. Run at very high speed
- D. Burn due to heat produced in the field winding by eddy currents

- Ans
- 1. (a)
  - 2. (b)
  - 3. (c)
  - 4. (d)



Question ID : 9941601619  
Option 1 ID : 9941606473  
Option 2 ID : 9941606474  
Option 3 ID : 9941606475  
Option 4 ID : 9941606476  
Status : Answered  
Chosen Option : 4

Q.73 Which of the following is not a type of interconnect used in VLSI circuits?

- A. Wires
- B. Bus
- C. Switch
- D. Via

Ans  1. (a)  
 2. (b)  
 3. (c)  
 4. (d)

Question ID : 9941601661  
Option 1 ID : 9941606641  
Option 2 ID : 9941606642  
Option 3 ID : 9941606643  
Option 4 ID : 9941606644  
Status : Answered  
Chosen Option : 4

Q.74 Which one of the following material cannot be deposited by chemical vapour deposition.

- a) silicon
- b) carbon
- c) tungsten
- d) plutonium

Ans  1. (a)  
 2. (b)  
 3. (c)  
 4. (d)

Question ID : 9941601666  
Option 1 ID : 9941606661  
Option 2 ID : 9941606662  
Option 3 ID : 9941606663  
Option 4 ID : 9941606664  
Status : Answered  
Chosen Option : 4

Q.75

Which of the following is a type of microprocessor / microcontroller?

- a) CISC
- b) RISC
- c) EPIC
- d) All of the above

- Ans
- 1. (a)
  - 2. (b)
  - 3. (c)
  - 4. (d)

Question ID : 9941601655  
Option 1 ID : 9941606617  
Option 2 ID : 9941606618  
Option 3 ID : 9941606619  
Option 4 ID : 9941606620  
Status : Answered  
Chosen Option : 4

Q.76

In 8051 microcontroller, SCON register in serial port is used for \_\_\_\_\_

- a) Transferring data
- b) Receiving data
- c) Controlling the communication
- d) None of the above

- Ans
- 1. (a)
  - 2. (b)
  - 3. (c)
  - 4. (d)

Question ID : 9941601653  
Option 1 ID : 9941606609  
Option 2 ID : 9941606610  
Option 3 ID : 9941606611  
Option 4 ID : 9941606612  
Status : Answered  
Chosen Option : 1

Q.77

If firing angle in SCR rectifier is decreased, the output is

- a) Increased
- b) Maximum
- c) Decreased
- d) Un affected

Ans  1. (a)  
 2. (b)  
 3. (c)  
 4. (d)

Question ID : 9941601620  
Option 1 ID : 9941606477  
Option 2 ID : 9941606478  
Option 3 ID : 9941606479  
Option 4 ID : 9941606480  
Status : Not Answered  
Chosen Option : --

Q.78 Common mode rejection ratio of an ideal differential amplifier

- a) zero
- b) less than unity
- c) greater than unity
- d) infinite

Ans  1. (a)  
 2. (b)  
 3. (c)  
 4. (d)

Question ID : 9941601646  
Option 1 ID : 9941606581  
Option 2 ID : 9941606582  
Option 3 ID : 9941606583  
Option 4 ID : 9941606584  
Status : Answered  
Chosen Option : 4



Q.79

Which of the following is a universal gate?

- A. AND
- B. OR
- C. NOT
- D. NAND

- Ans
- 1. (a)
  - 2. (b)
  - 3. (c)
  - 4. (d)

Question ID : 9941601628

Option 1 ID : 9941606509

Option 2 ID : 9941606510

Option 3 ID : 9941606511

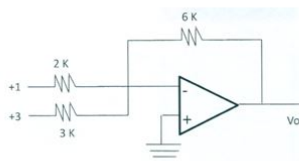
Option 4 ID : 9941606512

Status : Answered

Chosen Option : 4

Q.80

In the circuit shown in fig, the value of the output voltage  $V_o$  is .....



- a) -4 V
- b) -6 V
- c) -8 V
- d) -9 V

- Ans
- 1. (a)
  - 2. (b)
  - 3. (c)
  - 4. (d)

Question ID : 9941601648

Option 1 ID : 9941606589

Option 2 ID : 9941606590

Option 3 ID : 9941606591

Option 4 ID : 9941606592

Status : Answered

Chosen Option : 4