1. The safe and proper way of removing the existing software from the computer is:
   (A) removing  (B) disabling
   (C) deleting  (D) uninstalling

2. The type code printed on the zener is BZC9V1, where ‘B’ indicates:
   (A) germanium  (B) silicon
   (C) carbon     (D) boron

3. In MS-Word file, the short cut key used to save the document is:
   (A) Ctrl+A  (B) Ctrl+S
   (C) Ctrl+V  (D) Ctrl+X

4. The number of diodes used for a centre tapped full wave rectifier is:
   (A) 1  (B) 2
   (C) 3  (D) 4

5. Expansion of SPDT is:
   (A) Single Phase Double Throw  (B) Single Pole Double Throw
   (C) Single Phase Dual Throw    (D) Single Pole Dual Throw

6. Open circuit test is conducted on a transformer to determine:
   (A) eddy current loss  (B) copper loss
   (C) hysteresis loss    (D) core loss

7. One Pico farad is equal to:
   (A) $10^{-6}$ farad  (B) $10^{-9}$ farad
   (C) $10^{-12}$ farad  (D) $10^{-15}$ farad

8. The number of complete cycles produced in one second is called:
   (A) frequency  (B) period
   (C) amplitude  (D) peak value

A 3
9. The function of tweezer is to:
(A) grip and hold the cylindrical objects
(B) cut small diameter wires and cables
(C) hold light weight and very small components and wires
(D) remove the sheath and insulation from cables and boards

10. 1 joule =:
(A) 1 Nm
(B) 1 Nm²
(C) 1 N²m²
(D) 1 kgm/sec²

11. The melting point of aluminium is:
(A) 810°C
(B) 660°C
(C) 560°C
(D) 360°C

12. Specific gravity of electrolyte is measured by:
(A) lactometer
(B) pyrometer
(C) hydrometer
(D) galvanometer

13. Find the square root of 15376:
(A) 414
(B) 124
(C) 214
(D) 324

14. Which type of drawing sheet having biggest area?
(A) A3
(B) A2
(C) A1
(D) A0

15. What is the potential energy in a body, mass 5 kg on top of a pole 20 m high?
(A) 100 j
(B) 980 j
(C) 1000 j
(D) 9800 j

16. Which is the example of mandatory sign?
(A) Risk of electric shock
(B) Wear safety belt
(C) Smoking prohibited
(D) All of the above

17. The unit of quantity of electricity is:
(A) Watt hour
(B) Coulomb
(C) Ampere
(D) Volt
18. What is the value of medium resistance based on its ohmic values?
   (A) Above 1 ohm upto 1000 ohms  (B) Above 1 ohm upto 100 K ohms
   (C) Above 100 K ohms  (D) Below one ohm

19. Which tool is used to measure the size of the conductor?
   (A) Bevel gauge  (B) Vernier caliper
   (C) Standard wire gauge  (D) Depth gauge

20. In which classification of accessories, the switch will belong?
    (A) Holding  (B) Safety
    (C) General  (D) Controlling

21. What is the name of defect occurred in a cell, due to the presence of impurities on the zinc plate?
    (A) Polarisation  (B) Sulphation
    (C) Buckling  (D) Local action

22. The mass of a substance liberated from an electrolyte by one coulomb of electricity is termed as:
    (A) electrochemical equivalent  (B) quantity of electricity
    (C) electric charge  (D) electrochemical expression

23. What is the method of charging the battery at very low rate?
    (A) Rectifier method  (B) Constant current method
    (C) Trickle charge method  (D) Constant voltage method

24. The distance between two adjacent teeth of hacksaw blades are called:
    (A) pitch of the blades  (B) specification of the blades
    (C) size of the blades  (D) number of the blades

25. Which substance is diamagnetic?
    (A) Manganese  (B) Nickel
    (C) Bismuth  (D) Cobalt

26. Tesla is the unit of:
    (A) flux density  (B) flux
    (C) reluctance  (D) magnetic field strength

A  5
27. Which type of DC generator is used for welding generator sets?
   (A) Shunt generator
   (B) Series generator
   (C) Cumulative compound generator
   (D) Differential compound generator

