Y

Booklet Code : C

Time : 2 Hours

Marks : 100

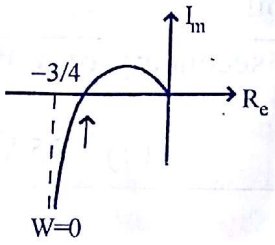
Instructions :

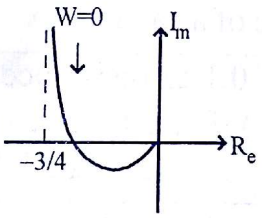
(i) Each question carries **ONE** mark.

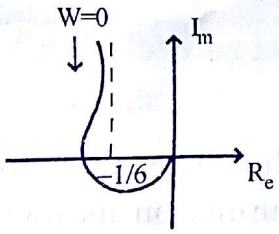
(ii) Choose the correct or most appropriate answer from the given options to the following questions and darken, with Black Ball Point Pen only, the corresponding digit **1, 2, 3** or **4** in the circle pertaining to the question number concerned in the OMR Answer Sheet, separately supplied to you.

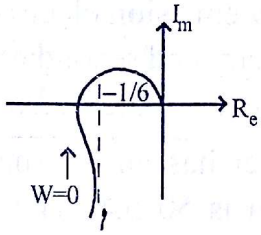
SECTION - A : ELECTRICAL ENGINEERING

1. The frequency response of $G(s)=\dfrac{1}{s(s+1)(s+2)}$ plotted in the complex $G(j\omega)$ plane (for $0 < \omega < \infty$) is

(1) 

(2) 

(3) 

(4) 

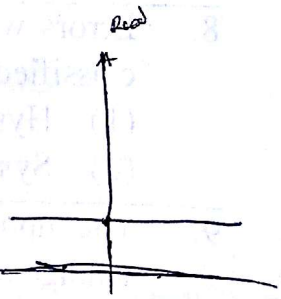
2. The constant M loci plot is symmetrical with respect to

(1) real axis and imaginary axis

(2) M = 1 straight line and the real axis

(3) M = 1 straight line and the imaginary axis

(4) M = 1 straight line



3. Consider the state space model of a system, as given below

$$\begin{bmatrix}\dot{x}_1\\ \dot{x}_2\\ \dot{x}_3\end{bmatrix}=\begin{bmatrix}-1 & 1 & 0\\ 0 & -1 & 0\\ 0 & 0 & -2\end{bmatrix}\begin{bmatrix}x_1\\ x_2\\ x_3\end{bmatrix}+\begin{bmatrix}0\\ 4\\ 0\end{bmatrix}u$$

$$y=[1 \quad 1 \quad 1]\begin{bmatrix}x_1\\ x_2\\ x_3\end{bmatrix}$$

The system is _____

(1) Controllable and observable
(2) Uncontrollable and observable
(3) Uncontrollable and unobservable
(4) Controllable and unobservable

4. High voltage Schering bridge is used for the measurement of

(1) Resistance and inductance of a coil
(2) Frequency of the ac source
(3) Loss angle of a capacitor
(4) Q of a coil

5. An ammeter of 0.1 Ω resistance is connected across the secondary of a 400/5 A current transformer (CT). The CT burden is

(1) 0.5 VA (2) 2.5 VA (3) 5.0 VA (4) 25 VA

6. An aquadag is used in a CRO to collect _____

(1) Primary electrons
(2) Secondary emission electrons
(3) Both primary and secondary emission electrons
(4) The frequency of the signal

7. A PMMC meter has an internal resistance 200 Ω and the current required for its full scale deflection is 50 μA. The meter is capable of measuring, on its own, a maximum voltage of _____

(1) 5 μV (2) 10 μV (3) 5 mV (4) 10 mV

8. Errors which may be variable both in magnitude and nature (positive or negative) are classified as

(1) Hysteresis error
(2) Random errors
(3) Systematic errors
(4) Interaction errors

9. The input voltage to a full wave bridge rectifier is v(t) = 200 sin ωt volts. The peak inverse voltage of the diodes is

(1) 200 volt
(2) $\sqrt{2} \times 200$ volt
(3) $\sqrt{2} \times 100$ volt
(4) 400 volt

