TSNPDCL Assistant Engineer- Electrical 2015 Question Paper

1. Damper winding is provided in 3- phase synchronous motor to:

(A) Prevent hunting only

(B) Provide starting torque and prevent hunting (C) Provide starting torque only

(D) Prevent crawling

2. 3 equal impedances 10+j10Ω are connected in delta across a 3 phase balanced supply the angle between the line current I_R and line voltage V_{RY} is given by:

(A) 45^0

(B) 75^0

(C) 15^0

(D) 0^0

3. The state of charge of the battery is indicated by the electrolytes:

(A) Mass

(B) Colour

(C) Viscosity

(D) Specific gravity

4. A load has a per unit impedance of 0.6 to a base of 20MVA and 33kV.The P.U impedance to a base of 10MVA and 11kV:

(A) 0.121

(B) 2.7

(C) 0.133

(D) 0.9

5. A 3 ϕ,6 Pole induction motor is run with a rated voltage V and rated frequency 50Hz.The maximum torque obtained is T_{m1}.If the motor is supplied with same voltage but a frequency of 60Hz, the maximum torque would be approximately:

(A) $0.7T_{m1}$

(B) $0.5T_{m1}$

(C) $1.2T_{m1}$

(D) T_{m1}

6. In a transformer the core is laminated to reduce:

(A) Copper losses in the core

(B) Hysteresis losses only

(C) Hysteresis and eddy current losses

(D) Eddy current losses only

7. The voltage of a DC 2 wire system operating at 200V is raised to 400V.The percentage saving in conductor material gained if same power is transmitted over the same distance with same power loss:

(A) 50

(B) 40

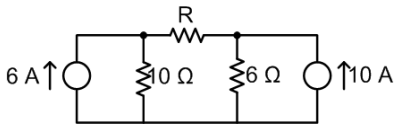
(C) 75

(D) 60

8. The voltage across various discs of suspension insulators having identical discs are different due to:

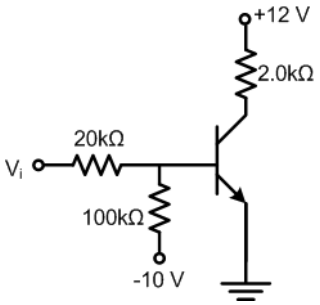
(A) Surface leakage currents
(B) Series capacitance of lines
(C) Shunt capacitance to ground
(D) Series and shunt capacitances

9. The power dissipated in watts, in the resistor R is:



(A) 36 R
(B) 0
(C) 100 R
(D) 16 R

10. Consider the circuit shown in the figure. If the β of the transistor is 30 and the input voltage is +5 V, then the transistor would be operating in:

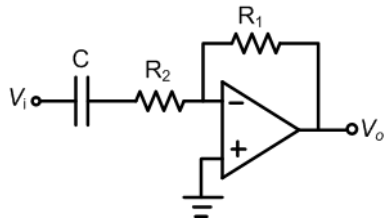


(A) Cut off region
(B) Breakdown region
(C) Active region
(D) Saturation region

11. A voltage is impressed at the end A of a long transmission line AB.This voltage travelling along AB has two components f (t - x/v) and f (t + x/v) where v is the velocity of the wave and x is the distance travelled. Which of the following statements is true for such a wave:

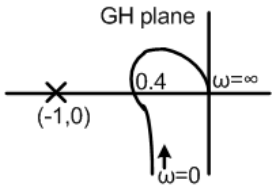
(A) f (t - x/v) is a backward travelling component
(B) f (t + x/v) - f (t - x/v) is the total voltage at any time ‘t’.
(C) The sum of the two is the total voltage at time’t’
(D) f (t + x/v) is a forward travelling component

12. The following op-amp circuit is:



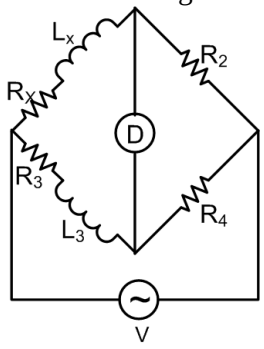
(A) Low pass filter with cut off frequency $1/R_2C$
(B) Low pass filter with cut off frequency $1/R_1C$
(C) High pass filter with cut off frequency $1/R_2C$
(D) High pass filter with cut off frequency $1/R_1C$

