



भारत संचार निगम लिमिटेड  
BHARAT SANCHAR NIGAM LIMITED

Question 1. The distance between the Two stumps of cricket pitch is  
( Correct Answer Mark : 4 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ 18 yards
- ☐ 22 meters
- ☐ 18 meters
- ☐ 22 yards

Correct Answer: 22 yards  
Incorrect Answer: 18 yards

Question 2. He is European  
( Correct Answer Mark : 1 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ a
- ☐ an
- ☐ The
- ☐ None of these

Correct Answer: a  
Incorrect Answer: an

Question 3. Pick the most suitable one word substitute: One who is unable to pay his debts  
( Correct Answer Mark : 4 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Optimist
- ☐ Lapidist
- ☐ Fatalist
- ☐ Insolvent

Correct Answer: Insolvent  
Incorrect Answer: Lapidist

Question 4. The author of the book "Rebooting Government"  
( Correct Answer Mark : 4 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Pranab Mukherjee
- ☐ Arun Jaitley
- ☐ Manmohan Singh
- ☐ Nandan Nilekani

Correct Answer: Nandan Nilekani  
Incorrect Answer: Arun Jaitley

Question 5. Pick the synonym for the word "Zeal"  
( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Hazardous
- ☐ Connotation
- ☐ Passion
- ☐ Initiation

Correct Answer: Passion  
Incorrect Answer: Passion

Question 6. The total number of digits in UIDAI Aadhar  
( Correct Answer Mark : 1 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ 12
- ☐ 13
- ☐ 14
- ☐ 15

Correct Answer: 12  
Incorrect Answer: 15

Question 7. The study of earth quake is known as  
( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Sialogy
- ☐ Seismology
- ☐ Ecology
- ☐ Theology

Correct Answer: Seismology  
Incorrect Answer: Seismology

Question 8. Which Technology Giant has agreed to provide wi-fi hotspot at 500 Railway stations in India

( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Microsoft
- ☐ Google
- ☐ IBM
- ☐ Wipro

Correct Answer: Google

Incorrect Answer: Google

Question 9. To whom, highest civilian award of the Indian Government " Bharat Ratna" was awarded during 2015

( Correct Answer Mark : 4 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Sri. Prakash Singh Badal
- ☐ Sri LK Advani
- ☐ Smt. MS Subbulakshmi
- ☐ Sri Atal Bihari Vajpayee

Correct Answer: Sri Atal Bihari Vajpayee

Incorrect Answer: Sri Atal Bihari Vajpayee

Question 10. The President of India can be removed from his office on the recommendation of the

( Correct Answer Mark : 4 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Supreme Court
- ☐ Chief Justice of India
- ☐ Lok Sabha
- ☐ Two Houses of Parliament

Correct Answer: Two Houses of Parliament

Incorrect Answer: Two Houses of Parliament

Question 11. Pick the correct Antonym for the word "Validate"

( Correct Answer Mark : 1 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Disprove
- ☐ Approve
- ☐ Prove
- ☐ Authentic

Correct Answer: Disprove

Incorrect Answer: Disprove

Question 12. How many hours is IST ahead of GMT

( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ +5.00
- ☐ +5.30
- ☐ +6.00
- ☐ +6.30

Correct Answer: +5.30

Incorrect Answer: +5.30

Question 13. The 24-Km long Hirakud Dam is located at the border of

( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Orissa and Bihar
- ☐ Orissa and Madhya Pradesh
- ☐ Bihar and west Bengal
- ☐ Madhya Pradesh and Jharkand

Correct Answer: Orissa and Madhya Pradesh

Incorrect Answer: Orissa and Madhya Pradesh

Question 14. Which Indian subsidy is world's largest direct benefit scheme?

( Correct Answer Mark : 1 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ LPG
- ☐ Fertilizers
- ☐ Food for work
- ☐ Diesel

Correct Answer: LPG

Incorrect Answer: LPG

Question 15. Moon revolves round the earth in \_\_\_\_\_ days

( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ 27
- ☐ 27 1/2
- ☐ 27 1/4
- ☐ 28

Correct Answer: 27 1/2

Incorrect Answer: 27 1/2

Question 16. Which of the following personalities is known as "Metro Man"?

( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ PV Chandran

- ) Elattuvalapil Sreedharan
- ) Tessy Thomas
- ) Man Mohan sarma

**orre t Answer:** Elattuvalapil Sreedharan

**n i te Answer:** Elattuvalapil Sreedharan

Question 17. The state in India with less literacy rate as per 2011 census

( Correct Answer Mark : 4 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ) Rajasthan
- ) Jharkand
- ) Arunachal Pradesh
- ) Bihar

**orre t Answer:** Bihar

**n i te Answer:** Bihar

Question 18. At which place DRDO has set up the world's highest Terrestrial Research Centre?

( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ) Leh
- ) Srinagar
- ) Ladakh
- ) Anantnag

**orre t Answer:** Ladakh

**n i te Answer:** Leh

Question 19. The 2016 summer Olympics will be held in \_\_\_\_\_ country

( Correct Answer Mark : 4 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ) China
- ) India
- ) Sri Lanka
- ) Brazil

**orre t Answer:** Brazil

**n i te Answer:** Brazil

Question 20. Telecom Regulatory Authority of India (TRAI) was established in

( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ) 1993
- ) 1995
- ) 1997
- ) 1999

**orre t Answer:** 1997

**n i te Answer:** 1999

Question 21.  $\text{Kg m}^2 \text{ per sec}$  is the unit of

( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ) energy
- ) Momentum
- ) Angular Momentum
- ) Power

**orre t Answer:** Angular Momentum

**n i te Answer:** energy

Question 22. UJT may be better used as

( Correct Answer Mark : 4 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ) Amplifier
- ) Clamper
- ) Rectifier
- ) Saw-Tooth wave Generator

**orre t Answer:** Saw-Tooth wave Generator

**n i te Answer:** Rectifier

Question 23. An ideal voltage source will charge an ideal capacitor

( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ) in infinite time
- ) Exponentially
- ) Instantaneously
- ) None of the above

**orre t Answer:** Instantaneously

**n i te Answer:** Instantaneously

Question 24. The vectors having the same initial point are called

( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ) Position vector
- ) Free vector
- ) Co-Initial Vector
- ) Unit Vector

**orre t Answer:** Co-Initial Vector

n i te Answer: Co-Initial Vector

Question 25.

$$\int a^x dx$$

( Correct Answer Mark : 1 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐  $\frac{a^x}{\log a} + c$   
☐  $a^x + c$   
☐  $\log a + c$   
☐  $\frac{\log a}{a} + c$

ore t Answer:

$$\frac{a^x}{\log a} + c$$

n i te Answer:

$$\frac{a^x}{\log a} + c$$

Question 26.

$$\int \sin^2 x dx$$

( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐  $\frac{1}{2} (x + \frac{1}{2} \sin 2x) + c$   
☐  $\frac{1}{2} (x - \frac{1}{2} \sin 2x) + c$   
☐  $\frac{1}{2} (x - \sin 2x) + c$   
☐  $\frac{1}{2} (x - \cos 2x) + c$

ore t Answer:

$$\frac{1}{2} (x - \frac{1}{2} \sin 2x) + c$$

n i te Answer:

$$\frac{1}{2} (x - \frac{1}{2} \sin 2x) + c$$

Question 27. Waves traveling through a solid medium are

( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Transverse waves  
☐ Longitudinal waves  
☐ either of the both  
☐ None

ore t Answer: either of the both

n i te Answer: Transverse waves

Question 28. Binary numbers can be converted into Hexadecimal numbers by grouping bits into group of \_\_\_\_\_ starting from \_\_\_\_\_ and represented each group as \_\_\_\_\_ Hexadecimal number

( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Three bits, Right Most bit  
☐ Three bits, Left Most bit  
☐ Four bits, Right Most bit  
☐ Sixteen bits, Left Most bit

ore t Answer: Four bits, Right Most bit

n i te Answer: Four bits, Right Most bit

Question 29. The 9's complement of a Decimal digit is the

( Correct Answer Mark : 1 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ 1's Complement of the Excess-3 code for the Digit  
☐ 2's Complement of the Excess-3 code for the Digit  
☐ 1's Complement of the Excess-4 code for the Digit  
☐ 2's Complement of the Excess-4 code for the Digit

ore t Answer: 1's Complement of the Excess-3 code for the Digit  
n i te Answer: 2's Complement of the Excess-3 code for the Digit

Question 30. In complex numbers, the value of  $i^{37}$  =  
( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ 37i
- ☐ i
- ☐ -i
- ☐ -37i

ore t Answer: i  
n i te Answer: i

Question 31. The distance between the parallel lines  $4x+6y+4=0$  and  $4x+6y+5=0$  is  
( Correct Answer Mark : 1 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐  $1/\sqrt{52}$
- ☐  $\sqrt{52}$
- ☐  $1/\sqrt{2}$
- ☐ 1

ore t Answer:  $1/\sqrt{52}$   
n i te Answer: 1

Question 32. The laser produced from stimulated emission has the following characteristic  
( Correct Answer Mark : 4 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Monochromatic
- ☐ Coherent
- ☐ very narrow and collimated ray
- ☐ All of the above

ore t Answer: All of the above  
n i te Answer: very narrow and collimated ray

Question 33. The stabilization factor " $S_{ICO}$ " of Fixed bias circuit is  
( Correct Answer Mark : 1 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐  $S_{ICO} = (1+\beta)$
- ☐  $S_{ICO} = 1$
- ☐  $S_{ICO} = \beta$
- ☐ None

ore t Answer:  $S_{ICO} = (1+\beta)$   
n i te Answer: None

Question 34. In a schmitt Trigger UTP=12V, LTP=8V, the hysteresis  $V_H$  is  
( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ 12V
- ☐ 8V
- ☐ 4V
- ☐ 20V

ore t Answer: 4V  
n i te Answer: 4V

Question 35. Unit distance codes are also called as  
( Correct Answer Mark : 1 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Cyclic Codes
- ☐ Non Cyclic codes
- ☐ Error codes
- ☐ All of the above

ore t Answer: Cyclic Codes  
n i te Answer: Cyclic Codes

Question 36. In a stationary wave the distance between a node and its successive antinode is  
( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐  $l/2$
- ☐  $l/4$
- ☐  $l/8$
- ☐ l

ore t Answer:  $l/4$   
n i te Answer:  $l/2$

Question 37. Kirchoff's Voltage Law is known as  
( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Conservation of Charge
- ☐ Conservation Energy
- ☐ Both
- ☐ None

ore t Answer: Conservation Energy  
n i te Answer: Conservation Energy

Question 38. A 'n' bit flash type ADC requires maximum of \_\_\_\_\_ to complete conversion  
( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ 'n' Clock pulses
- ☐ "2n+1" Clock pulses
- ☐ one clock pulse
- ☐ "2n-1" Clock pulses

ore t Answer: one clock pulse  
n i te Answer: "2n+1" Clock pulses

Question 39. Which of the following is true with respect to DC Amplifier ( Direct coupled amplifier)  
( Correct Answer Mark : 4 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Capable of amplifying DC signals
- ☐ is designed without use of any coupling capacitors at input
- ☐ Poor Thermal stability
- ☐ All the above

ore t Answer: All the above  
n i te Answer: is designed without use of any coupling capacitors at input

Question 40. Very small-time intervals are accurately measured by the  
( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Pulsars
- ☐ White dwarfs
- ☐ Atomic clocks
- ☐ Quartz clocks

ore t Answer: Atomic clocks  
n i te Answer: Atomic clocks

Question 41. In a step-up transformer, the turn's ratio is 1:2. A Leclanche cell (emf 1.5V) is connected across the primary. The voltage across the secondary is  
( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ 3.0 V
- ☐ 0.75 V
- ☐ 0 V
- ☐ 1.5 V

ore t Answer: 0 V  
n i te Answer: 0.75 V

Question 42. Electrons in atoms and molecules can change energy levels by emitting or absorbing  
( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Protons
- ☐ Photons
- ☐ electrons
- ☐ All of the above

ore t Answer: Photons  
n i te Answer: electrons

Question 43. The capacitive effects of a reverse biased PN Junction are described by  
( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Storage capacitance
- ☐ Diffusion capacitance
- ☐ Junction capacitance
- ☐ All of the above

ore t Answer: Junction capacitance  
n i te Answer: Diffusion capacitance

Question 44. The vertex of the parabola  $y^2 - 2y + 8x - 23 = 0$   
( Correct Answer Mark : 1 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ ( 3, 1 )
- ☐ ( 1, 3 )
- ☐ ( -1, 3 )
- ☐ ( 1, -3 )

ore t Answer: ( 3, 1 )  
n i te Answer: ( 1, -3 )

Question 45. Reluctance in Magnetic circuits is analogous to \_\_\_\_\_ in electric circuit  
( Correct Answer Mark : 1 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Resistance
- ☐ Voltage
- ☐ current
- ☐ Power

ore t Answer: Resistance  
n i te Answer: Resistance

Question 46. The Flip Flop which acts as Frequency divider is  
( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ SR Flip Flop

☐ D Flip Flop  
☐ T Flip Flop  
☐ None  
**ore t Answer:** T Flip Flop  
**n i te Answer:** D Flip Flop

Question 47. There are eight images of a candle which is kept in between two plane mirrors. The angle of inclination of the plane mirror is  
 ( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

☐ 60°  
☐ 90°  
☐ 40°  
☐ 45°  
**ore t Answer:** 40°  
**n i te Answer:** 60°

Question 48. The loop gain of a Schmitt Trigger is always  
 ( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

☐ 0  
☐ Less than 1  
☐ Greater than 1  
☐ None  
**ore t Answer:** Greater than 1  
**n i te Answer:** Less than 1

Question 49. Miller sweep has the following data  $R = 1K$  ohms,  $C = 1$  PF,  $V = 10$  Volts. Its sweep speed is  
 ( Correct Answer Mark : 4 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

☐  $10^2$  V/S  
☐  $10^6$  V/S  
☐  $10^4$  V/S  
☐  $10^{10}$  V/S  
**ore t Answer:**  $10^{10}$  V/S  
**n i te Answer:**  $10^{10}$  V/S

Question 50. which of the following is not a characteristic of ideal Operational Amplifier  
 ( Correct Answer Mark : 4 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