10. As the temperature is increased, the voltage across a semiconductor diode carrying a constant current
(1) increases
(2) decreases
(3) remains constant
(4) may increase or decrease depending upon the doping levels in the junction

11. The frequency of ac voltage in a single phase PWM converter is regulated by
(1) increasing the amplitude of sine wave
(2) varying the frequency of sine wave
(3) varying the frequency of triangular wave
(4) amplitude of the triangular wave

12. A single phase half wave converter with freewheeling diode fed separately excited DC drive operates at 1000 rpm at firing angle $\alpha = 45°$. If single phase half wave converter is replaced by single phase semi converter, the motor rotates at
(1) 2000 rpm (2) 1500 rpm (3) 1000 rpm (4) 500 rpm

13. A three phase full wave controlled rectifier is connected to a separately excited DC motor and the machine has the following data: $T_e = 150$ N–m; $\omega = 75$ rad/sec and $I_a = 50$A; What will be the back emf of the motor?
(1) 200 V (2) 225 V (3) 250 V (4) 275 V

14. Which of the following is an 8-bit register in Intel 8085 microprocessor
(1) Accumulator (2) Programme counter
(3) Stack counter (4) Both accumulator and stack counter

15. Consider a second-order linear system. Which one of the following gives the correct relationship between bandwidth and natural frequency of the system?
(1) Bandwidth is equal to natural frequency
(2) Bandwidth doesn't have any relationship with natural frequency
(3) Bandwidth is inversely proportional to natural frequency
(4) Bandwidth is directly proportional to natural frequency

16. The voltage at the receiving end of the line can be controlled by installing
(1) Synchronous condenser supplying leading kVAR
(2) Synchronous condenser supplying lagging kVAR depending on excitation of condenser
(3) Synchronous condenser supplying leading kVAR depending on excitation of condenser
(4) Synchronous condenser supplying lagging kVAR

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17. The power transformer having a capacity of 10 MVA with 132/66 kV (Star-Delta) configuration is protected by circulating current protection system. Calculate the CT ratios on both sides of the transformer for a circulating current of 5A in the pilot wires.
(1) 43.71/5, 87.4/5 (2) 43.71/(5/1.732), 87.4/5
(3) 87.4/5, 43.71/(5/1.732) (4) 43.71/5, 87.4/(5/1.732)

18. BJT amplifier configuration which acts as buffer is
(1) Common emitter (2) Common base
(3) Common collector (4) Cascode amplifier

19. Hexa decimal equivalent value of decimal number 757·25 is
(1) 7B2·2B (2) 2F5·40 (3) 3E4·60 (4) 42A·8

20. Frequency of oscillation of Colpitt's oscillator is
(1) $f = \dfrac{1}{2\pi\sqrt{L\left(\dfrac{C_1C_2}{C_1+C_2}\right)}}$ (2) $f = \dfrac{1}{2\pi\sqrt{L(C_1+C_2)}}$
(3) $f = \dfrac{1}{2\pi\sqrt{(L_1+L_2)C}}$ (4) $f = \dfrac{1}{2\pi\sqrt{(L_1+L_2+2M)C}}$

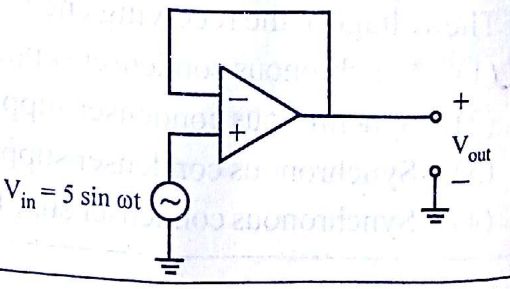
21. The type of feedback used in wien bridge oscillator is
(1) Negative feedback only (2) Positive feedback only
(3) No feedback (4) Both negative and positive feedback

22. The clock frequency of an 8-bit successive approximation type A to D converter is 2MHz. The conversion time for an analog signal sample to be converted to digital equivalent value is
(1) 2μs (2) 1μs (3) 4μs (4) 16μs