13. The polar plot of a feedback control system, which is open loop stable with gain K = 1 is given by:



now if K is doubled, the system will be:
(A) Stable with less oscillations in step response
(B) Unstable
(C) Stable with more oscillations in step response
(D) Step response has sustained oscillations

14. The unknown inductance L_x is measured using Maxwells Bridge shown in figure:



Under balanced conditions R_x and L_x are given by
(A) $R_x = (R_4 / R_2) \times R_3$;
$L_x = (R_2 / R_4) \times L_3$;
(B) $R_x = (R_2 / R_4) \times R_3$;
$L_x = (R_2 / R_4) \times L_3$;
(C) $R_x = (R_2 / R_4) \times R_3$;
$L_x = (R_4 / R_2) \times L_3$;
(D) $R_x = (R_4 / R_3) \times R_2$;
$L_x = (R_4 / R_3) \times L_3$;

15. If an unsymmetrical line to ground fault occurs at the secondary terminals of a delta/star, ungrounded transformer, then:
(A) Zero sequence currents are present on both sides of the transformer
(B) Zero sequence currents are absent on both sides of the transformer

(C) Zero sequence currents are present on the secondary side but not on the primary side

(D) Zero sequence currents are present on the primary side but not on the secondary side

16. Peterson coil is used for:

(A) Shunt compensation of lines

(B) Reduce fault currents

(C) Grounding of system neutral

(D) Connecting interconnected systems

17. HRC fuses provide best protection against:

(A) Lightning

(B) Short circuits

(C) Overload

(D) Over voltage

18. Consider the 8085 program below:

```
MVI A BB
LXI B 2060 H
STAX B
```

After this program is executed, the contents of A and the flag which is set, are:

(A) OOH, carry flag

(B) BB, AC flag

(C) OOH, zero flag

(D) BB, no flag

19. From an open circuit test on a transformer, the no load power factor was determined. Out of the following choices which is the most likely value:

(A) 0.9

(B) unity

(C) 0.8

(D) 0.4

20. Principle of thermocouple is based on:

(A) Thomson effect

(B) Peltier effect

(C) Seebeck effect

(D) Kelvin effect

21. Consider the following statements:

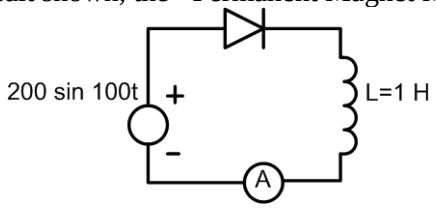
(A) IGBT has low input impedance compared to PMOSFET

(B) IGBT and PMOSFET are both voltage controlled devices

(C) IGBT can be designed for higher voltages compared to PMOSFETS

(D) IGBT converters are more costly and bigger in size compared to BJT converter

22. In the diode rectifier circuit shown, the Permanent Magnet Moving Coil meter will read:



(A) 1A
(B) 1.414A
(C) 2A
(D) 2.814A

23. A dummy strain gauge is used in a quarter bridge strain gauge circuit to:
(A) Compensate for changes in temperature and lead wire resistance
(B) Produce more output voltage from the bridge
(C) Increase the sensitivity of the bridge
(D) Compensate lead wire resistance only

24. LVDT is used to measure:
(A) Strain
(B) Pressure
(C) Flow
(D) Displacement

25. Slip test is performed to determine:
(A) Slip in an induction motor
(B) X_d and X_q in a salient pole alternator
(C) Synchronous impedance in an alternator
(D) Positive and Negative sequence impedances of an alternator

26. A transmission line of 200 km has a certain A, B, C and D parameters. If the length is reduced to 60 km:
(A) A increases, B decreases
(B) A and B increases
(C) A decreases, B decreases
(D) A and B decreases

27. Load compensation in power system is a process to:
(A) Maintain better voltage profile
(B) Increase short circuit capacity of the system
(C) Generate required harmonics for loads like arc furnaces
(D) Compensate for the line reactance

28. A 5A ammeter with 0.3Ω resistance is to be used to measure current in a circuit which draws a current up to 20 A. Then the shunt resistance to be used along with the ammeter:
(A) 0.1 Ω
(B) 0.2 Ω
(C) 0.3 Ω

