

127/2017

Question Booklet
Alpha Code

A

Question Booklet
Serial Number

Total Number of Questions : 100

Time : 75 Minutes

Maximum Marks : 100

INSTRUCTIONS TO CANDIDATES

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.

127/2017

1. Madhav Gadgil Committee recommended Ecologically Sensitive Area in Western ghats as :
(A) 64% (B) 36% (C) 37% (D) 62%
2. Which Article of Indian Constitution allows to proclaim financial emergency under circumstances ?
(A) Article 352 (B) Article 356 (C) Article 360 (D) Article 362
3. The very first meeting of India's Constituent Assembly was presided over by :
(A) B.R. Ambedkar (B) Sachidananda Sinha
(C) S.K. Patil (D) Rajendra Prasad
4. The Indian Parliamentary democracy closely upholds more which among the following aspects :
(A) Supremacy of the Parliament
(B) Supremacy of the President
(C) Supremacy of the Election Commission
(D) Supremacy of the Constitution
5. POCSO Act meant :
(A) Prohibition of Children from Sexual Offences
(B) Prohibition of Criminal Sexual Offences
(C) Protection of Children from Sexual Offences
(D) Prevention of Criminals from Sex Offences
6. Kuttankulam Sathyagraha is associated with the premises of the Temple of :
(A) Thiruvallam Temple (B) Vaikom Temple
(C) Kudalmanikam Temple (D) Guruvayoor Temple
7. The book "Bilathivishesham" was written by :
(A) S.K. Pottekad (B) K. Ramakrishna Pillai
(C) V.K. Narayanankutty Nair (D) K.P. Kesava Menon

A

3

{P.T.O.}

8. Dr. Karl Landsteiner is closely associated in which field of Medical Sciences ?
(A) Organ transplantation (B) Blood transfusion
(C) Cancer disease (D) Clonning
9. The first journalistic publication in Malayalam, 'Rajya Samacharam' was published by :
(A) Church Mission Society (B) London Mission Society
(C) Basel Evangelical Mission (D) Jesuit Missionaries
10. Who among the following reformers used 'Samatva Samajam' for social reformation in Kerala ?
(A) Chattampi Swamikal (B) Vaghbhatananda
(C) Vaikunda Swamikal (D) K.P. Vellon
11. The name of Vakom Abdul Khadir Maulavi is not associated with the publication of :
(A) Al Islam (B) Swadeshabhimani
(C) Deepika (D) Al Ameen
12. Which one among the following that does not belong to the financial standing committee of Indian Parliament ?
(A) Estimate Committee (B) Public Undertakings Committee
(C) Subject Committee (D) Public Accounts Committee
13. The book 'Atmanutapam' was written by :
(A) Abraham Malpan (B) Mar Elias Chavara
(C) Pampadi John Joseph (D) Pandit K.P. Karuppen
14. 'Sabari Ashram' an orphanage for the children of the depressed classes was started by :
(A) Dr. Ayyathan Gopalan (B) V.T. Bhattathiripad
(C) T.R. Krishna Swami Iyer (D) V.P. Narayanan Nambiar
15. 'Kallumala Agitation' was organised by the inspiration of the ideas of the following social reformer in Kerala :
(A) Velukutty Arayan (B) Moorkoth Kumaran
(C) Sahodaran Ayyappan (D) Ayyankali

