1. **What is the main drawback of a primary cell?**
   1. Chemical reaction is irreversible
   2. The used electric equipments are costly
   3. Cell is not light
   4. None of these

2. **The required AT quantity for air gap is more than that for ferrum part from a magnetic circuit because**
   1. Air is a mixture of gases
   2. Magnetic permeability for iron is less than that of air
   3. Magneti permeability for iron is more than that of air
   4. None of these

3. **What will be the equivalent potential if a condenser of 20μF charged to 500V is connected in parallel to a condenser of 10μF charged to 200 V?**
   1. 200 V 2. 250 V 3. 300 V 4. 400 V

4. **When the primary coil of transformer is loaded from an AC source, its core gets heated due to**
   1. Permeability of core 2. Iron loss
   3. Iron magnetism 4. Hysterisis loss

5. **What will be the value of a star network equivalent to three 12 kΩ resistance delta?**
   1. Each 2kΩ 2. Each 4 KΩ
   3. Each 8 KΩ 4. Each 6 KΩ

6. **What will be the name of mascot of commonwealth games to be held in India in 2010?**
   1. Shera 2. Kaptan
   3. Melbourne 4. None of these

7. **The opposition parties of Nepal have decided to hand over the office of Prime Minister to**
   1. B.P. Koirala
   2. Girija Prasad Koirala
   3. Shankar Kumar
   4. None of these

8. **Where is Greenwinch situated?**
   1. Britain 2. America
   3. Russia 4. India

9. **The 52nd Constitutional Amendment is related to the**
   1. Legislative Council
   2. Sales Tax
   3. Antidefection
   4. None of these

10. **One rupee currency note bears the signature of**
    1. Governor of RBI
    2. Fianance Secretary
    3. Both (1) and (2)
    4. None of these

11. **The Victoria Memorial Park is situated in**
    1. Kolkata 2. Delhi
    3. Mumbai 4. Hyderabad

12. **The instrument used to measure atmospheric pressure is**
    1. Barometer 2. Thermometer
    3. Lactometer 4. None of these

13. **Creamy Layer hypothesis is**
    1. Economy based classification
    2. Society based classification
    3. Caste based classification
    4. None of these

14. **Who is the writer of the book 'Hind Swaraj'**
    1. Dr. Rajendra Prasad
    2. Mahatama Gandhi
    3. B.R. Ambedkar
    4. Dayanidhi

15. **Hirakud Dam has been built on the river**
    1. Mahanadi 2. Ganges
    3. Tapti 4. Cauvery

16. **Rotting process in jute happens by**
    1. Microbiotic process 2. Chemical process
    3. Physical process 4. None of these

17. **Which is the last month of Indian national Calendar?**
    1. Chaitra 2. Palgun
    3. Asadha 4. Bhadra

18. **Humayunama is a composition of**
    1. Humayun
    2. Gulbadan Begum
    3. Firdausi
    4. Abul Fazal

19. **The first sitting of the Council of States was held in**
1. 1955 2. 1954 3. 1952 4. 1950

20. **Operation Flood is related to**
1. Wool 2. Milk
3. White meat 4. Eggs

21. **Postcard was firstly introduced in**
1. Hungary 2. Myanmar
3. Maharashtra 4. Russia

22. **The Article 352 of the Constitution is related to**
1. Emergency powers of the President
2. Services to the citizens
3. Fundamental Rights
4. None of these

23. **Who was the founder of Sen Dynasty?**
1. Nagbhatta 2. Mannuk
3. Samant Sen 4. Kokalla

24. **What is the currency of Bangladesh?**
1. Rupee 2. Taka 3. Dinar 4. Dollar

25. **The Suez canal connects**
1. Manchester and Liverpool
2. North Sea and Rotterdam
3. Mediterrean Sea and Red Sea
4. Andhra Pradesh and Tamil Nadu

26. **Which is the highest dam?**
1. Bhakhara Nangal 2. Hirakud
3. Sardar Sarovar 4. None of these

27. **Which is called city of palaces?**
1. Chandigarh 2. Delhi
3. Kolkata 4. Mumbai

28. **What the script of Egypt is called?**
1. Hiroglific 2. Devnagari
3. Greek 4. Unani

29. **Asoka was the follower of**
1. Buddhism 2. Hinduism
3. Sikhism 4. Christianity

30. **Who was the first woman Governor of an Indian State?**
1. Sarojini Naidu 2. Padmaja Naidu
3. Lakshmi N Mittal 4. Sucheta Kriplani

31. **Who was the founder of the Brahmo Samaj?**
1. Raja Ram Mohan Roy 2. Vivekanand
3. Dayanand Saraswati 4. D.N. Tagore