(D) 1 Ω

29. In a PMMC instrument, the damping provided is:
(A) Air damping
(B) Fluid damping
(C) Eddy current damping
(D) Magnetic damping using a magnet

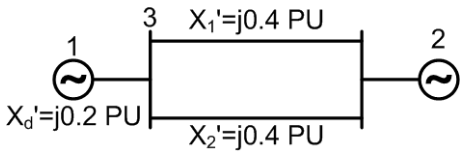
30. Which of the following is true for a bus impedance matrix?:
(A) It is sparse
(B) It has diagonally dominant elements
(C) It is the inverse of the bus admittance matrix
(D) Each element of it is the reciprocal of the corresponding element in admittance matrix

31. A single phase voltage controller of 220V,50 Hz and a load of 10 Ω. For 9 cycles 'on' and 7 cycles 'off', the rms output voltage and input power factor are:
(A) 170 V, 0.7
(B) 171 V, 0.78
(C) 165 V, 0.75
(D) 180 V, 0.6

32. The range of frequencies used in induction heating is:
(A) 0 – 25 Hz
(B) 50 – 100 Hz
(C) less than 200 Hz
(D) more than 1 kHz

33. Consider the following statements:
(1) Magnetising current in a 1 phase transformer is sinusoidal
(2) Magnetising currents in the 3 phase supply lines of a 3 – phase transformer are sinusoidal
(3) Magnetising current in a 1 phase transformer is non sinusoidal but the induced voltages are sinusoidal
(A) (1) and (3)
(B) (2) only
(C) (2) and (3)
(D) (1) only

34. A generator is connected to an infinite bus through a double circuit line as shown.



The admittance matrix Y is given by:

(A) $\begin{bmatrix} j5 & 0 & -j5 \\ 0 & j5 & -j5 \\ -j5 & -j5 & j10 \end{bmatrix}$

(B) $\begin{bmatrix} -j5 & 0 & j5 \\ 0 & -j5 & j5 \\ j5 & j5 & -j10 \end{bmatrix}$

(C) $\begin{bmatrix} -j5 & 0 & -j5 \\ 0 & j5 & -j5 \\ -j5 & -j5 & j10 \end{bmatrix}$

(D) $\begin{bmatrix} -j5 & +j10 & j5 \\ j10 & -j5 & j5 \\ j5 & j5 & -j10 \end{bmatrix}$

35. The supply for arc welding is:

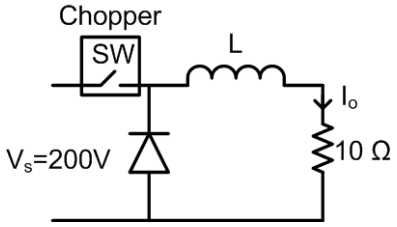
(A) High voltage, high current ac voltage

(B) Low voltage, low current ac voltage

(C) High voltage, high current dc voltage

(D) Low voltage, high current ac or dc voltage

36. For the simple chopper circuit shown, the average and rms value of currents for a duty cycle of 0.49, in amps, are (neglect the drop across when ON):



(A) 9.8, 14

(B) 14, 9.8

(C) 20, 28.28

(D) 14, 18.2

37. In a 2kW, 200V, 1000rpm, DC series motor the torque at full load was found to be 0.3 N-m. The torque at half full load in N-m is:

(A) 0.2

(B) 0.15

(C) 0.075

(D) 0.1

38. If Z transform of a^K is Z/(Z-a) then the Z transform of Ka^K is given by:

(A) (kZ)/(Z-a)

(B) (aZ)/(Z-a)^2

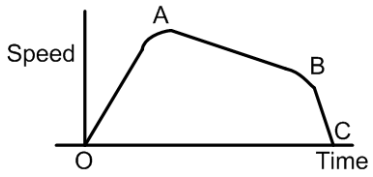
(C) (aZ)/(Z-a)

(D) a/Z-a)^2

39. The open loop transfer function with unity feedback is given by,
$G(S) = 1/(S(S+2))$
The poles of the closed loop system are located at
(A) 0, -2
(B) 2.46, -4.46
(C) -1, -1
(D) -1, -2