28. How many parallel paths in simplex wave winding of a D.C. generator having 8 poles?
   (A) 8
   (B) 6
   (C) 4
   (D) 2

29. As per BIS the series tied winding terminals must be marked as:
   (A) B₁ B₂
   (B) E₁ E₂
   (C) D₁ D₂
   (D) F₁ F₂

30. Which law/rule states that the magnitude of the induced e.m.f. is directly proportional to the rate of change of flux linkage?
   (A) Lenz's law
   (B) Faraday's law of electromagnetic induction
   (C) Fleming's right hand rule
   (D) Faraday's law of electrolysis

31. The table fan is not oscillating. The cause may be:
   (A) the loose guards
   (B) the defective speed control switch
   (C) the spur gear with broken teeth
   (D) the blades are out of balance

32. Which one has negative temperature co-efficient of resistance?
   (A) Copper
   (B) Nichrome
   (C) Aluminium
   (D) Mica

33. Which type of resistors are called as thermistors?
   (A) PTC resistors
   (B) Varistors
   (C) LDR
   (D) NTC resistors
34. Which one is NOT an application of electromagnet?
   (A) Calling bell               (B) Protective relays
   (C) Electric iron             (D) DOL starter

35. The magnetic term analogous to electrical term current is:
   (A) reluctance               (B) flux
   (C) flux density             (D) m.m.f.

36. The fire extinguisher not used for electric fire:
   (A) Foam type                (B) Halon type
   (C) Carbon tetrachloride     (D) Dry powder type

37. Six carbon-zinc cells in series have an output of:
   (A) 6 V                      (B) 9 V
   (C) 12 V                     (D) 7.5 V

38. A 100 Ah capacity battery should deliver a current of 10 A for approximately
    hours.
   (A) 12                        (B) 10
   (C) 100                       (D) 25

39. A fluorescent tube may burn out if the choke coil is:
   (A) open circuited           (B) grounded
   (C) short circuited          (D) connected to the neutral line

40. The starting torque of a single phase induction motor is:
   (A) low                      (B) high
   (C) very low                 (D) zero

41. While testing a capacitor with a multimeter, the needle shows zero position indicating the
    capacitor is:
   (A) in good condition        (B) open circuited
   (C) short circuited          (D) leaky
42. The direction of rotation of a capacitor-start motor can be reversed by:
   (A) reversing the supply terminal connections
   (B) reversing the connection of the auxiliary winding
   (C) reversing the connection of both the main and auxiliary winding
   (D) reversing the connection of either the main or the auxiliary winding

43. What is the synchronous speed of a six-pole induction motor running on power at 60 Hz supply?
   (A) 1200 rpm
   (B) 1000 rpm
   (C) 7200 rpm
   (D) 6000 rpm

44. The output of an alternator is in:
   (A) HP
   (B) KVA
   (C) KW
   (D) BHP

45. The other name of field current in an alternator is:
   (A) load current
   (B) armature current
   (C) exciting current
   (D) induced current

46. A 6-pole, 1200 rpm alternator will generate emf at the frequency of:
   (A) 50 Hz
   (B) 60 Hz
   (C) 40 Hz
   (D) 30 Hz

47. The voltage induced in the armature of an alternator will be:
   (A) pulsating DC
   (B) oscillating
   (C) DC
   (D) AC

48. In Scot connection, the teaser transformer has a tapping of transformer.
   (A) 86% of main
   (B) 56% of main
   (C) 50% of secondary
   (D) 58% of secondary

49. The common method of cooling a power transformer is:
   (A) air cooling
   (B) air blast cooling
   (C) oil cooling with air blast
   (D) oil cooling with water forced
50. Three single phase transformers, each with 10 KVA rating connected in delta. If one of the transformer is damaged and taken out, the output of the system will be:

(A) 20 KVA  
(B) 17.4 KVA  
(C) 8.66 KVA  
(D) 10 KVA

51. Transformer oil is used to:

(A) cool  
(B) lubricate  
(C) lubricate and cool  
(D) insulate and cool

52. Which one of the following transformer is largest in size?

(A) 2 KVA, 600 Hz  
(B) 2 KVA, 400 Hz  
(C) 2 KVA, 200 Hz  
(D) 2 KVA, 50 Hz

53. Power transformers are designed to have maximum efficiency at:

(A) near full load  
(B) no load  
(C) half load  
(D) more than full load

54. A transformer has maximum efficiency at an iron loss of 400 watts. Its copper loss will be:

(A) 200 W  
(B) 300 W  
(C) 400 W  
(D) 800 W

55. When a 440/220 V transformer is connected to a 440 V DC supply:

(A) the output will be zero volt  
(B) the output will be 220 V  
(C) the transformer may burn  
(D) the output will be less than 220 V

56. In a transformer, the primary and secondary induced voltages are:

(A) 90° out of phase  
(B) in phase  
(C) 180° out of phase  
(D) in any phase difference

57. is the most suitable material for the core of a transformer.

(A) Cold rolled grain oriented steel  
(B) Hot rolled grain oriented steel  
(C) Cast steel  
(D) Carbon steel
58. The current drawn by a 240 DC motor of armature resistance 0.5 ohm and back emf of 220 V will be:

(A) 20 A
(B) 30 A
(C) 10 A
(D) 40 A

59. For wide and very sensitive speed control, the usual method is:

(A) Field control
(B) Armature control
(C) Voltage control
(D) Ward-Leonard control

60. The speed of a DC motor can be controlled by varying:

(A) the resistance of the armature circuit
(B) its flux per pole
(C) the voltage
(D) all of the above

61. A compound motor has:

(A) two fields
(B) three fields
(C) one field
(D) four fields

62. A 4-point starter is essential for a:

(A) compound motor with speed control above normal
(B) shunt motor with speed control below normal
(C) series motor with speed control above normal
(D) compound motor with speed control below normal

63. The power output of any electrical motor is taken from the:

(A) shaft
(B) terminal box
(C) armature
(D) brushes

64. In DC motor three-point starter the hold ON coil is connected:

(A) in series to field coil
(B) in series to armature
(C) in parallel with field coil
(D) in parallel with armature

65. How many parallel paths are formed in DC motor four point starter?

(A) One
(B) Two
(C) Three
(D) Four
66. The inter poles are connected in:
   (A) series with the armature  (B) parallel with the armature
   (C) series with the field    (D) parallel with the field

67. The standard length of PVC wiring conduit available in the market is:
   (A) 3 meters                (B) 2.5 meters
   (C) 2 meters                (D) 3.5 meters

68. If five numbers of lamps to be installed in godown wiring, we require:
   (A) one SPT and five two-way switches  (B) one SPT and six two-way switches
   (C) two SPT and four two-way switches   (D) one SPT and four two-way switches

69. The minimum length of pipe electrode used for earthing should not be less than:
   (A) 3 m                      (B) 3.5 m
   (C) 2.5 m                    (D) 4 m

70. According to IE rules, the leakage current in an installation should not exceed one
    part of the maximum current in the installation.
    (A) 5000                    (B) 500
    (C) 100                     (D) 50000

71. An ON-LOAD tap changer is provided with:
    (A) power transformer       (B) distribution transformer
    (C) instrument transformer  (D) isolation transformer

72. The repeated closure of the circuit to start a motor from rest, producing small movements is
called:
    (A) starting                 (B) jolting
    (C) jogging                  (D) flashing

73. The number of contactors used in a semi-automatic star-delta starter is:
    (A) 1                        (B) 2
    (C) 3                        (D) 4

74. The edges of the slot liner should be folded on either end to prevent them from sliding in the
slots is called:
    (A) cuffing                  (B) wedging
    (C) packing                  (D) over hanging
75. The periphery of the armature divided by the number of poles of the machine is called:
   (A) front pitch  (B) pole pitch
   (C) back pitch   (D) commutator pitch

76. An electromagnetic device used to detect and locate grounded, shorted and open coils in an armature:
   (A) external growler  (B) internal growler
   (C) megger          (D) mulimeter