32. **To remove ink spots, what is used?**
1. Benzoic acid 2. Acetic acid
3. Oxalic acid 4. Boric acid

33. **The period of 10th five year plan is**
1. 2000-2005 2. 2001-2006
3. 2002-2007 4. 2003-2008

34. **Labour Day is celebrated on**
1. April 8 2. June 5
3. May 1 4. May 8

35. **The year 2006 has been declared as year of ___ by the Railway Minister.**
1. Passenger service with a smile
2. Passenger Amenities
3. Freight Service
4. Senior Citizen

36. **If several alternators are connected in parallel, the active power coefficient of each is determined by**
1. Power coefficient of load
2. Moment of force of original motion generator
3. Its regional excitement
4. None of these

37. **A 3-phase load is in equilibrium if all three phases have equal__.**
1. Impedance
2. Power factor
3. Impedance and power factor
4. None of these

38. **A permanent magnetic moving coil ammeter is connected to 50 Hz AC circuit in which 5A ampere current is flowing. What will be the reading of ammeter?**
1. OA 2. 5A
3. 2.5A 4. None of these

39. **Moving iron instrument consists of**
1. A uniform scale 2. A square scale
3. Logarithmic scale 4. None of these

40. **Five similar capacitors in series have resultant capacity 4μF. When these are connected in parallel and are charged to 400 V then total stored energy will be**
1. 16 J 2. 8 J 3. 24 J 4. 9 J

41. **Three capacitors of Capacity 3μF. 9μF and 18μF are connected in series and then in parallel. The ratio Cs/Cp will be**
1. 1 : 15 2. 1 : 3
3. 1 : 9 4. 1 : 2

42. **In which position, DC. series coiled motor will have super mobility?**
1. When load is increased
2. When the region is opened
3. When armature circuit is opened
4. When load is removed

43. **An inductor of 8Ω and a resistance of 6Ω are connected across a 200 V A.V supply. The consumed power will be**
1. 400 W 2. 2400 W
3. 2000 W 4. 1200 W

44. **The relative permeability of a meterial is more than 1, it is called**
1. Paramagnitic 2. Diamagnetic
3. Ferromagnetic 4. None of these

45. **The specific resistance of a metalic conductor ___ with an increase in temperature.**
1. Increases 2. Decreases
3. Remains unchanged 4. None of these

46. **A series RLC circuit in which R = 20Ω X_L = 60 Ω and X_C = 80 Ω is connected to a sine curve voltage source of 20 + jov. the courrent in the circuit will be**
1. 0.707 + J 0.707 A 2. 0.5 – J 0.5 A
3. 0.5 + J 0.5 A 4. 0.0707 – J 0.707 A

47. **In a given AC RL circuit the potential difference across resistance is 15V and that across the inductor is 20V. The supply voltage is**
1. 35 V 2. 5 V 3. 25 V 4. $\sqrt{175}$ V

48. **If an alternating voltage is denoted by V = 200 sin 314 t, what will be its r.m.s value?**
1. 100 V 2. 282.8 V 3. 121.4V 4. 141.4V

49. **A tubro alternator uses**
1. Region coil non-polar space composition
2. Region coil polar space composition
3. Rotatory A.C. armature coll
4. None of these

50. **A power generating station has an average demand of 15 MW. If the coefficient of mechanical capacity be 50%, the original mechanical capacity will be**
1. 20 MW 2. 10 MW 3. 25 MW 4. 30 MW

51. **The working of a dynamo is based on the principle of**
1. Heating effect of current
2. Magnetic effect of current
3. Chemcial effect of current
4. Electromagnetic induction

52. **The standard frequency of AC supply in India is**
1. 50 Hertz 2. 60 Hertz
3. 40 Hertz 4. 75 Hertz

53. **Synchronous motor is**
1. Alternating generator
2. DC Motor
3. Single Phase Motor
4. None of these

54. **A piece of wire of a resistance 4 ohm is bent through 180° at its midpoint and the two halves are twisted together. Then the resistance is**
1. 1 Ω 2. 2 Ω 3. 5 Ω 4. 8 Ω

55. **How many times will the resistance of n identical conductors be increased if the parallel resistance be changed to series one?**
1. $\sqrt{n}$ 2. n 3. n^2 4. n^{-2}

56. **A single phase series coiled motor can be operated by**
1. AC only 2. DC only
3. AC and DC both 4. None of these

57. **In a step up transformer**
1. Es > Ep 2. Ep > Es
3. Es = Es 4. None of these