☐ BW =  $\infty$   
☐ Perfect balance  $V_0 = 0$  when  $V_1 = V_2$   
☐ Gain is -  $\infty$   
☐ Input resistance is Zero  
**ore t Answer:** Input resistance is Zero  
**n i te Answer:** Perfect balance  $V_0 = 0$  when  $V_1 = V_2$

Question 51. If  $A^T = A^{-1}$ , where A is real matrix, then A is  
 ( Correct Answer Mark : 4 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

☐ Normal  
☐ Symmetric  
☐ Hermitian  
☐ Orthogonal  
**ore t Answer:** Orthogonal  
**n i te Answer:** Orthogonal

Question 52. When the input to a seven segment decoder is "0100" the number on display will be  
 ( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

☐ 0  
☐ 2  
☐ 4  
☐ 9  
**ore t Answer:** 4  
**n i te Answer:** 4

Question 53. which of the following multi vibrator is also called as Eccles-Jordan Circuit in early days  
 ( Correct Answer Mark : 1 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

☐ Bistable Multivibrator  
☐ Monostable Multi vibrator  
☐ Astable Multivibrator  
☐ All of the above  
**ore t Answer:** Bistable Multivibrator  
**n i te Answer:** Bistable Multivibrator

Question 54. The relative permeability  $\mu_r$  is given by  
 ( Correct Answer Mark : 1 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

☐  $B / \mu_0 \cdot H$   
☐  $B/H$   
☐  $H/B$   
☐ None



ore t Answer: B /  $\mu_0$  . H  
n i te Answer: None

Question 55. The number of NAND Gates required to implement Ex-OR and Ex-NOR gates are respectively  
( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ 2 and 3
- ☐ 3 and 2
- ☐ 4 and 5
- ☐ 4 and 3

ore t Answer: 4 and 5  
n i te Answer: 4 and 5

Question 56. A network which contain one or more than one source of emf is known as  
( Correct Answer Mark : 1 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Active Network
- ☐ Passive Network
- ☐ Electric Network
- ☐ None of the above

ore t Answer: Active Network  
n i te Answer: Active Network

Question 57. The equation of the hyperbola of eccentricity 3 and the distance between whose foci 24 is  
( Correct Answer Mark : 1 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐  $x^2 - 8y^2 = 128$
- ☐  $8x^2 - y^2 = 128$
- ☐  $16x^2 - y^2 = 128$
- ☐ None

ore t Answer:  $x^2 - 8y^2 = 128$   
n i te Answer:  $8x^2 - y^2 = 128$

Question 58. \_\_\_\_\_ is a dimensionless quantity .  
( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Gravity
- ☐ Specific Gravity
- ☐ Density
- ☐ acceleration

ore t Answer: Specific Gravity  
n i te Answer: Specific Gravity

Question 59. Access Time in Memories is equal to  
( Correct Answer Mark : 4 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Latency Time
- ☐ Seek Time
- ☐ Transfer Time
- ☐ sum of all the above

ore t Answer: sum of all the above  
n i te Answer: Transfer Time

Question 60. "The direction of an induced emf is such that it will always opposes the change that is causing" This law is called as  
( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Kirchoffs Laws
- ☐ Lenzs Law
- ☐ Faradays Law
- ☐ None

ore t Answer: Lenzs Law  
n i te Answer: Lenzs Law

Question 61. which of the following configuration is used for Emitter follower Amplifier  
( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Common Base
- ☐ Common Emitter
- ☐ Common Collector
- ☐ None

ore t Answer: Common Collector  
n i te Answer: Common Base

Question 62. The area of the circle with centre at (1,2) and passing through (4,6) is  
( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ 5 $\pi$  sq. units
- ☐ 25 $\pi$  sq. units
- ☐ 29 $\pi$  sq. units
- ☐ None

ore t Answer: 25 $\pi$  sq. units  
n i te Answer: 25 $\pi$  sq. units



Question 63. Shift left by 'n' positions in Shift Register is equivalent to  
( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Multiplication by  $2^n$
- ☐ Addition by  $2^n$
- ☐ Division by  $2^n$
- ☐ None of the above

Correct Answer: Division by  $2^n$

Incorrect Answer: Multiplication by  $2^n$

Question 64. Leakage current in the Silicon semiconductor is in the order of  
( Correct Answer Mark : 4 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Amps
- ☐ milli Amps
- ☐ micro Amps
- ☐ nano Amps

Correct Answer: nano Amps

Incorrect Answer: micro Amps

Question 65. The trigonometric Fourier series of a periodic time function can have only  
( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Cosine terms
- ☐ Sine terms
- ☐ Cosine & Sine terms
- ☐ Cosine & DC terms

Correct Answer: Cosine & Sine terms

Incorrect Answer: Cosine & Sine terms

Question 66. Two long parallel conductors carrying currents in opposite directions \_\_\_\_\_ each other  
( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Attract
- ☐ Repel
- ☐ No effect on
- ☐ None of the above

Correct Answer: Repel

Incorrect Answer: Attract

Question 67. The power consumed by a pure capacitor is  
( Correct Answer Mark : 4 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ 1 w
- ☐ 0.5 W
- ☐  $\infty$  W
- ☐ 0 w

Correct Answer: 0 w

Incorrect Answer: 0 w

Question 68. The Odd Parity is generated by  
( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Ex-OR Gate
- ☐ Ex-NOR Gate
- ☐ NDT Gate
- ☐ All the above

Correct Answer: Ex-NOR Gate

Incorrect Answer: Ex-OR Gate

Question 69. Two capacitors of 2  $\mu$ F and 3 $\mu$ F are connected in series across 10V. The potential difference across the 2  $\mu$ F capacitor will be  
( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ 4V
- ☐ 6V
- ☐ 10V
- ☐ 0V

Correct Answer: 6V

Incorrect Answer: 6V

Question 70. In a transformer, the ratio of primary to secondary is 9:4. If power input is P, what will be the ratio of power output to the power input  
( Correct Answer Mark : 4 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ 4:9
- ☐ 9:4
- ☐ 5:4
- ☐ 1:1

Correct Answer: 1:1

Incorrect Answer: 9:4

Question 71. The phenomenon of bending of light at the surface of separation of two media having different R.I is called  
( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Deflection of Light
- ☐ Reflection of Light
- ☐ Refraction of Light
- ☐ absorption of Light

**ore t Answer:** Refraction of Light  
**n i te Answer:** Deflection of Light

Question 72. The sum of two unit vectors is a unit vector. The magnitude of their difference is  
 ( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ 2
- ☐  $\sqrt{3}$
- ☐  $\sqrt{2}$
- ☐ 1

**ore t Answer:**  $\sqrt{3}$   
**n i te Answer:** 1

Question 73. An equivalent decimal number of  $(234.55)_8$  is

( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐  $(106.703)_{10}$
- ☐  $(156.703)_{10}$
- ☐  $(146.703)_{10}$
- ☐  $(308.703)_{10}$

**ore t Answer:**  $(156.703)_{10}$   
**n i te Answer:**  $(156.703)_{10}$

Question 74. To convert Celsius (Centigrade) to Fahrenheit

( Correct Answer Mark : 1 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ multiply by 1.8 and add 32
- ☐ subtract 32 and divide by 1.8
- ☐ multiply by 32 and add 1.8
- ☐ subtract 1.8 and divide by 32