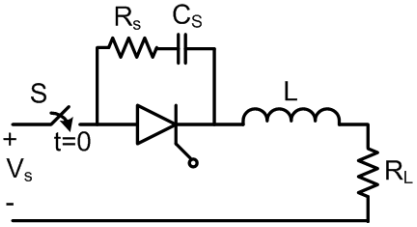
40. For using regenerative breaking , the most suitable motor is:
(A) DC series motor
(B) Slip ring induction motor
(C) Squirrel cage induction motor
(D) Synchronous motor

41. The speed time curve for an electric train is shown in the figure. In this, the segment AB represents:



(A) Accelaration
(B) Coasting
(C) Braking
(D) Regeneration

42. Figure shows a thyristor controlling power in a load resistance R_L. The supply voltage is 240V DC and the limit for di/dt for the SCR is 50 A/μsec. The minimum value of L, used for di/dt protection, in μH is:



(A) 2.4
(B) 120
(C) 1.2
(D) 4.8

43. A thyrite type lightening arrester:
(A) Blocks surge voltage appearing on a line
(B) Absorbs the surge voltage appearing on a line
(C) Returns the surge back to source
(D) Offers low resistance path to surge currents

44. Unit commitment is a procedure in which:

(A) Scheduling of total generation is done economically

(B) Optimal combination of units in a system is chosen at any given time

(C) Most efficient machines are selected for financial economy

(D) Most efficient machines are selected for minimum reactive power loss

45. For a single phase full bridge inverter with V_S = 220 V DC, T = 1 ms feeding a resistive load, the fundamental component of the load voltage (rms value) in volts is:

(A) Accelaration

(B) Coasting

(C) Braking

(D) Regeneration

46. The range of 'k' for which the system with the following characteristic equation is stable, is

$S^3 + kS^2 + (k+2)S + 3 = 0$:

(A) $k > 0$

(B) $k > 1$

(C) $-3 < k < 1$

(D) $1 < k < 3$

47. In a star-Δ connected 3ϕ transformer, supplied with 11 kV on star side, the line current is 20 A. Per phase turns ratio is 11. The secondary line voltage and line current are:

(A) 577 V, 381 A

(B) 550 V, 220 A

(C) 635 V, 381 A

(D) 1 kV, 220 A

48. A short circuit test on a 1ϕ, 4 kVA, 200/400, 50Hz transformer gave following results HV side : 15 V, 10 A, 80 W.

The percentage regulation on full load unity power factor is:

(A) 2

(B) 4

(C) 1

(D) -2

49. Consider the following statements. Which of these statements are correct? :

(1) Reactance relays are preferred for ground fault relaying

(2) Impedance relays are most suitable for protecting long transmission lines

(3) Mho relays are best suited for long transmission line protection

(4) Reactance relays are widely used for protection medium transmission lines

(A) All of them

(B) (1) and (3)
(C) (2) and (4)
(D) (1), (2) and (4)

50. Consider the two colomns A and B. In the colomn A different instruments are given. In colomn B certain characteristics of the meters are given. Match items of A with B :

A	B
(1) Moving iron (2) PMMC (3) Energy meter	(i) No control springs (ii) Air damping (iii) Electro magnetic damping (iv) eddy current damping

(A) (1) - (iv), (2) - (iii), (3) - (ii)
(B) (1) - (iii), (2) - (ii), (3) - (iv)
(C) (1) - (ii), (2) - (iii), (3) - (i)
(D) (1) - (ii), (2) - (iv), (3) - (i)

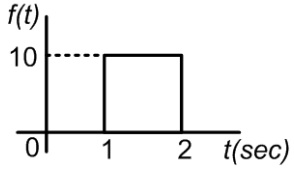
51. A double cage induction motor has better starting and running characteristics because two of the following conditions are satisfied:

(A) The inner cage has high resistance and reactance
(B) The inner cage has low resistance and high reactance
(C) The outer cage has high resistance and low reactance
(D) The outer cage has low resistance and reactance

They are:

(A) (2), (4)
(B) (1), (3)
(C) (2), (3)
(D) (1), (4)

52. The laplace transform of the function shown in the figure, is:



(A) $10/S\ e^{-S}$
(B) $10/S\ (e^{-S} + e^{-2S})$
(C) $10/S\ (e^{-S} - e^{-2S})$
(D) $10\ (e^{-S} - e^{-2S})$