16. 'Sreemoolavasam' was closely associated as :
(A) Buddhist centre (B) Popular assembly
(C) Royal households (D) Jain centre
17. The first woman High Court Judge in India :
(A) Leela Seth (B) Meera Kumar (C) Anna Chandy (D) Anna Malhotra
18. C. Krishnan campaigned against untouchability in the columns of his paper published from Calicut :
(A) Kerala mitram (B) Mitavadi
(C) Paschimataraka (D) Gomati
19. "a miracle of modern times" is a famous comment on the Temple Entry proclamation of 1936, by :
(A) Swami Vivekananda (B) Jawaharlal Nehru
(C) Mahatma Gandhi (D) K. Kelapan
20. The book 'Aphante Makal' written by M.B. Nambudiripad belongs to the literature of :
(A) Drama (B) Novel (C) Short story (D) Poems
21. Hacksaw blades are made of :
(A) Low alloy steel and high speed steel
(B) Medium carbon steel and stainless steel
(C) High carbon steel and stainless steel
(D) Low carbon steel
22. The type of hacksaw frames in which more than one standard size blade can be fitted is called _____.
(A) Solid frame (B) Fixed frame
(C) Adjustable frame (D) Tubular frame
23. The punching marks on the lines drawn during marking off are known as _____.
(A) Marking (B) Witness marking
(C) Drawing (D) Checking

24. The vice clamps are used to _____.
- (A) Protect hard jaws (B) Clamp the work piece rigidly
(C) Protect the finished surfaces (D) Prevent the movable jaw being filed
25. The size of an engineer's vice is specified by the :
- (A) Length of the movable jaw (B) Width of the jaw
(C) Height of the vice (D) Maximum opening of the jaw
26. The part of the universal surface gauge which helps to draw the parallel line along the datum edge is the :
- (A) Rocker arm (B) Snug
(C) Fine adjustment screw (D) Guide pins
27. Scribes are made of :
- (A) Mild steel (B) Brass
(C) High carbon steel (D) Cast iron
28. The reference surface during marking is provided by the :
- (A) Surface gauge (B) Work piece
(C) Drawing of the work (D) Marking table surface
29. While cutting small diameter pipes, it is advisable to watch regularly and ensure that :
- (A) More saw teeth are in contact (B) The cut is along the curved line
(C) The work is not overheated (D) Proper balancing of hacksaw is maintained
30. The copper-zinc alloys are known as :
- (A) Bronzes (B) Brasses (C) Led (D) Zinc
31. The process of introducing carbon into low carbon steels in order to produce a hard surface is known as :
- (A) Electroplating (B) Nitriding (C) Carburizing (D) Spraying
32. Pig iron refined in a cupola produces _____.
- (A) Cast iron (B) Wrought iron (C) Steel (D) Stainless steel

33. Materials which do not contain iron is known as :
- (A) Ferrous materials (B) Non-metals
(C) Non-ferrous metals (D) Ceramic metals
34. Wrought iron is produced by :
- (A) Pudding process (B) Bessemer convertor
(C) Electric furnace (D) Cupola furnace
35. Which of the following is a ferrous material ?
- (A) Zinc (B) Plastic (C) Silicon carbide (D) Iron
36. The angle of centre punch is _____.
- (A) 30° (B) 60° (C) 90° (D) 120°
37. The portion of the hammer which is not hardened is the :
- (A) Face (B) Peen (C) Handle (D) Cheek
38. A drift is used for drilling machine is :
- (A) Drawing a drill location
(B) Indexing chuck on spindle
(C) Removing the drill from the machine spindle
(D) Removing from broken drill from the work
39. Suitable cutting fluid for drilling mild steel in drilling machine is _____.
- (A) Synthetic soluble oil (B) Distilled water
(C) Kerosene (D) Soluble oil
40. The distance, which the cutting edge of a tool passes over the material in a minute, while machining, is known as :
- (A) Cutting speed (B) Feed (C) Speed (D) RPM
41. The chisel will dig into the material when :
- (A) The rake angle is more (B) The angle of inclination is more
(C) The clearance angle is too low (D) The angle of inclination is too low