**ore t Answer:** multiply by 1.8 and add 32  
**n i te Answer:** multiply by 1.8 and add 32

Question 75. Norton's Theorem results in

( Correct Answer Mark : 1 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ a Current source with an impedance in Parallel
- ☐ a Voltage source with an impedance in series
- ☐ a Voltage source alone
- ☐ a Current source alone

**ore t Answer:** a Current source with an impedance in Parallel  
**n i te Answer:** a Current source with an impedance in Parallel

Question 76. If  $\theta$  is the angle between Two lines whose slopes are  $m_1$  &  $m_2$ , then  $\tan \theta =$

( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐  $m_1 - m_2$
- ☐  $m_1 + m_2$
- ☐  $(m_1 - m_2) / (1 + m_1 m_2)$
- ☐  $(m_1 - m_2) / (1 - m_1 m_2)$

**ore t Answer:**  $(m_1 - m_2) / (1 + m_1 m_2)$   
**n i te Answer:**  $(m_1 - m_2) / (1 + m_1 m_2)$

Question 77. A string of 4 bits is called as

( Correct Answer Mark : 4 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ Bit
- ☐ Byte
- ☐ Word
- ☐ Nibble

**ore t Answer:** Nibble  
**n i te Answer:** Nibble

Question 78.

$$\frac{d}{dx} \operatorname{cosech} x$$

( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐  $\operatorname{cosech} x \coth x$
- ☐  $-\operatorname{cosech} x \coth x$
- ☐  $\operatorname{sech} x \coth x$
- ☐  $\operatorname{sech} x \coth x$

**ore t Answer:**  $-\operatorname{cosech} x \coth x$   
**n i te Answer:**  $-\operatorname{cosech} x \coth x$

Question 79. Divide by 78 counter can be realized using

( Correct Answer Mark : 4 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ 6 number of mod-13 counters
- ☐ 13 number of mod-6 counters
- ☐ 13 number of mod-13 counters
- ☐ one mod-13 counter followed by one mod-6 counter

**ore t Answer:** one mod-13 counter followed by one mod-6 counter  
**n i te Answer:** 6 number of mod-13 counters

Question 80. Isotopes are atoms that have

( Correct Answer Mark : 1 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ Same atomic number but different atomic mass
- ☐ Same atomic mass but different atomic number
- ☐ Same Number of Protons but different number of electrons
- ☐ None

**ore t Answer:** Same atomic number but different atomic mass  
**n i te Answer:** Same Number of Protons but different number of electrons

Question 81. Mass and weight

( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ are same quantities
- ☐ Are different quantities
- ☐ No relation between them
- ☐ All of the above

**ore t Answer:** Are different quantities  
**n i te Answer:** Are different quantities

Question 82. when a lead acid cell is recharged

( Correct Answer Mark : 4 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ The anode becomes dark chocolate brown colour
- ☐ Voltage rises
- ☐ Energy is absorbed by the cell
- ☐ All of the above

**ore t Answer:** All of the above  
**n i te Answer:** Voltage rises

Question 83. Logic expressions can be simplified by using

( Correct Answer Mark : 4 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ Boolean Algebra Method
- ☐ Karnaugh - map Method
- ☐ Tabulation Method
- ☐ Any of the above methods

**ore t Answer:** Any of the above methods  
**n i te Answer:** Any of the above methods

Question 84. In a PN junction depletion layer is created due to

( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ Diffusion of ions
- ☐ Diffusion of Minority carriers
- ☐ Diffusion of Majority carriers
- ☐ Diffusion of Minority & Majority carriers

**ore t Answer:** Diffusion of Majority carriers  
**n i te Answer:** Diffusion of Majority carriers

Question 85. Find the value of k, if the equation  $3x^2 + 8xy + ky^2 = 0$  represents perpendicular lines

( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ 3
- ☐ -3
- ☐ 0
- ☐ 8

**ore t Answer:** -3  
**n i te Answer:** -3

Question 86. Isotopes are atoms that have

( Correct Answer Mark : 1 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ Same atomic number but different atomic mass
- ☐ Same atomic mass but different atomic number
- ☐ Same Number of Protons but different number of electrons
- ☐ None

**ore t Answer:** Same atomic number but different atomic mass  
**n i te Answer:** Same Number of Protons but different number of electrons

Question 87. The number of 4:1 MUX required to make 64:1 MUX is

( Correct Answer Mark : 4 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ 16
- ☐ 64
- ☐ 20
- ☐ 21

ore t Answer: 21  
n i te Answer: 21

Question 88. which one of the following is not a unit of time  
( Correct Answer Mark : 4 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Micro second
- ☐ Second
- ☐ Year
- ☐ Light year

ore t Answer: Light year  
n i te Answer: Light year

Question 89. Positive feedback is used in  
( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Amplifiers
- ☐ Rectifiers
- ☐ Oscillators
- ☐ None

ore t Answer: Oscillators  
n i te Answer: Oscillators

Question 90. The angle between the pair of straight lines  $x^2 - 2xy + y^2 = 0$   
( Correct Answer Mark : 4 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ 45°
- ☐ 30°
- ☐ 120°
- ☐ 90°

ore t Answer: 90°  
n i te Answer: 45°

Question 91. Echo is heard due to  
( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Refraction
- ☐ Scattering
- ☐ Reflection
- ☐ Interference

ore t Answer: Reflection  
n i te Answer: Reflection

Question 92. Race around condition occur in JK Flip Flop is due to  
( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ The clock time period is less than propagation delay
- ☐ The clock time period is greater than propagation delay
- ☐ Due to triggering
- ☐ None

ore t Answer: The clock time period is greater than propagation delay  
n i te Answer: The clock time period is greater than propagation delay

Question 93. For a 12 bit A/D converter the range of input signal is 0 to +10V. The voltage corresponding to 1 LSB will be  
( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ 0
- ☐ 0.0012V
- ☐ 0.0024V
- ☐ 0.833V

ore t Answer: 0.0024V  
n i te Answer: 0.0012V

Question 94. As frequency increases, the magnetic flux inside a conductor  
( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Increases
- ☐ Decreases
- ☐ Remains constant
- ☐ None of the above

ore t Answer: Decreases  
n i te Answer: Remains constant

Question 95. Find the angle between two vectors a and b with magnitudes  $\sqrt{3}$  and 2 respectively having a.b= $\sqrt{6}$   
( Correct Answer Mark : 1 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ 45°
- ☐ 90°
- ☐ 180°
- ☐ 30°

ore t Answer: 45°  
n i te Answer: 30°

Question 96. In a class-B amplifier the output current flows for  
( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ 90°
- ☐ 180°
- ☐ More than 180° and less than 270°
- ☐ 360°

ore t Answer: 180°  
n i te Answer: 180°

Question 97. The unit used to measure the supersonic speed is  
( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ knots
- ☐ Mach
- ☐ Richter
- ☐ Hertz

ore t Answer: Mach  
n i te Answer: Mach

Question 98. Five memory chips of 16 X 4 size have their address buses connected together. This system will be of size  
( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ 16 X 16
- ☐ 16 X 20
- ☐ 20 X 16
- ☐ 16 X 64

ore t Answer: 16 X 20  
n i te Answer: 16 X 20

Question 99. The current in capacitive circuits the voltage  
( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Lags
- ☐ Leads
- ☐ Inphase with
- ☐ None of the above

ore t Answer: Leads  
n i te Answer: Leads

Question 100. The most stable sine wave oscillator with most simple circuit is  
( Correct Answer Mark : 4 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Colpits
- ☐ Armstrong
- ☐ Phase-shift Circuit
- ☐ Crystal

ore t Answer: Crystal  
n i te Answer: Phase-shift Circuit

Question 101. A semi conductor when placed at 0° K, will act as  
( Correct Answer Mark : 1 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Insulator
- ☐ Conductor
- ☐ Semiconductor
- ☐ Metal

ore t Answer: Insulator  
n i te Answer: Insulator

Question 102. With reference to the early effect in Bipolar Junction Transistor (BJT), the phenomenon of Punch through occurs when  
( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ effective Collector width is brought to '0'
- ☐ effective Base width is brought to '0'
- ☐ effective emitter width is brought to '0'
- ☐ None

ore t Answer: effective Base width is brought to '0'  
n i te Answer: effective Collector width is brought to '0'