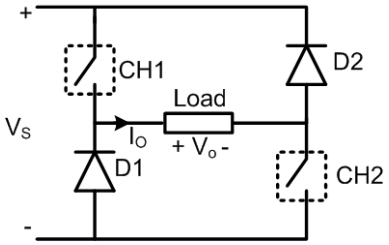
53. A 5 kW, 220 V, 1500 rpm DC shunt motor runs at 1550 rpm on no load with full voltage applied. If the applied voltage is reduced to 165 V, the speed at which it will run, in rpm is: (neglect armature resistance)

(A) 1162.5
(B) 775
(C) 1200
(D) 1550

54. In a synchronous generator if the excitation increased from a low value to normal value, with a fixed load:

(A) The armature current increases and the power factor decreases
(B) The armature current decreases and the power factor also decreases
(C) The armature current decreases and the power factor increases but is lagging
(D) The armature current decreases and the power factor increases but is leading

55. The circuit shown employs 2 choppers to supply the load. This chopper drive is:



(A) One quadrant drive
(B) Two quadrant drive
(C) Three quadrant drive
(D) Four quadrant drive

56. The speed of a separately excited DC motor is controlled by a 3-ϕ, semi converter from a 3-ϕ, 440 V, 50Hz supply. The armature resistance is 1 Ω and motor torque constant of 2 Nm/A. If firing angle is 45^0, the back emf generated by the motor, for a torque of 50 Nm, is:

(A) 460 V
(B) 482 V
(C) 420 V
(D) 333 V

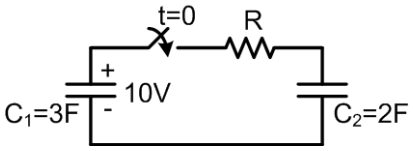
57. A separately excited DC motor is energised from a 440 V, 50 Hz, 3ϕ full converter. The input voltage to the motor for a firing angle of 45^0, in volts, is:

(A) 420
(B) 297
(C) 390
(D) 260

58. According to IE rules1956, the breaking strength of all conductors of over head power lines shall be:

(A) not less than 450 kg
(B) not less than 350 kg
(C) not less than 250 kg
(D) not less than 500 kg

59. In the following circuit the switch is closed at t = 0. The total energy lost in the resistor R = 10 Ω is found to be 60J. If the value of R is reduced to 5Ω, the energy lost in the resistor in joules would be:



(A) 60
(B) 30
(C) 120
(D) 15

60. In a stack , variable reluctance stepper motor with 12 rotor teeth, the angle through which the rotor moves for one pulse excitation is :

(A) 12^0
(B) 5^0
(C) 10^0
(D) 30^0

61. The unit of speed regulation of a governor i:

(A) Hz
(B) Hz/MW
(C) Hz/MVA
(D) rpm/MVAR

62. The fundamental component of the single phase full bridge inverter output voltage is (V_S is the DC input voltage) (A) $V_S/\pi.\sin\omega t$
(B) $2V_S/\pi.\sin\omega t$
(C) $4V_S/3\pi.\sin\omega t$
(D) $4V_S/\pi.\sin\omega t$

63. A Pyrheliometer is an instrument to measure:
(A) Temperature of solar photovoltaic cell
(B) Intensity of direct solar radiation at normal incidence
(C) Intensity of direct solar radiation
(D) Efficiency of a solar photovoltaic cell

64. When high rate of rise of recovery voltages are expected in networks consisting of generators, transformers, reactors and lines, circuit breakers with shunt resistance are employed. T_C ensure exponential build up to 50 Hz recovery without overshoot, the resistance connected is, (L is the inductance of the line and capacitance from line to ground is C):

(A) $\sqrt{LC}$
(B) LC
(C) $0.5\sqrt{\frac{L}{C}}$
(D) $\sqrt{\frac{L}{C}}$

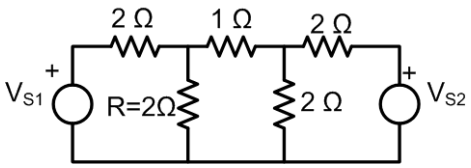
65. If a phase lead compensator has the following transfer function:

$$G(S) = \frac{K(1+\frac{s}{z})}{(1+\frac{s}{p})} \; p, z > 0$$

Then,
(A) $z < p$
(B) $z > p$
(C) $z > Kp$
(D) $z > K/p$

66. The armature current on symmetrical 3 phase short circuit of a synchronous machine (salient pole):
(A) has q – axis current only
(B) has d – axis current only
(C) both d and q axis currents
(D) cannot be divided between q and d axis currents