58. **I KWh = ?**
1. 9.81×10^3 J 2. 36×10^3 J
3. 9.81×10^5 J 4. 36×10^5 J

59. **4-bit data word is called**
1. Byte 2. Nibble
3. Data base 4. None of these

60. **An ideal DC generator is one whose voltage regulator is ——**
1. Zero 2. Minimum
3. Positive 4. Negative

61. **For high frequency capacity offers**
1. More resistance 2. Less resistance
3. Zero resistance 4. None of these

62. **The power factor of an AC circuit having resistance R and inductance L connected in series to an a.c source of angular frequency ω is**
1. $\frac{R}{\omega L}$ 2. $\frac{\omega L}{R}$
3. $\frac{R}{\sqrt{R^2+\omega^2 L^2}}$ 4. Zero

63. **For generator, the law followed is**
1. Fleming's left hand rule
2. Fleming's right hand rule
3. Ohm's law
4. Ampere's law

64. **An electric heating element consumes 500W, when connected to a 100 V line. If the line voltage becomes 150 V, the power consumed will be**
1. 500 W 2. 750 W 3. 1000 W 4. 1125 W

65. **An electric kettle taking 3 A at 200 V brings one litre of water from 20°C to the boiling point in 10 minutes. Its efficiency is**
1. 33.3% 2. 66.6% 3. 87.7% 4. 93.3%

66. **Joule's mechanical equivalent of heat is equals to**
1. 4.2 cal/J 2. 2.4 J/cal
3. 4.2 J/cal 4. 4.2 J

67. **An equivalent circuit of an ideal diode is**
1. one resistance
2. one switch
3. one charged condenser
4. one uncharged condenser

68. **The conductivity of aluminium in comparison to copper is**
1. 50 per cent 2. 55 per cent
3. 60 per cent 5. 75 per cent

69. **A transformer whose PF is 0.90 receives 2 ampere current. Its power will be**
1. 150 W 2. 180 W 3. 160 W 4. 190 W

70. **The resistance of an ideal voltmeter is**

1. zero 2. infinity 3. 100 Ω 4. 500 Ω

71. **Three resistors connected in star get 12 A current from 3 phase supply. If these resistors in delta are connected across the same supply, the current will be**

1. 12 A 2. 4 A 3. 24 A 4. 36 A

72. **The inductance of a circuit is 2H. If the circuit current change at 10A/sec, the self induced EMF will be**

1. 12 A 2. 4 A 3. 24 A 4. 36 A

73. **To heat the filament of a vacuum pipe 0.4 A d.c is required. To heat the filament to the same tempera ture, the r.m.s. value of the required ac will be**

1. $0.4 \times \sqrt{2}$ A 2. $\frac{0.4}{\sqrt{2}}$ A

3. $\frac{0.8}{\sqrt{2}}$ A 4. 0.4 A

74. **If the relative electric permittivity of a medium increases, the force between two charges kept separately will**

1. increase 2. decrease
3. remain unchanged 4. None of these

75. **In a three phase synchronous motor there are 12 poles and it works on 440 V, 50 Hz supply. What will be the motion of motor?**

1. 500 rpm 2. 750 rpm
3. 1500 rpm 4. 1000 rpm

76. **IF V = 10.8 sin 50 t then frequency will be**

1. 8.96 Hz 2. 9.96 Hz
3. 7.96 Hz 4. None of these

77. **The back emf in a DC motor is maximum when**

1. The motor has picked up max. speed
2. The motor has just started moving
3. The speed of motor is still on the increase
4. None of these

78. **In an electric circuit inductance opposes**

1. increase in current
2. decrease in current
3. change in current
4. None of these

79. **In a commercial lead acid cell. number of plates is 16. The number of cathode pltes is**

1. 7 2. 8 3. 9 4. 10

80. **If current in a buld is reduced by 2% the power will be reduced by**

1. 2% 2. 4% 3. 1% 4. 2.6%

ANSWERS

1.1	2.3	3.4	4.4	5.2	6.1	7.2	8.1	9.3	10.2	11.1	12.1	13.1	14.2	15.1	16.1
17.2	18.2	19.3	20.2	21.1	22.1	23.3	24.2	25.3	26.1	27.2	28.1	29.1	30.1	31.1	32.3
33.3	34.3	35.2	36.2	37.1	38.3	39.4	40.2	41.1	42.4	43.2	44.3	45.2	46.1	47.1	48.4
49.2	50.4	51.4	52.1	53.1	54.1	55.3	56.3	57.1	58.4	59.3	60.3	61.2	62.3	63.2	64.4
65.4	66.3	67.3	68.3	69.2	70.2	71.2	72.1	73.1	74.2	75.1	76.3	77.1	78.3	79.2	80.2