Question 103. The Battery will get warm, when we try to send too much current through battery. This is mainly due to  
( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Battery manufacturing defect
- ☐ Due to defect of connected Load
- ☐ Internal Resistance of the Battery
- ☐ None

ore t Answer: Internal Resistance of the Battery  
n i te Answer: Internal Resistance of the Battery

Question 104. The induction coil works on the principle of  
( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Self-Induction

- ☐ Mutual Induction
  - ☐ ampere's Rule
  - ☐ Flemings Right Hand rule
- Correct Answer:** Mutual Induction  
**Wrong Answer:** Self-Induction

Question 105. If the vectors  $2i+3j+k$ ,  $3i+xj+k$  are orthogonal then  $x=$   
 ( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ 2
- ☐ 4
- ☐ -2
- ☐ 1

**Correct Answer:** 4  
**Wrong Answer:** 2

Question 106. A coil having an inductance of 150 mH is carrying a current of 5 Amp. If the current is reduced to zero in 1 milli seconds, the self-induced emf will be  
 ( Correct Answer Mark : 4 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ 125V
- ☐ 375V
- ☐ 500V
- ☐ 750V

**Correct Answer:** 750V  
**Wrong Answer:** 125V

Question 107. Sound cannot travel through

( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ Gases
- ☐ Vacuum
- ☐ solids
- ☐ Liquids

**Correct Answer:** Vacuum  
**Wrong Answer:** Vacuum

Question 108. In a N- channel JFET, Drain current is maximum when Gate Voltage  $V_{GS}$  is

( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ equal to  $+V_{DD}$
- ☐ morethan to  $+V_{DD}$
- ☐ equal to "0 volts"
- ☐ All the above

**Correct Answer:** equal to "0 volts"  
**Wrong Answer:** equal to  $+V_{DD}$

Question 109. \_\_\_\_\_ is a unit used in radio astronomy to measure the strength (flux density) of radio signals from space

( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ Amp
- ☐ Jansky
- ☐ Hertz
- ☐ Knot

**Correct Answer:** Jansky  
**Wrong Answer:** Amp

Question 110. These are used for bloodless surgery

( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ Anesthetic
- ☐ Fiber-optics
- ☐ Lasers
- ☐ None

**Correct Answer:** Lasers  
**Wrong Answer:** Lasers

Question 111. when a unit step input is applied to a perfect integrator, the output will be

( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ bounded
- ☐ unbounded
- ☐ remains constant
- ☐ is unity

**Correct Answer:** unbounded  
**Wrong Answer:** unbounded

Question 112. In discrete time \_\_\_\_\_ is used to obtain transfer function

( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ Laplace Transform
- ☐ Z-Transform
- ☐ Both
- ☐ None

**Correct Answer:** Z-Transform



n i te Answer: Z-Transform

Question 113. when there is a variation of load resistance, Which of the following DC Generator can not deliver power at constant voltage  
( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ separately excited generator
- ☐ shunt generator
- ☐ series generator
- ☐ compound generator

orre t Answer: shunt generator

n i te Answer: shunt generator

Question 114. Wave guides are generally made of

( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Gold
- ☐ Bronz or aluminium
- ☐ PVC
- ☐ HDPE

orre t Answer: Bronz or aluminium

n i te Answer: Bronz or aluminium

Question 115. In continuous time is used to obtain transfer function

( Correct Answer Mark : 1 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Laplace Transform
- ☐ Z-Transform
- ☐ Both
- ☐ None

orre t Answer: Laplace Transform

n i te Answer: Laplace Transform

Question 116. VSWR for an ideal Antenna is

( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ 0
- ☐  $\infty$
- ☐ 1
- ☐ Zo

orre t Answer: 1

n i te Answer: 1

Question 117. Nyquist stability test is a graphical method and its advantages are

( Correct Answer Mark : 4 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Applicable to experimental results or frequency response of open loop system
- ☐ closed loop stability can be predicted from openloop results
- ☐ It indicates how to stabilize an unstable system
- ☐ All the above

orre t Answer: All the above

n i te Answer: All the above

Question 118. PMMC (D'Arsonval) is used for

( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ AC current
- ☐ DC Voltage
- ☐ AC Voltage
- ☐ All of the above

orre t Answer: DC Voltage

n i te Answer: AC Voltage

Question 119. Ammeters are always connected in

( Correct Answer Mark : 1 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Series
- ☐ Parallel
- ☐ either
- ☐ None

orre t Answer: Series

n i te Answer: either

Question 120. A connecting probe in CRO causes

( Correct Answer Mark : 4 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ loading
- ☐ distortion in the wave
- ☐ both
- ☐ None

orre t Answer: None

n i te Answer: both

Question 121. The standing wave ratio (SWR) equal to unity implies that

( Correct Answer Mark : 4 Wrong Answer Mark (Negative Mark) : 0.25 )



**Options:**

- ☐ The transmission line is open circuited
- ☐ The transmission line is short circuited
- ☐ The transmission line characteristic impedance is Zero
- ☐ The transmission line characteristic impedance is equal to Load impedance

**Correct Answer:** The transmission line characteristic impedance is equal to Load impedance  
**Incorrect Answer:** The transmission line characteristic impedance is equal to Load impedance

Question 122. Introduction of parity bit for error detection does not imply  
 ( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ Increase in the lengths of the code
- ☐ Increase in the hardware of system
- ☐ automatic error correction
- ☐ all the above

**Correct Answer:** automatic error correction  
**Incorrect Answer:** automatic error correction

Question 123. When AM receiver is tuned to 1200 KHz, the Local oscillator frequency is  
 ( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ 1200 KHz
- ☐ 1655 KHz
- ☐ 2110 KHz
- ☐ 745 KHz

**Correct Answer:** 1655 KHz  
**Incorrect Answer:** 745 KHz

Question 124. Armstrong modulator generates  
 ( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ AM Signal
- ☐ FM signal
- ☐ PM Signal
- ☐ both B & C

**Correct Answer:** FM signal  
**Incorrect Answer:** both B & C

Question 125. Spread-Spectrum multiplexing is also known as  
 ( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ Time division Multiplexing
- ☐ Frequency division Multiplexing
- ☐ Code division Multiplexing
- ☐ All the above

**Correct Answer:** Code division Multiplexing  
**Incorrect Answer:** Frequency division Multiplexing

Question 126. which of the following has highest priority  
 ( Correct Answer Mark : 4 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ INTR
- ☐ RST 6.5
- ☐ RST 7.5
- ☐ TRAP

