

098/2018

Question Booklet
Alpha Code

A

Question Booklet
Serial Number

Total Number of Questions : 100

Time : 75 Minutes

Maximum Marks : 100

1. The question paper will be given in the form of a Question Booklet. There will be four versions of question booklets with question booklet alpha code viz. A, B, C & D.
2. The Question Booklet Alpha Code will be printed on the top left margin of the facing sheet of the question booklet.
3. The Question Booklet Alpha Code allotted to you will be noted in your seating position in the Examination Hall.
4. If you get a question booklet where the alpha code does not match to the allotted alpha code in the seating position, please draw the attention of the Invigilator IMMEDIATELY.
5. The Question Booklet Serial Number is printed on the top right margin of the facing sheet. If your question booklet is un-numbered, please get it replaced by new question booklet with same alpha code.
6. The question booklet will be sealed at the middle of the right margin. Candidate should not open the question booklet, until the indication is given to start answering.
7. Immediately after the commencement of the examination, the candidate should check that the question booklet supplied to him contains all the 100 questions in serial order. The question booklet does not have unprinted or torn or missing pages and if so he/she should bring it to the notice of the Invigilator and get it replaced by a complete booklet with same alpha code. This is most important.
8. A blank sheet of paper is attached to the question booklet. This may be used for rough work.
9. **Please read carefully all the instructions on the reverse of the Answer Sheet before marking your answers.**
10. Each question is provided with four choices (A), (B), (C) and (D) having one correct answer. Choose the correct answer and darken the bubble corresponding to the question number using Blue or Black Ball Point Pen in the OMR Answer Sheet.
11. **Each correct answer carries 1 mark and for each wrong answer 1/3 mark will be deducted. No negative mark for unattended questions.**
12. No candidate will be allowed to leave the examination hall till the end of the session and without handing over his/her Answer Sheet to the Invigilator. Candidates should ensure that the Invigilator has verified all the entries in the Register Number Coding Sheet and that the Invigilator has affixed his/her signature in the space provided.
13. Strict compliance of instructions is essential. Any malpractice or attempt to commit any kind of malpractice in the Examination will result in the disqualification of the candidate.

098/2018

1. Who was the main writer who assisted William Logan in the writing the 'Malabar Manual' ?
(A) O. Chanthu Menon (B) A. Ayyappan
(C) V.P. Menon (D) Itti Achuthan
2. Malabar Manual was first published in _____.
(A) 1889 (B) 1887 (C) 1886 (D) 1880
3. Magna Carta was signed in _____.
(A) 1215 (B) 1342 (C) 1299 (D) 1432
4. Prathyksha Raksha Daiva Sabha was founded by _____.
(A) Poykayil Yohannan (B) K. Maadhavan
(C) Dr. Palpu (D) Vagbhatananda
5. Who was known as Kerala Lincolon ?
(A) EMS Nambudirippad (B) Pandit Karuppan
(C) A.K. Gopalan (D) K.R. Gouri Amma
6. Atmavidya Kahalam was written by _____ in 1929.
(A) Vagbhatananda (B) Vakkom Abdul Khadar
(C) Kalidasan (D) Swami Sivayogi
7. The famous Kizhariyur bomb case was in _____.
(A) 1857 (B) 1940 (C) 1945 (D) 1942
8. Who started servants of Mary Immaculate ?
(A) K. Karuppan (B) Chavara Achan
(C) K. Krishnan (D) Makthi Thangal
9. The Slavery abolished in America was _____.
(A) 1900 (B) 1864 (C) 1865 (D) 1765
10. Right to Health is mentioned in _____ of U.N. Declaration Human Rights.
(A) Article 8 (B) Article 20 (C) Article 25 (D) None of these

11. Kallumala Samara was broken out in 1915 in the _____ district of Kerala.
(A) Thiruvananthapuram (B) Kozhikode
(C) Alappuzha (D) Kollam
12. "Liberty, Equality and Fraternity" is the slogan of _____ Revolution.
(A) American (B) French (C) Chinese (D) None of these
13. The most prominent work on Partition is Freedom at Midnight was written by _____.
(A) Annie Besant (B) Dominique Lapierre
(C) Larry Augustine (D) Abdul Kalam
14. At the time of Indian Independence Hyderabad was ruled by _____.
(A) Ali Khan (B) Mohammed (C) Abdul Razak (D) None of these
15. Who was the murderer of Canolly, the District Collector of Malabar ?
(A) Pokker Haji (B) Kunhali
(C) Haider (D) Vadakkeveetil Mohammed
16. The Dutch East India Company started in _____.
(A) 1600 (B) 1602 (C) 1605 (D) 1700
17. The famous Aruvippuramprathishta was the challenge against the Brahmin by _____.
(A) Nanu Asan (B) Guru Govind
(C) K. Karuppan (D) Palpu
18. Hunter Commission was appointed in _____.
(A) 1880 (B) 1881 (C) 1884 (D) 1882
19. Bharath Matha Society was founded by _____.
(A) J.M. Chatterjee (B) Chandrashekhar Azad
(C) N. Bhattachari (D) None of these
20. Who had written "India's struggle for Independence" ?
(A) Bipin Chandra (B) Sumit Sarkar
(C) Ray Choudhar (D) A.R. Desai