23. The present outputs of the flip-flops of a 3 bit synchronous down converter are 110. After 7 clock pulses the outputs change to
(1) 110 (2) 111 (3) 101 (4) 100

24. The highest priority interrupt in Intel 8085 microprocessor is
(1) INTR (2) RST 7.5 (3) TRAP (4) RST 6.5

25. The figure shows a circuit with an ideal operational amplifier V_{in} = 5 sinωt mV. The V_{out} is _____ mV
(1) 5 sin ωt
(2) –5 sin ωt
(3) 10 sin ωt
(4) 2.5 sin ωt



26. $\int_{|z+1|=2} \frac{z^2}{4-z^2} dz =$

(1) 0 (2) $2\pi i$ (3) $-2\pi i$ (4) 1

27. Which of the following is not an Eigen vector of the matrix $\begin{bmatrix} 1 & 1 & 3 \\ 1 & 5 & 1 \\ 3 & 1 & 1 \end{bmatrix}$?

(1) $\begin{bmatrix} 1 \\ 0 \\ -1 \end{bmatrix}$ (2) $\begin{bmatrix} -3 \\ 0 \\ 3 \end{bmatrix}$ (3) $\begin{bmatrix} 3 \\ 0 \\ -3 \end{bmatrix}$ (4) $\begin{bmatrix} 1 \\ 0 \\ 1 \end{bmatrix}$

28. The Fourier transform of the function $f(x)=xe^{4x^2}$ is

(1) 0 (2) $\frac{\sqrt{\pi}}{2} e^{-\frac{w^2}{16}}$ (3) $-i\frac{\sqrt{\pi}}{16} we^{-\frac{w^2}{16}}$ (4) $i\frac{\sqrt{\pi}}{8} we^{-\frac{w^2}{8}}$

29. Let X be a random variable that follows Binomial distribution with expectation E(X) = 7 and variance V(X) = 6. Then the probability of success p is

(1) $\frac{6}{7}$ (2) $\frac{36}{49}$ (3) $\frac{1}{7}$ (4) $\frac{1}{49}$

30. The area of the region that lies inside the cardioid $r = 1+\cos\theta$ and outside the circle $r = 1$ is

(1) $\frac{\pi}{4}$ (2) $\frac{\pi}{4}+1$ (3) $\frac{\pi}{4}+2$ (4) $\frac{\pi}{4}+4$

31. A coil with a certain number of turns has a specified time constant. If the number of turns is doubled, its time constant would be

(1) Remain unaffected (2) Become doubled
(3) Become fourfold (4) Get halved

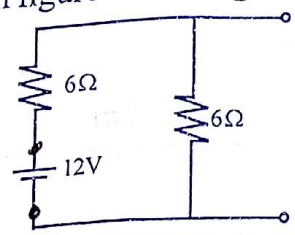
32. The instantaneous power of a balanced three-phase load is 2000 W when phase A is at its peak voltage. What will be the instantaneous power 30° later?

(1) 1 kW (2) 4 kW (3) $\sqrt{3}$ kW (4) 2 kW

33. A balanced three phase delta connected load is supplied by a balanced 3-phase, 400 V supply. The phase current is 10 A at a 0.8 power factor lagging. The total reactive power absorbed by the load is

(1) 7.2 kVAR (2) 2.4 kVAR (3) 3.2 kVAR (4) 9.6 kVAR

34. The Thevenin's equivalent of the circuit shown in figure is a voltage source of



(1) 6V in series with a resistance of 3Ω

(2) 12V in series with a resistance of 3Ω

(3) 6V in series with a resistance of 6Ω

(4) 6V in series with a resistance of 12Ω

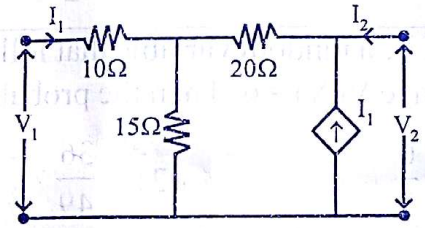
35. The combined inductance of two coils connected in series is 0.6H or 0.1H, depending upon the relative directions of the currents in the coils. How much is the mutual inductance between the coils?