67. In the circuit shown the power in resistor R is 8W, when V_{S1} = 12 V, V_{S2} = 0 V. Find the power in the same resistor R when V_{S1} = 12 V, V_{S2} = 24 V, in watts:



(A) 16
(B) 24
(C) 0
(D) 32

68. A 500W bulb fitted with a reflector illuminates an area of 2 m X 2 m with an average illumination of 500 lux. The efficiency is of the reflector is 50%. The efficiency of the bulb in lumens/watts is:
(A) 8
(B) 10
(C) 6
(D) 12

69. The specified variables at any PV bus for a load flow study are:
(A) Real and reactive power
(B) Real power and load angle
(C) Real power and voltage magnitude
(D) voltage magnitude and load angle

70.

	00	01	11	10
00	1	1	0	1
01	0	0	0	0
11	0	0	1	1
10	1	0	1	1

(A) $\overline{A}\overline{B}\overline{C} + AC + \overline{B}CD + \overline{A}\overline{B}\overline{D}$
(B) $\overline{A}\overline{B}\overline{C} + AC + \overline{A}BC$
(C) $\overline{A}\overline{B}\overline{C} + AC + \overline{B}\overline{D}$
(D) $\overline{A}\overline{B}\overline{C} + AC + \overline{A}\overline{B}\overline{D}$

71. The electrode rod used for welding uses a coaching on it:
(1) To give a vapour to serve as a shielding gas to protect the weld area from atmospheric contamination
(2) To protect the arc
(3) To provide slag to protect the welded area
(4) To provide better contact with the base material

Which of these statements are correct?

(A) (1) and (2)
(B) (2) and (3)
(C) (1) and (3)
(D) (3) only

72. A hall with an area of 10 m x 10 m is to be illuminated with 240 lux using 30W CFL bulbs. The lamp maintenance factor is 0.7 and utilisation factor is 0.72. CFL bulb gives 80 lumens / watt. The number of CFL bulbs required are:
(A) 5
(B) 8
(C) 20
(D) 30

73. In a DC generator the winding of inter poles are connected:
(A) In series with the main field winding, to create a pole of same polarity as the main pole ahead in the direction of rotation.
(B) In series with the main field winding, to create a pole of opposite polarity as the main pole ahead in the direction of rotation
(C) In series with the armature winding, to create a pole of same polarity as the main pole ahead in the direction of rotation.
(D) In series with the armature winding, to create a pole of opposite polarity as the main pole ahead in the direction of rotation.

74. Consider the following statements:

(1) Step up cycloconverters require forced commutation
(2) Step down cycloconverters operate on line commutation
(3) Step up or step down cycloconverters can be load commutated for any type of load
The correct statements are:
(A) (1) only
(B) (1), (3)
(C) (1), (2)
(D) (3) only

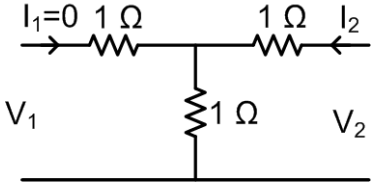
75. A six pole, 3 phase 50 Hz induction motor has a maximum torque of 10 Nm at 875 rpm. The torque at 5% slip is:
(A) 7.4 Nm
(B) 5.2 Nm
(C) 7.2 Nm
(D) 6.9 Nm

76. A function F(s) could be a driving point impedance or Admittance function of an RC or RL network:

$$F(s) = \frac{(S+1)(S+3)}{(S+2)(S+4)}.$$

This function can be realised as:
(A) RL network if F(s) = Z(s)
(B) RC network if F(s) = Z(s)
(C) RL network if F(s) = Y(s)
(D) It cannot be realised either by RL or RC network

77. The h – parameter matrix of the network shown is:



(A) $\begin{bmatrix} 1.5 & 0.5 \\ -0.5 & 0.5 \end{bmatrix}$
(B) $\begin{bmatrix} 0.5 & -0.5 \\ 0.5 & 1.5 \end{bmatrix}$
(C) $\begin{bmatrix} 2 & 1 \\ -1 & 0.5 \end{bmatrix}$
(D) $\begin{bmatrix} 2 & 0 \\ -1 & 0.5 \end{bmatrix}$