21. Unit of Electrical energy is _____.
(A) Ampere Hour (B) Kilowatt Hour
(C) Kilowatt (D) Kilovolt Ampere
22. Magnitude of electrical shock on a human body depends upon _____.
(A) Current flow through the body
(B) Path of electric current through the body
(C) Duration of electric shock
(D) All of the above
23. One of the following components is a passive device _____.
(A) Field effect transistor (B) Silicon controlled rectifier
(C) Air core inductor (D) Zener diode
24. Armouring is provided in the underground cable to safeguard against _____.
(A) Mechanical injury (B) Moisture entry
(C) White ant attack (D) Brusting of failure
25. The main switch is used in single phase supply is to be provided with _____.
(A) Fuse in both line and neutral
(B) A link in the line and a fuse in the neutral
(C) A fuse in the line and a link in the neutral
(D) None of these
26. Which of the following units is the **correct** one for reactive power ?
(A) Kilovolt Ampere (B) Kilowatt
(C) Megawatt (D) Kilovolt Ampere reactive
27. The type of insulator used for holding high transmission overhead conductor on straight running of poles _____.
(A) Post insulator (B) Pin insulator
(C) Stay insulator (D) Shackle insulator
28. A water pump lifts less water than earlier, what could be the reason for this fault ?
(A) Impiller damaged
(B) Level of water in pump is too high
(C) Pump running in reverse direction
(D) Motor running fast

29. In an energy meter the holes of the aluminium disc helps to _____.
(A) Prevent creeping error (B) Reduce the resistance
(C) Reduce the friction (D) Reduce the weight of disc
30. Earth leakage circuit breaker is used to disconnect the supply from _____.
(A) Short circuit (B) Ground fault
(C) Open circuit (D) Overload
31. In a transformer, the chemical contained inside the Breather is _____.
(A) Mineral oil (B) Salt (C) Silica gel (D) Water
32. The device which can be used as switch as well as protective device is _____.
(A) Double pole Iron clad switch
(B) Intermediate switch
(C) Earth leakage circuit breaker
(D) Miniature circuit breaker
33. Size of hammer is specified by _____.
(A) Length of hammer (B) Diameter of the phase
(C) Height of the head (D) Weight of the hammer
34. Gravity controlled instrument has to be kept in _____.
(A) Vertical position (B) Horizontal position
(C) Inclined position (D) Any position
35. A sodium vapour lamp gives which colour of light ?
(A) Green colour (B) White colour
(C) Yellow colour (D) Red colour
36. High pressure mercury vapour lamp has three pin bayonet cap lamp holder. This is done for _____.
(A) To make a three phase connection
(B) Prevent wrong connection
(C) To earth the lamp
(D) None of the above

37. A choke is generally used in series with fluorescent tube circuit to _____.
(A) Improve the power factor
(B) Prevent flickering
(C) To make high voltage for conduction
(D) Suppress radio interference
38. Three phase distribution transformer are usually connected in _____.
(A) Delta/Delta (B) Star/Star (C) Star/Delta (D) Delta/Star
39. Conductivity of aluminium is _____.
(A) Sixty percent to that of copper (B) Forty percent to that of copper
(C) Eighty percent to that of copper (D) Fifty percent to that of copper
40. The flux per unit area of material is known as _____.
(A) Current density (B) Flux density
(C) Magnetic lines of force (D) Electromotive force
41. Which lamp has more resistance with same applied voltage ?
(A) Forty watts (B) Hundred watts
(C) Sixty watts (D) Fifteen watts
42. Tool used for cutting, twisting or holding of wires or cables for terminations _____.
(A) Insulated combination plier (B) Insulated side cutting plier
(C) Insulated round nose plier (D) Insulated flat nose plier
43. Alternating current is converted into direct current by _____.
(A) Alternator (B) Motor (C) Rectifier (D) Transformer
44. Buchholz relay is generally used for the protection of _____.
(A) Transmission line (B) Transformer
(C) Alternator (D) Generator
45. Which of the following is conventional source of energy ?
(A) Coal (B) Solar (C) Small Hydro (D) Wind

