

# 007/2020

Question Booklet  
Alpha Code

A

Question Booklet  
Serial Number

Total No. of Questions: 100

Time : 75 Minutes

Maximum : 100 Marks

## 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. Blank sheets of paper is attached to the question booklet. These 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.

007/2020-A





1. What safety devices will you use to protect yourself while chipping ?  
(A) Guard (B) Goggles  
(C) Hand screen (D) Gloves
  
2. Why the wooden top used on a workbench ?  
(A) Absorb shocks (B) Reject shocks  
(C) Easy damage (D) Durable
  
3. Which safety precaution not associated with use of hammer ?  
(A) Make sure that the handle is fits tightly in the head.  
(B) Never use a hammer having a split handle.  
(C) Don't strike hardened surface with a hammer.  
(D) Use hammer instead of any other tool.
  
4. Protect from electric shock which device use ?  
(A) Hand Screen (B) Plain goggles  
(C) Leather hand gloves (D) Rubber hand gloves
  
5. To protect from the eyes from rays of arc should use \_\_\_\_\_.  
(A) Plain goggles (B) Hand screen  
(C) Leather hand gloves (D) Rubber hand gloves
  
6. Which provide on the point of scriber to prevent accident ?  
(A) Cork (B) Twined  
(C) Paper cover (D) Plastic cover
  
7. Where white wash use on the job ?  
(A) Smooth surface (B) Rough surface  
(C) Finished surface (D) Plane surface
  
8. Which tool use to scribe lines to indicate dimensions on the workpiece ?  
(A) Punch (B) Calliper  
(C) Scriber (D) Divider

9. State the tool use for scribing lines parallel to datum surface.
- (A) Surface gauge (B) Surface plate  
(C) Marking table (D) Hammer
10. Point angle of prick punch
- (A)  $30^\circ$  (B)  $90^\circ$   
(C)  $45^\circ$  (D)  $62^\circ$
11. How to specify dividers ?
- (A) Joint and length (B) Peen and joint  
(C) Peen and length (D) Joints and pointer
12. State the angle of Try square.
- (A)  $60^\circ$  (B)  $35^\circ$   
(C)  $55^\circ$  (D)  $90^\circ$
13. Least count of a metric outside micrometer is
- (A) 0.01 mm (B) 0.03 mm  
(C) 0.3 mm (D) 0.02 mm
14. Name the tool use to measure outside diameter of a pipe.
- (A) Inside calliper (B) Steel rule  
(C) Outside calliper (D) jenny calliper
15. The included angle of twist drill bit.
- (A)  $120^\circ$  (B)  $112^\circ$   
(C)  $118^\circ$  (D)  $90^\circ$
16. File guard are used for the removal of
- (A) Suspended matters from the file.  
(B) Suspended matters from the jaw.  
(C) Suspended matters from the tap.  
(D) Suspended matters from die.

17. Hand taps are used to form the thread on
- (A) Internal threads
  - (B) External threads
  - (C) Convex surface
  - (D) Concave surface
18. Socket is also one of the device of their
- (A) tap holder
  - (B) drill holder
  - (C) die holder
  - (D) pipe holder
19. External threads are cut by
- (A) tap
  - (B) die
  - (C) tong
  - (D) drills
20. Mortise Chisel is a
- (A) Cutting tool
  - (B) Marking tool
  - (C) Measuring tool
  - (D) Assembling tool
21. Which tool is use for extracting nails ?
- (A) Ball peen hammer
  - (B) Claw hammer
  - (C) Sledge hammer
  - (D) Mallet
22. Length of cross-cut saw is varies from
- (A) 700 to 750 mm
  - (B) 300 to 350 mm
  - (C) 800 to 850 mm
  - (D) 600 to 650 mm
23. Name the tool to measure the surface level of small area.
- (A) Spirit level
  - (B) Plumbob
  - (C) Try Square
  - (D) Water level
24. G.I. Pipe socket are designated by
- (A) Its nominal bore
  - (B) Its length
  - (C) Nominal bore of pipe for which it is meant
  - (D) Its weights

25. Lead pipe and copper pipe are cut easy with  
(A) Hack saw (B) Pipe cutter  
(C) Knife (D) Chain pipe cutter
26. P.V.C. pipes are manufactured by using  
(A) Rubber (B) Plastic  
(C) Nylon (D) Polyvinyl chloride
27. In hot water line which colour code is used ?  
(A) Red (B) Blue  
(C) Yellow (D) Green
28. Spun Pipe (Cast iron) are manufactured by using  
(A) Metal moulds (B) Sand moulds  
(C) Clay moulds (D) None rotating moulds
29. Pipe wrench is used for pipes of diameter  
(A) Less than 15 mm (B) 15 to 50 mm  
(C) 50 to 150 mm (D) More than 150 mm
30. Tee is used for  
(A) Branch of at 90° (B) Branch of 45°  
(C) To deviate 90° (D) To connect die pipe at 45°
31. Every pipe bender will have  
(A) Back former (B) Inner former  
(C) Bleed screw (D) Hydraulic raw
32. Mortar pan is used for  
(A) Mixing of concrete (B) Finish floor  
(C) Measuring cement (D) Carry excavated materials
33. Compressive strength of any individual brick  
(A) shall be more than 10%.  
(B) shall be less than 10%.  
(C) shall not be less than 80% of specified strength.  
(D) shall be more than 8% of specified strength.