(1) 0.25H (2) 0.3H (3) 0.05H (4) 0.125H

36. An initially relaxed RC-series network with R = 2M ohm and C = 1 micro Farad is switched on to a 10 V step input. The voltage across the capacitor after 2 seconds will be

(1) Zero (2) 3.68 V (3) 6.32 V (4) 10 V

37. The parameter Z_{11} of the below circuit is _____



(1) 50 Ω

(2) 15 Ω

(3) 35 Ω

(4) 40 Ω

38. The network function $f(s) = \dfrac{(s+2)}{((s+1)(s+3))}$, represents

(1) RC impedance (2) RL impedance

(3) RC impedance and RL admittance (4) RC admittance and RL impedance

39. For a series RLC circuit, the power factor at the lower half power frequency is

(1) 0.5 lagging (2) 0.5 leading (3) Unity (4) 0.707 leading

40. An electric field is given as $E = 6y^2 z\,\hat{x} + 12xyz\,\hat{y} + 6xy^2\,\hat{z}$ V/m. An incremental path is represented by $\Delta L = -3\hat{x} + 5\hat{y} - 2\hat{z}\ \mu m$. How much is the work done in moving a 2μC charge along this path if the location of the path is at (0, 2, 5)?

(1) 360 pJ (2) 720 pJ (3) 180 pJ (4) 1440 pJ

41. A point charge of 500 pC is located at the origin of the coordinate system. How much is the potential difference between two points A and B, which are at radial distances of 5 m and 15 m, respectively, from the charge?

(1) 0.9 V (2) 0.6 V (3) 0.3 V (4) 1.2 V

42. The unit of relative permeability is _____

(1) a Number (2) $\frac{AT}{m^2}$ (3) $\frac{AT}{m}$ (4) $\frac{N}{wb}$

43. A circular-loop conductor, having a radius of 0.1 m and a resistance of 5Ω, lies in the $z = 0$ plane with its center at the origin of the coordinate system. The magnetic flux density in the region is 0.2 sin 1000t $\hat{z}$ Wb/m^2. How much is the current flowing in the conductor?

(1) $0.4\pi \cos 1000t$ A (2) $0.02\pi \sin 1000t$ A

(3) $-0.4\pi \cos 1000t$ A (4) $-0.02\pi \sin 1000t$ A

44. The magnetic field strength in a region is given as $H = y\cos ax\,\hat{x} + (y + e^x)\,\hat{z}$. What is the value of $\nabla \times H$ at the origin?

(1) $\hat{x} + \hat{y} + \hat{z}$ (2) $\hat{x} + \hat{y} - \hat{z}$

(3) $-\hat{x} - \hat{y} - \hat{z}$ (4) $\hat{x} - \hat{y} - \hat{z}$

45. A hollow metal sphere of radius 5 cm is charged such that the potential on its surface is 10V. The potential at a distance of 2 cm from the centre of the sphere is _____

(1) 4 V (2) 10 V (3) $\frac{10}{3}$ V (4) Zero

46. The Maxwell equation for time varying field is _____

(1) $\nabla \times H = J + \frac{\partial D}{\partial t}$ (2) $\nabla \cdot H = J + \frac{\partial D}{\partial t}$

(3) $\nabla \times H = J \frac{\partial D}{\partial t}$ (4) $\nabla \times H = J - \frac{\partial D}{\partial t}$

47. How much is the energy of the discrete-time signal $x[n]$ given by:
$x[n] = (-0.5)^n\, u[n]$, where $u[n]$ is the unit step sequence.

(1) $\frac{3}{4}$ (2) $\frac{1}{2}$ (3) $\frac{4}{3}$ (4) 2

48. The Laplace transform of signal $x(t) = -e^{-2t}\,u(-t)$ is _____, where $u(t)$ is the unit step signal.

(1) $\frac{1}{s-2}$ (2) $\frac{1}{s+2}$ (3) $-\frac{1}{s+2}$ (4) $-\frac{1}{s-2}$