46. Advantage of Hydro electric power station is _____.
 (A) Low cost (B) Free from pollution
 (C) No fuel transportation problem (D) All of the above
47. Which of the following system electric power maybe transmitted ?
 (A) Overhead system
 (B) Underground system
 (C) Overhead and underground system
 (D) None of these
48. The fuel used in nuclear generating power plant is _____.
 (A) Crude oil (B) Isotopes of Uranium
 (C) Liquified hydrogen (D) Methane
49. What is the basic three electrical quantities ?
 (A) Resistance, Capacitance, Inductance
 (B) Power, Voltage, Conductance
 (C) Voltage, Current, Resistance
 (D) Current, Reactance, Inductance
50. Value of short circuit current will flow in the circuit is _____.
 (A) Zero (B) Very low (C) Normal (D) Infinite
51. Motor used in household refrigerator is _____.
 (A) D.C. Series motor (B) Single phase induction motor
 (C) D.C. Shunt motor (D) Universal motor
52. Which motor would you select for vaccum cleaner ?
 (A) Universal motor (B) Repulsion motor
 (C) Hysterisis motor (D) None of these
53. The damper winding in a synchronous motor is generally used _____.
 (A) To provide starting torque only
 (B) To reduce noise level
 (C) To reduce eddy current
 (D) To prevent hunting and provide the starting torque

54. An Auto transformer which has only one winding may be used as _____.
 (A) Step-up transformer
 (B) Step-down transformer
 (C) Step-up and Step-down transformer
 (D) None of these
55. The unit of solid angle is a _____.
 (A) Lumen (B) Radian (C) Steradian (D) Candela
56. Full form of MCCB is _____.
 (A) Moulded Case Circuit Breaker
 (B) Moulded Case Current Breaker
 (C) Miniature Current Circuit Breaker
 (D) Minimum Current Circuit Breaker
57. The star delta starter is used in _____.
 (A) Flour mills (B) Pumps (C) Machine tools (D) All of these
58. Motor used in ceiling fan is _____.
 (A) Split phase motor (B) Capacitor start motor
 (C) A.C. series motor (D) Repulsion motor
59. Rotor resistance starter used to which of the following motors ?
 (A) Slip ring motor
 (B) Heavy duty squirrel cage motor
 (C) Medium duty squirrel cage motor
 (D) Double cage motor
60. The thickness of insulation provided in the conductor in cable depends upon the factor is _____.
 (A) Resistivity of the conductor (B) Current to be carried
 (C) Operating voltage (D) Power factor
61. The structure of pin type insulator is wavy. It is done to increase _____.
 (A) Mechanical strength (B) Puncture strength
 (C) Flash over voltage (D) Thermal strength

62. Carbon arc lamp are commonly used in _____.
(A) Cinema projectors (B) Domestic lighting
(C) Street lighting (D) Photography
63. Which of the following is one **not** a part of circuit breaker ?
(A) Explosion plot (B) Conservator
(C) Operating mechanism (D) Fixed and moving contact
64. The handle of iron box is made up of _____.
(A) Bakelite (B) Ebonite
(C) Chromium (D) Bakelite and Ebonite
65. Lumen per watt is the unit of _____.
(A) Light flux (B) Luminous efficiency
(C) Luminous intensity (D) Brightness
66. The generating voltage and frequency in India is _____.
(A) 11 kV and 50 Hz (B) 11 kV and 60 Hz
(C) 220 kV and 50 Hz (D) 220 kV and 60 Hz
67. The lamp generally used for lighting purpose is _____.
(A) Carbon filament lamp (B) Arc lamp
(C) Tungsten filament lamp (D) All of the above
68. In running condition voltage across tube starter is _____.
(A) 110 V (B) 180 V (C) 220 V (D) Zero
69. Capacitor is used in tube circuit is _____.
(A) To improve the power factor (B) To improve the voltage
(C) To safeguard the tube (D) To give the full light
70. The synchronous speed of an induction motor refers to the speed of the _____.
(A) Rotor (B) Armature
(C) Speed marked on the name plate (D) Rotating magnetic field