**Correct Answer:** TRAP  
**Incorrect Answer:** TRAP

Question 127. Signal flow graph is used to obtain the  
 ( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ stability of the system
- ☐ Transfer function of the system
- ☐ Controllability of the system
- ☐ observability of the system

**Correct Answer:** Transfer function of the system  
**Incorrect Answer:** Transfer function of the system

Question 128. Consider the following program fragment

```
DELAY: LXI H, 0010H
LOOP: DCX H
      MOV A, L
      ORA H
      XRA A
      JNZ Loop
      RET
```

The number of times loop will be executed is  
 ( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ 16
- ☐ 10
- ☐ 1
- ☐ Infinite

**Correct Answer:** 1

**n i te Answer:** Infinite

Question 129. while calculating our Routh-Hurwitz, if we have a row of all zeros, the row directly above it is known as the  
( Correct Answer Mark : 1 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ Auxiliary Polynomial
- ☐ Polynomial
- ☐ Transfer function
- ☐ None

**ore t Answer:** Auxiliary Polynomial

**n i te Answer:** Auxiliary Polynomial

Question 130. The maximum speed at which the data can be transmitted on each channel of a standard PCM stream is  
( Correct Answer Mark : 1 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ 64 kbps
- ☐ 128 kbps
- ☐ 2 Mbps
- ☐ 4 Mbps

**ore t Answer:** 64 kbps

**n i te Answer:** 64 kbps

Question 131. When a computer is first turned on or restarted a special type of absolute loader is executed called a  
( Correct Answer Mark : 4 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ Compile and Go Loader
- ☐ PreBoot Loader
- ☐ Relating Loader
- ☐ Bootstrap Loader

**ore t Answer:** Bootstrap Loader

**n i te Answer:** Bootstrap Loader

Question 132. One of the following is a direct entry input devices  
( Correct Answer Mark : 4 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ Key-to-diskette
- ☐ Punched card
- ☐ Computer terminal
- ☐ Mouse

**ore t Answer:** Mouse

**n i te Answer:** Punched card

Question 133. Which of the following IP address is not assigned to any node by network planner  
( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ 192.0.0.0
- ☐ 127.0.0.1
- ☐ 128.0.0.1
- ☐ none

**ore t Answer:** 127.0.0.1

**n i te Answer:** 127.0.0.1

Question 134. A speech signal occupying the BW of 300 Hz to 3KHz, is converted into PCM format for use in digital communication. If the sampling frequency is 8 KHz and each sample is quantized into 256 levels, then the output bit rate will be  
( Correct Answer Mark : 4 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ 2048 Kbps
- ☐ 1024 Kbps
- ☐ 256 Kbps
- ☐ 64 Kbps

**ore t Answer:** 64 Kbps

**n i te Answer:** 2048 Kbps

Question 135. The device which does not have frequency dependent properties on its own is  
( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ Inductor
- ☐ Capacitor
- ☐ Resistor
- ☐ All the above

**ore t Answer:** Resistor

**n i te Answer:** Resistor

Question 136. The type of computers which can execute millions of instructions and billions of data per second  
( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ Laptop
- ☐ Mini Computer
- ☐ MainFrame computer
- ☐ Personal Computer

**ore t Answer:** MainFrame computer

**n i te Answer:** Personal Computer

Question 137. ORACLE is

( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ an Operating system
- ☐ a RDBMS
- ☐ an Interpreter
- ☐ A Compiler

**ore t Answer:** a RDBMS

**n i te Answer:** a RDBMS

Question 138. A circuit with a resistor, inductor and capacitor in series is resonant of  $f_0$  Hz. If all the component values are now doubled the new resonant frequency is

( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐  $2f_0$
- ☐ remains unchanged
- ☐  $f_0/2$
- ☐  $f_0/4$

**ore t Answer:**  $f_0/2$

**n i te Answer:** remains unchanged

Question 139. Any physical system which does not automatically correct for variation in its output is called

( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ Closed Loop System
- ☐ Open Loop System
- ☐ Unstable system
- ☐ Stable system

**ore t Answer:** Open Loop System

**n i te Answer:** Open Loop System

Question 140. Signature analysers are able to detect

( Correct Answer Mark : 1 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ digital waveform patterns
- ☐ digital Logic patterns
- ☐ digital Logic state
- ☐ None

**ore t Answer:** digital waveform patterns

**n i te Answer:** digital Logic patterns

Question 141. The effect used in Pointing Vector Wattmeters, for their operation is

( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ Heating effect
- ☐ Induction effect
- ☐ Hall effect
- ☐ None

**ore t Answer:** Hall effect

**n i te Answer:** Heating effect

Question 142. The speed at which serial data is transmitted is referred to

( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ bps
- ☐ Baud rate
- ☐ either 1 or 2
- ☐ None

**ore t Answer:** either 1 or 2

**n i te Answer:** Baud rate

Question 143. Repeaters function in the layer

( Correct Answer Mark : 1 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ Physical
- ☐ DataLink
- ☐ Network
- ☐ Session

**ore t Answer:** Physical

**n i te Answer:** DataLink

Question 144. An Amber LED on Logic probe indicates

( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ High state
- ☐ Low state
- ☐ Pulse
- ☐ None

**ore t Answer:** Pulse

**n i te Answer:** Pulse

Question 145. The delay line in CRD is placed after

( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ Horizontal Amplifier

- ) Vertical Amplifier
- ) Trigger circuit
- ) Power supply

**ore t Answer:** Vertical Amplifier  
**n i te Answer:** Trigger circuit

Question 146. which of the following is not performed by a microprocessor  
 ( Correct Answer Mark : 1 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ) Controlling the timing of a information flow
- ) Performing the computing tasks specified in a program
- ) Communicating with all peripherals using system bus
- ) storing results in registers

**ore t Answer:** Controlling the timing of a information flow  
**n i te Answer:** Communicating with all peripherals using system bus

Question 147. The margin between actual gain and critical gain is a measure of  
 ( Correct Answer Mark : 4 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ) Relative stability
- ) absolute stability
- ) sensitivity
- ) Gain Margin

**ore t Answer:** Gain Margin  
**n i te Answer:** Gain Margin

Question 148. Transformer works on the principle of  
 ( Correct Answer Mark : 1 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ) Mutual induction
- ) Self induction
- ) Both
- ) None

**ore t Answer:** Mutual induction  
**n i te Answer:** Both

Question 149. When a signal is given at "RESET IN" input of a microprocessor, then  
 ( Correct Answer Mark : 4 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ) Resets the program counter to Zero
- ) Resets the Interrupt enable flag
- ) Resets HLDA
- ) All of the above

**ore t Answer:** All of the above  
**n i te Answer:** Resets the program counter to Zero

Question 150. When dealing with signed numbers, micro processors use  
 ( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ) 1's complement
- ) shift and add
- ) 2's complement
- ) end around carry method

**ore t Answer:** 2's complement  
**n i te Answer:** 1's complement

Question 151. Two terminals constitute a "Port", if they satisfy port condition. The port condition indicates  
 ( Correct Answer Mark : 1 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ) Current entering one terminal is equal to the current leaving the other terminal
- ) Current entering one terminal & leaving the other terminal is different
- ) No current must enter and leave a port
- ) All the above