49. The amplitude spectrum $|X(j\omega)|$ of a real signal $x(t)$ is _____

(1) an even function (2) an odd function

(3) an even and odd function both (4) neither even nor odd function

50. Which of the following discrete time system is not causal

(1) $y[n] = x[-n]$ (2) $y[n] = \sum_{k=-\infty}^{n} x[k]$

(3) $y[n] = x[n-1]$ (4) $y[n] = y[n-1] + x[n]$

51. The fundamental period N of a discrete time signal $e^{j\left(\frac{3\pi}{4}\right)n}$ is

(1) N = 1 (2) N = 2 (3) N = 4 (4) N = 8

52. A single-phase 200/125 volt autotransformer delivers 40 kVA to a load at 0.8 power factor lagging. Neglect leakage reactance and magnetizing current. For this loading condition the transformed kVA is

(1) 15 (2) 40 (3) 25 (4) 32

53. A 3-phase induction motor runs at 3% slip and develops mechanical power equal to 10 kW. The air gap power is

(1) 9.7 kW (2) $\left(\frac{10}{0.97}\right)$ kW (3) 10.30 kW (4) 10.03 kW

54. A three-phase, 2000-volt, Y-connected wound rotor induction motor has the following no-load test data:
2000 volt, 15.3 amp and 10.1 kW
The core loss resistance r_c of the approximate equivalent circuit is nearly

(1) 396 Ω (2) 686 Ω (3) 329 Ω (4) 666 Ω

55. A 230 V dc series motor has an armature circuit resistance of 0.2 Ω and field resistance of 0.1 Ω. At rated voltage, the motor draws a line current of 40 A and runs at speed of 1000 rpm. Assume that the flux at 20 A line current is 60% of flux at 40 A line current. What is the speed of motor for a line current of 20 A at 230 V.

(1) 1317 rpm (2) 1713 rpm (3) 1137 rpm (4) 3117 rpm

56. A three-phase Y-connected synchronous generator has synchronous reactance $X_S = 5\ \Omega$ per phase. It delivers 12 kVA load at unity power factor. The terminal voltage is 200 volts/phase. The induced emf per phase of the generator is

(1) $\sqrt{5} \times 100$ volts (2) $\sqrt{3} \times 100$ volts

(3) $\sqrt{2} \times 100$ volts (4) 200 volts

57. The emf induced per phase in the rotor winding of a 3-phase induction motor is 100 V at stand still. Under full-load condition, this emf would be normally

(1) 100 V (2) 50 V (3) 4 V (4) 0.2 V

58. A 3-phase induction motor has a starting torque of 200 N-m when switched on-directly to supply. If an auto-transformer with 50% tapping is used for starting, the starting torque would be

(1) 400 N-m (2) 200 N-m (3) 100 N-m (4) 50 N-m

59. A 3-phase synchronous generator is operating at 0.8 pf lagging with respect to the excitation voltage. The nature of armature reaction mmf produced by the armature currents is

(1) Magnetizing
(2) Demagnetizing
(3) Cross-magnetizing and partly demagnetizing
(4) Partly demagnetizing and partly cross-magnetizing

60. When speed becomes more than the synchronous speed during hunting, the damper bars develop

(1) Synchronous motor torque (2) Induction motor torque
(3) DC motor torque (4) Induction generator torque

61. Rotor slot of the squirrel cage induction motor are skewed slightly, so as to

(1) Increase the mechanical strength of rotor
(2) Make the rotor construction simple
(3) Eliminate locking tendency of the rotor and to reduce the noise
(4) Save the amount of copper required

62. Maximum torque developed by a three-phase induction motor

(1) increases with increase in rotor resistance
(2) decreases with increase in rotor resistance
(3) is independent of rotor resistance
(4) increases with decrease in rotor resistance

63. A synchronous machine has its field winding on the stator and armature winding on the rotor. When running under steady conditions, its air gap field is

(1) Stationary with respect to stator

(2) Stationary with respect to rotor

(3) Rotating at synchronous speed with respect to stator

(4) Rotating at synchronous speed in the direction of rotor rotating

64. A long transmission line is energized at the sending end and is kept open circuited at the receiving end. The magnitude of receiving end line voltage is 400 kV. The magnitude of the sending end line voltage is