77. Pick up the odd one out:
   (A) agitator type  (B) fuzzy logic type
   (C) air power wash type  (D) saucepan type

78. The amount of emergent light downward is 60 to 90%. The type of lighting system is:
   (A) direct  (B) semi indirect
   (C) semi direct  (D) indirect

79. Coupling gap reading can be taken with the help of ———— while coupling and aligning MG sets.
   (A) spirit level  (B) feeler gauge
   (C) steel rule   (D) shims

80. As per Rule 51, a clear space of not less than 91.44 cm in width shall be provided:
   (A) behind the switch board  (B) above the switch board
   (C) below the switch board   (D) in front of the switch board

81. The highest peak of Himalaya:
   (A) Gangothri  (B) Mount Everest
   (C) Anamudi       (D) Dhaulagiri

82. Which state receive the heaviest rainfall in India?
   (A) Megalaya  (B) Kerala
   (C) Orissa     (D) Gujarat

83. What is the longest river in India?
   (A) Kaveri     (B) Ganga
   (C) Narmada    (D) Palaru

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84. The greatest mountain range come between northern and southern India:
   (A) Aravalli   (B) Satpura
   (C) Vindhyas   (D) Ponmudi

85. In the Sangam period the hilly regions were called as:
   (A) Mullai   (B) Kurinji
   (C) Marutham   (D) Palai

86. The first martyr of 1857 revolt:
   (A) Nana Sahib   (B) Mangal Pande
   (C) Rani Lakshmi Bai   (D) Tantya Tope

87. The founder of the Indian National Congress was:
   (A) W.C. Banarjee   (B) Tilak
   (C) Gandhiji   (D) A.O. Hume

88. Importance of the year 1942 is:
   (A) Civil Disobedience Movement   (B) Non Co-operation Movement
   (C) Quit India Movement   (D) None of these

89. ________ was responsible for the partition of Bengal.
   (A) Lord Wavell   (B) Lord Curzon
   (C) Lord Rippon   (D) Lord Mountbatten

90. The famous Edakkal cave is situated in ________ district.
   (A) Wayanad   (B) Idukki
   (C) Pathanamthitta   (D) Alappuzha

91. Kallumala agitation was led by:
   (A) Ayya Vaikundar   (B) Ayyankali
   (C) Thycaud Ayya   (D) Sree Narayana Guru

92. Ezhava Memorial was submitted under the leadership of:
   (A) Dr. Palpu   (B) Sree Narayana Guru
   (C) V.T. Bhattathirippad   (D) Thycaud Ayya
93. Who was the author of the famous work "Jathikummi"?
   (A) Kumaranasan
   (B) C.P. Ramaswamy
   (C) Swami Sivayogi
   (D) Pandit Karuppan

94. _______ was considered as the father of Muslim Renaissance in Kerala.
   (A) Rahmath Ali
   (B) Vakkom Moulavi
   (C) Abdul Kadhar
   (D) Mohammed Iqbal

95. Kuriakose Elias Chavara was died on :
   (A) 3rd January 1871
   (B) 3rd February 1871
   (C) 3rd November 1871
   (D) 3rd December 1871

96. Which political party won the 2015 Delhi Assembly Election?
   (A) CPM
   (B) AAP
   (C) INC
   (D) BJP

97. Who got Vayalar Award of 2014?
   (A) K.R. Chithra
   (B) Beena Paul
   (C) Sara Joseph
   (D) K.R. Meera

98. Which of the following is the Multilateral Bank operated by BRICS states?
   (A) Development Credit Bank
   (B) National Development Bank
   (C) New Development Bank
   (D) Asian Development Bank

99. Who was the Chief Guest of 2015 Republic Celebration in India?
   (A) Yingluck Shinawatra
   (B) Barack Obama
   (C) Bill Clindon
   (D) Shinzo Abe

100. The first Malayali to win Oscar Award was :
      (A) Resul Pookutty
      (B) Manju Wariyar
      (C) A.R. Rahman
      (D) Mamooty