71. Three phase induction motor started by DOL starter, the short circuit current is protected by _____.
(A) No volt coil (B) Overload relay
(C) Back off fuse (D) Protective earth connection
72. Cables are drawn through the pipe and terminated. The system of wiring is called _____.
(A) PVC casing and capping wire (B) Conduit wiring
(C) Teak wood batton wiring (D) Teak wood casing capping wiring
73. As compared to rewirable fuses HRC fuse have _____.
(A) High speed of operation (B) High rupturing capacity
(C) No ageing effect (D) Low rupturing capacity
74. The following application D.C. is essential _____.
(A) Electric traction motor (B) Electric home appliances
(C) Machine shop motor (D) Illumination
75. Which of the following does **not** change in a transformer ?
(A) Current (B) Voltage (C) Frequency (D) All of these
76. Which winding in a transformer has more number of turns ?
(A) Low voltage winding
(B) High voltage winding
(C) Winding does not depend upon number of turns
(D) None of these
77. In a D.C. machine the number of brushes in lap winding is _____.
(A) Same number of poles (B) Double number of poles
(C) Half of the number of poles (D) Two numbers
78. Compensating windings are used in D.C. generator is _____.
(A) To reduce eddy current by local short circuit
(B) To provide path for the circulation of cooling air
(C) To neutralize the cross magnetic effect of armature reaction
(D) None of these
79. Red colour wire is generally known for _____.
(A) Insulated wire (B) Earth wire
(C) Neutral wire (D) Phase wire

80. Stepper motor is _____.
 (A) Single phase motor (B) Two phase motor
 (C) Three phase motor (D) D.C. motor
81. The positive pole of dry cell is made of _____.
 (A) Copper (B) Zinc (C) Carbon (D) Mercury
82. The energy of secondary cells are renewed by _____.
 (A) Heating it (B) Passing current through it
 (C) Renewing its chemicals (D) It can't be renewed at all
83. When cells are connected in parallel, the result is _____.
 (A) The current capacity increases (B) The current capacity decreases
 (C) The EMF capacity increases (D) The EMF capacity decreases
84. The composition of electrician solder is _____.
 (A) Tin-40%, Lead-60% (B) Tin-50%, Lead-50%
 (C) Tin-90%, Lead-10% (D) Tin-60%, Lead-40%
85. Fire extinguisher used in the event of electric fire is _____.
 (A) Dry powder type (B) Gas cartridge type
 (C) Halon type (D) Foam type
86. Britania straight joint is used for _____.
 (A) Increase the length of the conductor
 (B) Increase the resistance of the conductor
 (C) Increase the conductivity of the conductor
 (D) Increase the mechanical strength of the conductor
87. E.C.E. stands for _____.
 (A) Electrovalent Chemical Equilant (B) Electro Chemical Equilant
 (C) Electrolysis Cathode Equilant (D) Electro Cardio Equilant
88. A current of ten ampere is same as _____.
 (A) Ten joule per second (B) Ten watts per second
 (C) Ten volt per second (D) Ten coulomb per second

89. The power dissipated in a pure capacitor is _____.
 (A) Zero
 (B) Unity
 (C) Proportional to the applied voltage
 (D) Proportional to the value of capacitance
90. Which of the following has positive temperature co-efficient ?
 (A) Germanium (B) Aluminium (C) Graphite (D) Rubber
91. I.G.B.T. stands for _____.
 (A) Integrated Gate Bidirectional Transistor
 (B) Integrated Gate Blocky Transistor
 (C) Integrated Gate Bipolar Transistor
 (D) Insulated Gate Bipolar Transistor
92. In Fleming's right hand rule, the fore finger indicates _____.
 (A) The direction of induced EMF
 (B) The direction of motion of the conductor
 (C) The direction of induced current
 (D) The direction of magnetic flux
93. Diode is a _____.
 (A) Multidirectional device (B) Unidirectional device
 (C) Bidirectional device (D) None of these
94. Earth wire or ground wire is made of _____.
 (A) Copper (B) Iron (C) Aluminium (D) Galvanized steel
95. Which tool is used to transfer measurement to the inside caliper ?
 (A) Odd leg caliper (B) Steel rule
 (C) Genny caliper (D) Divider
96. Chisel used for making rectangular holes in wood is _____.
 (A) Firmer Chisel (B) Paring Chisel
 (C) Mortise Chisel (D) Beavel - Firmer Chisel

97. Name the element used as impurity to produce N-type semiconductor _____.
(A) Gallium (B) Boron (C) Aluminium (D) Arsenic
98. Which of the following is known as metal rectifier ?
(A) Gas tube diode (B) Silicon diode
(C) Copper oxide rectifier (D) All of the above
99. Type of filter can be used along with a full wave rectifier only is _____.
(A) Series inductor filter (B) Pi filter
(C) Resistance Capacitance filter (D) Choke input LC filter
100. The difference between peak positive and peak negative values in AC is called _____.
(A) Effective value (B) Peak to Peak value
(C) Maximum value (D) Average value

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