**ore t Answer:** Current entering one terminal is equal to the current leaving the other terminal  
**n i te Answer:** Current entering one terminal is equal to the current leaving the other terminal

Question 152. The speed of a DC motor is  
 ( Correct Answer Mark : 1 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ) Directly proportional to back emf and inversely proportional to flux
- ) Inversely proportional to back emf and directly proportional to flux
- ) Directly proportional to emf and to flux
- ) Inversely proportional to emf and to flux

**ore t Answer:** Directly proportional to back emf and inversely proportional to flux  
**n i te Answer:** Directly proportional to emf and to flux

Question 153. When an instruction is read from the memory, it is called  
 ( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ) Memory Read cycle
- ) Fetch cycle
- ) Instruction cycle
- ) Memory write cycle

**ore t Answer:** Fetch cycle

n i te Answer: Fetch cycle

Question 154. How many OSI Layers are covered in X.25 standard  
( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ 2
- ☐ 3
- ☐ 5
- ☐ 7

ore t Answer: 3

n i te Answer: 7

Question 155. Typed matter/document is to be saved in  
( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Folder
- ☐ File
- ☐ HardDisk
- ☐ CD-ROM

ore t Answer: File

n i te Answer: Folder

Question 156. Moving processes from main memory to disk is called  
( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Scheduling
- ☐ Catching
- ☐ Swapping
- ☐ Spooling

ore t Answer: Swapping

n i te Answer: Catching

Question 157. The \_\_\_\_\_ is set (to 1) if there is a carry from the low nibble (lowest four bits) to the high nibble (upper four bits), or a borrow from the high nibble  
( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Carry flag
- ☐ Auxiliary carry flag
- ☐ Sign flag
- ☐ Parity flag

ore t Answer: Auxiliary carry flag

n i te Answer: Auxiliary carry flag

Question 158. \_\_\_\_\_ is an electrical device that converts direct current (DC) to alternating current (AC)  
( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Rectifier
- ☐ cycloconverter
- ☐ Inverter
- ☐ All the above

ore t Answer: Inverter

n i te Answer: Inverter

Question 159. Basic Interface in ISDN refers to the transmission speed of  
( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ 64 kbps
- ☐ 128 kbps
- ☐ 144 kbps
- ☐ 1.544 Mbps

ore t Answer: 144 kbps

n i te Answer: 144 kbps

Question 160. Which of the following is disadvantage of parallel data transmission  
( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Speed is low
- ☐ Data cannot flow in both directions
- ☐ cost of providing many registers, conductors etc is considerable
- ☐ All the above

ore t Answer: cost of providing many registers, conductors etc is considerable

n i te Answer: Data cannot flow in both directions

Question 161. For a stable system, the roots of the characteristic equation must lie on  
( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Real Axis only
- ☐ Imaginary axis only
- ☐ Left Half plane
- ☐ Right Half plane

ore t Answer: Left Half plane

n i te Answer: Left Half plane

Question 162. A 75 ohm line is terminated to a load of 100 ohms, and has some incident power. Percentage of reflected power is  
( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ 2%
- ☐ 100%
- ☐ 14%
- ☐ 20%

Correct Answer: 14%

Incorrect Answer: 20%

Question 163. In a Nyquist criteria, the roots of characteristic equation are given by

( Correct Answer Mark : 1 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Poles of the open loop transfer function
- ☐ Zeros of the open loop transfer function
- ☐ Poles of the Closed loop transfer function
- ☐ Zeros of the closed loop transfer function

Correct Answer: Poles of the open loop transfer function

Incorrect Answer: Poles of the Closed loop transfer function

Question 164. The FSK (with respect to HF Radio transmissions) has two tones which are generally

( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ 170 KHz apart
- ☐ 170 Hz apart
- ☐ 150 KHz apart
- ☐ 150 Hz apart

Correct Answer: 170 Hz apart

Incorrect Answer: 170 KHz apart

Question 165. In a feedback system, output is a function of

( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Output and input
- ☐ Input and feedback signal
- ☐ Reference and output
- ☐ None

Correct Answer: Input and feedback signal

Incorrect Answer: Input and feedback signal

Question 166. The term ampere-hour(Ah) is associated with

( Correct Answer Mark : 4 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ rectifiers
- ☐ Transformers
- ☐ Electromagnets
- ☐ Storage cells

Correct Answer: Storage cells

Incorrect Answer: Storage cells

Question 167. The power factor of a squirrel cage induction motor is

( Correct Answer Mark : 1 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Low at Light loads only
- ☐ Low at heavy loads only
- ☐ Low at Light and Heavy loads
- ☐ Low at rated load

Correct Answer: Low at Light loads only

Incorrect Answer: Low at heavy loads only

Question 168. A UART is usually an individual (or part of an) integrated circuit used for

communications over a computer or peripheral device

( Correct Answer Mark : 1 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Serial
- ☐ Parallel
- ☐ Both
- ☐ None

Correct Answer: Serial

Incorrect Answer: Both

Question 169. A transmission line has reflection coefficient "k" equal to 0.2. The VSWR is

( Correct Answer Mark : 4 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ 0
- ☐ 0.2
- ☐ 0.6
- ☐ 1.5

Correct Answer: 1.5

Incorrect Answer: 1.5

Question 170. If the Data is present in the instruction, such type of instructions are called as

( Correct Answer Mark : 4 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Direct addressing
- ☐ Indirect addressing
- ☐ Register addressing
- ☐ Immediate addressing



ore t Answer: Immediate addressing  
n i te Answer: Direct addressing

Question 171. layer is not present in the TCP/IP interface reference compared to OSI layers  
( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Transport
- ☐ Session
- ☐ Internet
- ☐ Application

ore t Answer: Session  
n i te Answer: Internet

Question 172. With respect to Opcode "DAD", which of the following is correct  
( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ It stands for Decimal adjust accumulator
- ☐ it adds 16-bit data directly in register pairs
- ☐ Decrement source by 1
- ☐ Increment source by 1

ore t Answer: it adds 16-bit data directly in register pairs  
n i te Answer: It stands for Decimal adjust accumulator

Question 173. The main disadvantage with Nickel-Cadmium cells is  
( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ They have a high-energy density
- ☐ They can be recharged more times than other types of rechargeable batteries
- ☐ They have to be fully discharged before recharging, because they suffer from a memory effect
- ☐ All the above

ore t Answer: They have to be fully discharged before recharging, because they suffer from a memory effect  
n i te Answer: They have to be fully discharged before recharging, because they suffer from a memory effect

Question 174. The typical value  $Z_0$  i.e. Characteristic impedance of a Coaxial cable is  
( Correct Answer Mark : 1 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ 75 ohms
- ☐ 300 ohms
- ☐ 100 ohms
- ☐ 600 ohms

ore t Answer: 75 ohms  
n i te Answer: 75 ohms

Question 175. If a Transmission line is terminated with a resistance equal to its characteristic impedance  
( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ The line loss will be maximum
- ☐ The input impedance will be twice the terminating resistance
- ☐ The Standing Wave Ratio will be minimum
- ☐ The Standing Wave Ratio will be maximum

ore t Answer: The Standing Wave Ratio will be minimum  
n i te Answer: The Standing Wave Ratio will be maximum