(1) < 400 kV (2) $= 400$ kV (3) > 400 kV (4) ≥ 400 kV

65. The string efficiency of a string of suspension insulators of a 400 kV, 3-phase transmission line is 80%. The voltage across the string is

(1) 400 kV (2) $(400/\sqrt{3})$ kV

(3) $(500/\sqrt{3})$ kV (4) 320 kV

66. A 3-phase, 11 kV, induction motor draws 100 kVA at 0.8 pf lagging from the system. A 3-phase capacitor bank rated 60 kVAR is installed across the motor in order to increase the power factor to unity. The apparent power supplied by the system to the motor with capacitor bank is

(1) 100 kVA (2) 40 kVA (3) 160 kVA (4) 80 kVA

67. As the moisture content in the air increases, the disruptive critical voltage

(1) Decreases (2) Increases (3) Remains constant (4) Infinite

68. The arc resistance causes distance relay

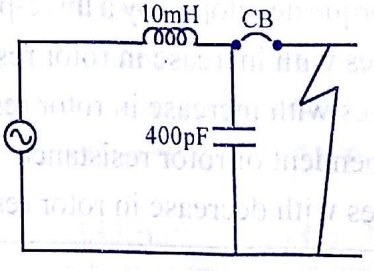
(1) under reach

(2) over reach

(3) under reach or over reach depending on the length of the line

(4) reach unchanged

69. Figure shows the single phase equivalent circuit for analyzing circuit breaker operation. The frequency of re-striking voltage is



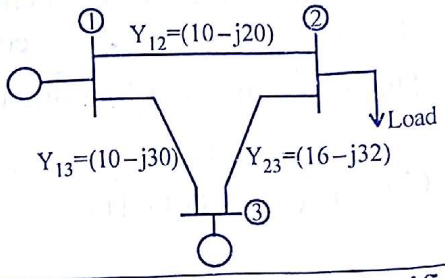
(1) 1000 kHz

(2) 5000 kHz

(3) 500×10^3 radians/sec

(4) 200×10^3 radians/sec

70. One-line diagram of a 3-bus power system is given in figure. The line admittances are marked in per unit. The first row of the Y_{Bus}



(1) $[(20-j50) \quad (-10+j20) \quad (-10+j30)]$
(2) $[(20-j50) \quad (10-j20) \quad (10-j30)]$
(3) $[(10-j20) \quad (-10+j20) \quad (-10+j30)]$
(4) $[(20+j50) \quad (-10+j20) \quad (-10+j30)]$

71. Number of iterations required for convergence of a load flow algorithm increases significantly with increase of number of buses with
(1) G-S load flow algorithm
(2) N-R load flow algorithm
(3) both G-S and N-R load flow algorithms
(4) Fast decoupled load flow algorithm

72. For low head and high discharge, the hydraulic turbine used is:
(1) Francis turbine
(2) Kaplan turbine
(3) Pelton wheel
(4) Impulse turbine

73. Corona loss can be reduced by the use of hollow conductors because,
(1) The current density is reduced
(2) Eddy current in the conductor is eliminated
(3) For a given cross-section, the radius of the conductor is increased
(4) Of better ventilation in the conductor

74. A transmission line represented in End condenser method, the values of parameters A and D are _____ and _____ respectively.
(1) A = 1+ZY; D = 1+ZY
(2) A = 1+ZY; D = 1
(3) A = 1–ZY; D = 1+ZY
(4) A = 1; D = 1+ZY

75. Overreaching of distance relay due to the decaying DC component is avoided by
(1) Electromechanical relay
(2) Solid state relay
(3) Digital relay
(4) Impedance relay

76. Transfer function of a system has a zero at –1, and a pole at –2 and gain factor of 2. The unit step response is
(1) $e^{-2t}-1$
(2) $1-e^{-2t}$
(3) $1+e^{-2t}$
(4) e^{-2t}

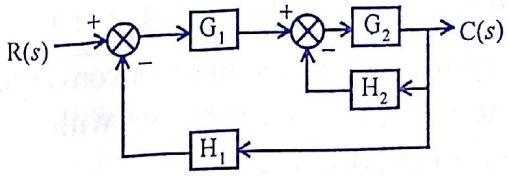
77. An unity negative feedback control system has open-loop transfer function $G(s)=\dfrac{4}{s(s+1)}$.