42. A slight convexity is given to cutting edge to :
- (A) Cut curved surfaces (B) Cut sharp corners
(C) Prevent digging on the ends (D) Allow the lubricant to enter
43. The point angle for a standard drill is
- (A) 135° (B) 60° (C) 108° (D) 118°
44. The part of a Vernier bevel protractor on which main scale divisions are marked is the :
- (A) Stock (B) Dial
(C) Disc (D) Adjustable blades
45. The process of bevelling the end of a hole is called :
- (A) Reaming (B) Counter sinking
(C) Spot facing (D) Counter boring
46. The term surface finish refers to the :
- (A) Shining of a machined surface
(B) Type of coating given on a surface
(C) Heat treatment given on a surface
(D) Roughness or smoothness of a surface
47. _____ is the relationship that exists between two mating parts, a hole and shaft, with respect to their dimensional differences before assembly.
- (A) Fit (B) Tolerance (C) Deviation (D) Allowance
48. A service petroleum pipe line flange is to be drilled. Which machine would you choose out of the following ?
- (A) Electrical hand drilling machine (B) Pneumatic hand drilling machine
(C) Sensitive drilling machine (D) Pillar drilling machine
49. Least count of a Vernier metric micrometer is :
- (A) 0.1 mm (B) 0.01 mm (C) 0.001 mm (D) 0.0001 mm

50. A chemical compound of carbon with iron is called :
(A) Ferrite (B) Cementite (C) Pearlite (D) Austenite
51. In anvil round hole is called _____.
(A) Drawing down and cutting off (B) Hardie hole
(C) Bending to round shape (D) Punching hole
52. A welding rectifier is used to :
(A) Convert an A.C. welding supply into a D.C. supply
(B) Generate a D.C. welding supply
(C) Convert a D.C. welding supply into an A.C. welding
(D) Increase ampere
53. Testing a weld without damaging the joint is called _____.
(A) Destructive testing (B) Non-destructive testing
(C) Chemical testing (D) Non-chemical testing
54. In a lathe machine internal and external taper turning can be done by :
(A) Offsetting the tailstock
(B) A combination of both the cross-slide and the compound slide
(C) Swivelling the compound slide
(D) Form tool method
55. When a tool is set above the centre line of a lathe ?
(A) Front clearance decreases
(B) Front clearance increases
(C) Front clearance does not change
(D) Front clearance becomes equal to the side clearance
56. A sine bar is used for :
(A) Levelling the job for drilling (B) Finding the angle of a taper job
(C) Measuring the diameter of holes (D) Checking the profile of a thread

57. In honing processes, the movement of the spindle is :
 (A) Vertical and reciprocating (B) Horizontal and reciprocating
 (C) Reciprocating (D) Rotating
58. The external threads on G.I. pipes are cut easily by :
 (A) Tap sets (B) Dies and die stocks
 (C) Thread rollers (D) Centre lathe
59. _____ is the mass per unit volume of a fluid.
 (A) Density (B) Viscosity (C) Specific volume (D) Specific gravity
60. _____ at a point is the force per unit area.
 (A) Compressibility (B) Viscosity (C) Pressure (D) Strain
61. _____ is a device used for lifting heavy weights by the application of a much smaller force.
 (A) Hydraulic accumulator (B) Hydraulic crane
 (C) Hydraulic coupling (D) Hydraulic press
62. Momentum of a body is given by :
 (A) Mass \times velocity (B) Mass \times acceleration
 (C) Moment \times distance (D) Mass \times change of velocity
63. Watt is the unit of :
 (A) Force (B) Velocity (C) Work (D) Power
64. One metric horse power is equal to :
 (A) 746 watts (B) 736 watts (C) 536 watts (D) 636 watts
65. _____ states that for material loaded within elastic limits, the stress is proportional to strain, produced by stress.
 (A) Hooke's law (B) Plank's law (C) Euler's law (D) Fleming's law