Question 176. CT and PT are used generally to  
( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Step up the respective quantities
- ☐ step down the respective quantities
- ☐ Both
- ☐ None

ore t Answer: step down the respective quantities  
n i te Answer: Both

Question 177. What function enable a user to input information ( in C language ) while the programme is in execution  
( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Print f
- ☐ scan f
- ☐ &&
- ☐ strcpy

ore t Answer: scan f  
n i te Answer: Print f

Question 178. A 3-phase 50HZ, 6 pole squirrel cage induction motor will run at a synchronous speed of  
( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ 960 rpm
- ☐ 1000 rpm
- ☐ 1500 rpm
- ☐ 1600 rpm

ore t Answer: 1000 rpm  
n i te Answer: 1500 rpm

Question 179. In a critically damped system, the damping factor of the system is



( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ Zero
  - ☐ Less than unity
  - ☐ Unity
  - ☐ greater than unity
- ore t Answer:** Unity  
**n i te Answer:** Unity

Question 180. When two frequencies  $F_1$  &  $F_2$  are applied to the Horizontal & Vertical Amplifiers respectively of a CRO, a "circle" is appeared on the CRT/ CRO screen. With reference to the Lissajous figures, the ratio of frequencies  $F_1$  &  $F_2$  is  
( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ 2:1
  - ☐ 1:2
  - ☐ 1:1
  - ☐ 3:1
- ore t Answer:** 1:1  
**n i te Answer:** 1:1

Question 181. An Analog transducer has range 0 - 10V. Calculate bits of an A/D converter if the resolution is 5 mV  
( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ 10
  - ☐ 9
  - ☐ 11
  - ☐ None
- ore t Answer:** 11  
**n i te Answer:** 11

Question 182. Characteristic impedance is also known as  
( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ Driving point impedance
  - ☐ Surge impedance
  - ☐ Iterative impedance
  - ☐ All of the above
- ore t Answer:** Surge impedance  
**n i te Answer:** Driving point impedance

Question 183. An accurate voltmeter must have an internal impedance of  
( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ Very Low value
  - ☐ Low value
  - ☐ Very High Value
  - ☐ Zero
- ore t Answer:** Very High Value  
**n i te Answer:** Very Low value

Question 184. The capacitors used in single-phase motors have no  
( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ definite value
  - ☐ Polarity marking
  - ☐ voltage rating
  - ☐ di-electric medium
- ore t Answer:** Polarity marking  
**n i te Answer:** voltage rating

Question 185. \_\_\_\_\_ antenna is most frequently used as reference antenna  
( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ Yagi-Uda
  - ☐ Parabolic
  - ☐ Horn
  - ☐ None
- ore t Answer:** Horn  
**n i te Answer:** Horn

Question 186. After reset, CPU begins execution of instruction from which memory address  
( Correct Answer Mark : 1 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ 0000<sub>16</sub>
  - ☐ 0001<sub>16</sub>
  - ☐ 8000<sub>16</sub>
  - ☐ FFFF<sub>16</sub>
- ore t Answer:** 0000<sub>16</sub>  
**n i te Answer:** 0000<sub>16</sub>

Question 187. Compiler converts  
( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ Source code to Higher Language

☐ Object code to source code  
☐ Source code to Machine code  
☐ One source code to another source code  
**ore t Answer:** Source code to Machine code  
**n i te Answer:** Source code to Machine code

Question 188. In a DC Motor, unidirectional torque is produced with the help of  
 ( Correct Answer Mark : 4 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ Brushes  
☐ Commutator  
☐ end plates  
☐ Both A & B

**ore t Answer:** Both A & B  
**n i te Answer:** end plates

Question 189. when the DC voltmeter is connected polarities reversed  
 ( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ The pointer deflects upscale  
☐ The pointer deflects downscale  
☐ The pointer remains stationary  
☐ None

**ore t Answer:** The pointer deflects downscale  
**n i te Answer:** The pointer remains stationary

Question 190. The power factor of an AC electric power system is defined as the ratio of  
 ( Correct Answer Mark : 1 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ real power flowing to the load to the apparent power in the circuit  
☐ apparent power in the circuit to the real power flowing to the load  
☐ real power flowing to the load to the apparent Voltage in the circuit  
☐ None

**ore t Answer:** real power flowing to the load to the apparent power in the circuit  
**n i te Answer:** apparent power in the circuit to the real power flowing to the load

Question 191. The Routh-Hurwitz criteria is comprised of \_\_\_\_\_ separate tests that must be satisfied for a stable system  
 ( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ 1  
☐ 2  
☐ 3  
☐ 4

**ore t Answer:** 3  
**n i te Answer:** 2

Question 192. The length of IPv4 Address is  
 ( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ 32 Bytes  
☐ 4 Bytes  
☐ 8 bytes  
☐ 2 bits

**ore t Answer:** 4 Bytes  
**n i te Answer:** 8 bytes

Question 193. Noise figure is used as figure of merit of  
 ( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ Oscillator  
☐ Amplifier  
☐ Modulator  
☐ Isolator

**ore t Answer:** Amplifier  
**n i te Answer:** Amplifier

Question 194. \_\_\_\_\_ is an electronic device that reduces the amplitude or power of a signal without appreciably distorting its waveform.  
 ( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ Amplifier  
☐ Attenuator  
☐ Mixer  
☐ All the above

**ore t Answer:** Attenuator  
**n i te Answer:** Mixer

Question 195. The bit rate of a digital communication system is 34 M bits/sec. The modulation scheme used is QPSK. The baud rate of the system is  
 ( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

**Options:**

- ☐ 8.5 M bit/sec  
☐ 17 M bit/sec  
☐ 34 M bit/sec  
☐ 68 M bit/sec

**ore t Answer:** 17 M bit/sec

n i te Answer: 8.5 M bit/sec

Question 196. Each Push and POP operation involves \_\_\_\_\_ at a time  
( Correct Answer Mark : 4 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ a single Bit
- ☐ a single Nibble
- ☐ a single Byte
- ☐ a Double Byte

ore t Answer: a Double Byte

n i te Answer: a Double Byte

Question 197. The IF of standard FM Receivers using the 88 to 108 MHz band is  
( Correct Answer Mark : 4 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ 455 KHz
- ☐ 26 MHz
- ☐ 70 MHz
- ☐ 10.7 MHz

ore t Answer: 10.7 MHz

n i te Answer: 455 KHz

Question 198. The bridge which is used to measure values of resistance below 1 ohm is  
( Correct Answer Mark : 2 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ Wheatstone bridge
- ☐ Kelvin's Bridge
- ☐ Maxwell's bridge
- ☐ Hay's bridge

ore t Answer: Kelvin's Bridge

n i te Answer: Wheatstone bridge

Question 199. In a parallel circuit all components must  
( Correct Answer Mark : 1 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ have same potential difference across them
- ☐ have the same value
- ☐ carry the same current
- ☐ All the above

ore t Answer: have same potential difference across them

n i te Answer: have same potential difference across them

Question 200. Short circuited stubs are preferred to open circuited stubs because the latter are  
( Correct Answer Mark : 3 Wrong Answer Mark (Negative Mark) : 0.25 )

Options:

- ☐ More difficult to make
- ☐ More difficult to connect
- ☐ Liable to radiate
- ☐ Incapable of giving a full range of reactance's

ore t Answer: Liable to radiate

n i te Answer: Incapable of giving a full range of reactance's