The damped natural frequency ω_d in radians / sec is

(1) $2\times\sqrt{1-(0.5)^2}$
(2) $4\times\sqrt{1-(0.25)^2}$
(3) $2\times\sqrt{1+(0.25)^2}$
(4) $2\times\sqrt{1-(0.25)^2}$

78. For a feedback control system of type-2, the steady state error for a ramp input is
(1) infinite (2) constant (3) zero (4) indeterminate

79. The overall transfer function of the system shown below is _____



(1) $\frac{G_1G_2}{1+G_1H_1+G_1G_2H_2}$

(2) $\frac{G_1G_2}{1+G_2H_2+G_1G_2H_1}$

(3) $\frac{G_1G_2}{1+G_2H_2+G_1G_2H_2}$

(4) $\frac{G_1G_2}{1-G_2H_2-G_1G_2H_1}$

80. An electric motor with high torque/inertia ratio has _____
(1) Lower motor time constant and faster dynamic response
(2) Higher motor time constant and slow dynamic response
(3) Lower motor time constant and slow dynamic response
(4) Higher motor time constant and faster dynamic response

SECTION - B : GENERAL AWARENESS AND NUMERICAL ABILITY

81. Conventional Rainfall occurs in
(1) Equatorial Region (2) Temperate Region
(3) Tropical Region ✓ (4) Polar Region

82. Eden Garden stadium in Kolkata is associated with
(1) Basket Ball (2) Foot Ball (3) Cricket (4) Hockey

83. Which in the following is a stringed instrument?
(1) Tabla (2) Shehnai (3) Santoor (4) Mridangam

84. Someone is sitting ____ the shade of a tree today because someone planted it a long time ago.
(1) Under (2) On (3) Above (4) In

85. The teacher _____ us some advice on taking tests.
(1) Did (2) Gave (3) Made (4) Took

86. If you were the Prime Minister of India, what _____ you _____?
(1) Would, do ✓ (2) Would, have done
(3) Will, do (4) Had, done

87. Sachin retired from his _____ cricket career in 2013.
(1) Illustrate (2) Illustrious (3) Illustrations (4) Illusive

88. Who of the following has called Hyderabad as Bagh City?
(1) Thevenot (2) Methold (3) Tavernier (4) Manucci

89. Who was the principal deity of Kakatiyas?
(1) Goddess Laxmi (2) Lord Vishnu
(3) Swamyambhu Shiva (4) Goddess Durga

90. Who wrote the book The Tragedy of Hyderabad?
(1) Mir Laiq Ali (2) Mohammed Hyder
(3) Narendra Luther (4) John Zubrzyki

91. Who was the first Martyr of Telangana Struggle?
(1) M.A.Rasheed (2) B. Narsi Reddy
(3) K. Venkateshwar Rao (4) Mir Laiq Ali

92. Which of the following is not a valid IP address?
(1) 192.10.9.20 (2) 192.30.23.189 (3) 192.10.23.350 (4) 192.10.50.230

93. Which of the following is not class of IP addresses?
(1) Class A (2) Class C (3) Class E (4) Class F

94. Process of inserting an element in an array is called _____
(1) Create (2) Push (3) Pop (4) Evaluate

95. DNS is stands for _____
(1) Domain Name Server (2) Domain Name System
(3) Dynamic Name System (4) Domain Network Service

96. Find the missing term in the following series:
2, 5, 10, 17, 26, 37, ?, 65
(1) 48 (2) 49 (3) 50 (4) 51

97. Complete the analogous pair, Terrible : Serene : : Roof: ?
(1) Door (2) Floor (3) Walls (4) Pillars

98. The price of a commodity increases first by 20% and then by 10%. What is the net increase in the price?
(1) 28% (2) 30% (3) 32% (4) 34%

99. Find the average of the first 97 natural numbers?
(1) 47 (2) 48 (3) 49 (4) 50

100. Who is empowered to transfer a Judge from one High court to another High court
(1) Chief Justice of India (2) President of India
(3) Law Minister of India (4) The Union Cabinet