66. In a riveted joint the tensile, shearing and crushing stresses are based on the :
- (A) Material size
 - (B) Diameter of rivet
 - (C) Mean of the diameter of rivet and drilled hole
 - (D) Diameter of drilled hole
67. A welded joint as compared to riveted joint, has :
- (A) Less strength
 - (B) More strength
 - (C) Equal strength
 - (D) Comparisons not required
68. The radial distance of the tooth above pitch circle is called _____.
- (A) Dedendum
 - (B) Pitch
 - (C) Addendum
 - (D) Diameter
69. The point of contact of two pitch circles of mating gears is called :
- (A) Circular pitch
 - (B) Module
 - (C) Pitch point
 - (D) Addendum
70. Difference between the upper limits and lower limit of deviation is called :
- (A) Allowance
 - (B) Tolerance
 - (C) Interference
 - (D) Basic size
71. Fluid mechanic deals with the behaviour of the _____.
- (A) Liquids or gases
 - (B) Solid or gases
 - (C) Semi solid or gases
 - (D) Half solid or gases
72. The copper tin alloys are known as :
- (A) Brasses
 - (B) Lead
 - (C) Zinc
 - (D) Bronzes
73. If the metals are ductile and cutting speeds are high, then :
- (A) Continuous chips are formed
 - (B) Discontinuous chips are formed
 - (C) Continuous chips with built-up edge are formed
 - (D) Discontinuous chips with built-up edge are formed

83. Which of the following threads is not used when the force acts entirely in one direction ?
(A) Square thread (B) Buttress thread (C) B.S.W thread (D) Acme thread
84. The largest permissible size for a dimension is known as :
(A) Lower limit (B) Basic size (C) Actual size (D) Upper limit
85. The system said to be bilateral tolerance if :
(A) Tolerance is positive (B) Tolerance is in one direction
(C) Tolerance is in two direction (D) Tolerance is negative
86. The notation 70H6/g5 means :
(A) Basic size is 70 mm and tolerance grade of hole is 6 and shaft is 5
(B) Basic size is 70 mm and tolerance grade of shaft is 6 and hole is 5
(C) Basic size is 70 mm
(D) Actual size is 70 mm
87. The two plates are to be jointed by rivets. The plates are touching each other and two cover plates are placed on both sides of the main plates and then riveted. This type of joint is known as :
(A) Lap joint (B) Butt joint
(C) Single strap joint (D) Double strap butt joint
88. Which material having highest melting point ?
(A) Tungsten (B) Manganese (C) Copper (D) Diamond
89. Bar is the unit of :
(A) Power (B) Energy (C) Pressure (D) Work
90. Unit of energy is :
(A) Watt (B) Joule (C) Joule-meter (D) Calorie
91. _____ is the process of heat transfer from a hot body to cold body without effecting the medium.
(A) Radiation (B) Conduction
(C) Convection (D) Convection and conduction

92. Within the elastic limit in a loaded material, stress is :
 (A) Inversely proportional to strain (B) Directly proportional to strain
 (C) Elasticity (D) Plasticity
93. Files are made of :
 (A) Cast iron (B) Wrought iron
 (C) Medium carbon steel (D) High carbon steel
94. A _____ is used for bringing the jobs close to the finishing size.
 (A) Bastard file (B) Second cut file
 (C) Smooth file (D) Dead smooth file
95. The _____ is the narrow strip which extends to the entire length of the flutes.
 (A) Shank (B) Web (C) Land/Margin (D) Body
96. The purpose of _____ is to restore the cutting action of the grinding wheel.
 (A) Loading (B) Glazing (C) Truing (D) Dressing
97. An accuracy of a metric micrometer is _____.
 (A) 0.1 mm (B) 0.01 mm (C) 0.02 mm (D) 0.001 mm
98. The accuracy of vernier bevel protractor is _____.
 (A) One degree (B) One minute (C) Two minute (D) Five minute
99. In 'v' block included angle VEE is _____.
 (A) 45° (B) 60° (C) 90° (D) 120°
100. _____ is used to check the gap between the mating parts.
 (A) Feeler gauge (B) Plug gauge (C) Snap gauge (D) Gauge

- o O o -

SPACE FOR ROUGH WORK

SPACE FOR ROUGH WORK