78. Which of the following is a cold cathode lamp?:
(A) Mercury vapour lamp
(B) Sodium vapour lamp
(C) Incandescent lamp
(D) Neon lamp

79. The arc voltage in a circuit breaker is:

(A) In phase with the arc current
(B) Lagging by 90^0 with an arc current
(C) Leading by 90^0 with arc current
(D) Lagging by 45^0 with an arc current

80. A second order system with zero initial conditions, has an impulse response C (t) = $10e^{-5t}$ sin10 t for $t \geq 0$ when excited by a unit step input, the steady state value of the response is

(A) 0
(B) 1.0
(C) 0.5
(D) 0.8

81. A wireless technology built in electronic gadgets used for exchanging data over short distances is:

(A) Wi - Max
(B) Bluetooth
(C) Modem
(D) USB

82. Who among the following personalities received Bharat Ratna for the year 2015:

(A) Shri Sachin Tendulkar
(B) Shri Bhimesh Joshi
(C) Shri C.N.R Rao
(D) Shri Atal Bihari Vajpayee

83. Identify the part of the sentence that has an error:

(A) Television viewers claim that /
(B) The number of scents depicting /
(C) Alcohol consumption have increased dramatically /
(D) over the last decade.

84. Identify the correct spelling from the option given:

(A) quintessence
(B quintassence
(C) quintesance
(D) quinitessence

85. The difference between people with access to computers and the internet and those without this access is known as the:

(A) Digital divide
(B Internet divide
(C) Web divide
(D) Cyber divide

86. What is the name of the India's first satellite? :

(A) Bhaskara I

(B Bhaskara II
(C) Aryabhatta
(D) Rohini

87. When was Telangana merged with Andhra, historically? :
(A) 1956
(B 1958
(C) 1955
(D) 1952

88. Which of the following is the official state bird of Telangana :
(A) Peacock
(B Pegion
(C) Sparrow
(D) Indian roller

89. Which of the following dynasties ruled Telangana? :
(A) Pala
(B Sena
(C) Kakatiya
(D) Chera

90. What will be the decimal equivalent of $(111011.101)_2$? :
(A) 48.625
(B 59.487
(C) 48.487
(D) 59.625

91. Bonalu is mainly celebrated in the period between :
(A) January and February
(B July and August
(C) September and October
(D) April and May

92. What is the form of SAARC? :
(A) The South Atlantic Association for Regional Corporation
(B The South Asian Association for Regional Cooperation
(C) The South Asian Association for Regional Corporation
(D) The Southern Asia Association for Regional Cooperation

93. One business men invested Rs 50,000 with rate of interest at 20 percent per annum. The interest was compound half yearly for first year and in the neat year it was compound yearly. What will be the total interest earned at the end of three years:
(A) Rs 20,300

(B Rs 49,200
(C) Rs 47,020
(D) Rs 48,010

94. Who is the present Chairman / CEO of Google:
(A) Mr.Sundar Pichai
(B Mr.Satya Nadella
(C) Mr.Cyrus P.Mistry
(D) Ms. Indra Nooyi

95. The sum of $\frac{1}{(32)^{\frac{-1}{5}}} + \frac{1}{(216)^{\frac{-2}{3}}} + \frac{1}{(256)^{\frac{-3}{4}}}$

(A) 1
(B 110
(C) 101
(D) 102

96. In the following question, pick up the choice which is most opposite in meaning of the underlined word in the sentence.
This author has **perspicuity** in his style.
(A) Frankness
(B Bluntness
(C) Vivacity
(D) Sincerity

97. What is the sum of two consecutive even numbers, the difference between of whose squares is 164:
(A) 82
(B 41
(C) 42
(D) 24

98. Choose the appropriate synonym for the word given below:
STERNUTATION
(A) Sneezing
(B Trepidation
(C) Hardening
(D) Reversal

99. The age of Rajesh differ by 20 year with Raghu. If 5 years ago, the age of Rajesh be 5 times as old as the Raghu, then their present ages in the years as
(A) 20, 4
(B 25, 5
(C) 30, 10
(D) 35, 15

100. A host computer that wants to communicate with another host computer on an internet requires the following to identify itself:

(A) MAC address
(B IP address
(C) Port
(D) Socket