34. Cement concrete is
- (A) Good in tension (B) Weak in compression  
(C) Good in compression (D) Equal in tension and compression
35. While hand mixing of cement concrete
- (A) Cement and coarse aggregate is first mixed  
(B) Cement and sand are first mixed  
(C) Cement and water are first mixed  
(D) None of these
36. Which tool is used for earth excavation, mixing mortar and mixing concrete ?
- (A) Spade (B) Mortar pan  
(C) Plumbob (D) Plumb rule
37. What type of bond is used for constructing curve and footing of foundation ?
- (A) Stretcher bond (B) Header bond  
(C) English bond (D) Flemish bond
38. What is used to binding stones, bricks e.t.c. ?
- (A) Trowel (B) Mortar  
(C) Spade (D) Mortar pan
39. To check straightness of brick masonry and plaster \_\_\_\_\_ is used.
- (A) Straight edge (B) Trowel  
(C) Spade (D) Shovel
40. Water absorption percentage of good brick of its own weight is \_\_\_\_\_.
- (A) less than 20% (B) greater than 20%  
(C) 25% (D) not more than 20%
41. Solder is an alloy of
- (A) Lead and Tin (B) Lead and Copper  
(C) Lead and Brass (D) Lead and Antimony

42. What type of flux is used for soldering Copper sheet, Brass sheet and Tin plates ?  
(A) Hydrochloric acid (B) Zinc chloride  
(C) Ammonium chloride (D) Resin
43. In torch brazing heat is applied by  
(A) Oxy-acetylene flame (B) Electric ore  
(C) Spelter (D) Silver solder
44. Which gases are used for cutting of steel and heating purpose only ?  
(A) Oxy acetylene gas flame (B) Oxy hydrogen gas flame  
(C) Oxy liquid petroleum gas flame (D) Oxy coal gas flame
45. Melting point of lead is  
(A) 332 °C (B) 350 °C  
(C) 327 °C (D) 370 °C
46. Which tongs are used for holding round rods horizontally ?  
(A) Flat tong (B) Square mouth tong  
(C) Hollow tong (D) Round Tong
47. The head of soldering iron is made of  
(A) Iron (B) Forged copper  
(C) Brass (D) Zinc
48. Which nut are used light duty assembly which requires frequent removal and fixing ?  
(A) Hexagonal nuts (B) Square nuts  
(C) Wing nuts (D) Knurled nuts
49. Soft solder are used for soldering, whose melting point is  
(A) less than 300 °C (B) less than 350 °C  
(C) less than 400 °C (D) less than 450 °C
50. Which welding process preferred by weld thick plate ?  
(A) Tig welding (B) Thermit welding  
(C) Oxy-acetylene gas welding (D) Submerged arc welding

51. \_\_\_\_\_ are defined as fitting at the end of soil pipes of waste pipes to prevent foul gases coming out of waste pipes.
- (A) Vent (B) Trap  
(C) Leakage (D) Ventilation
52. \_\_\_\_\_ is caused by a fault in the trap or plumbing installation and water on the floor would be apparent.
- (A) Leakage (B) Joint  
(C) Die (D) Tap
53. The length along the centre of the pipe and fitting :
- (A) Development length (B) Span  
(C) Embedment length (D) Developed length
54. The lowest portion of the inside of any pipe or conduit that is not vertical
- (A) Span (B) Fitting  
(C) Invert (D) Elbow
55. A valve permitted a liquid or gas to flow in one direction :
- (A) Float valve (B) Gate valve  
(C) Globe valve (D) Check valve
56. It is added to water to reduce salinity :
- (A) Solvent (B) Salt purifier  
(C) Fitting (D) Elbow
57. In sanitary fitting, the symbol  stands for
- (A) Water closet (B) Tap  
(C) Gate valve (D) Pump
58. Solder for potable water pipe shall be \_\_\_\_\_ free.
- (A) Copper (B) Lead  
(C) Zinc (D) Metal
59. The liquid waste from Kitchens, Bath rooms and Wash basins, is not called
- (A) Liquid waste (B) Sewage  
(C) Sullage (D) None of these

60. A pipe installed in the house or building drainage to preserve that water seal of a trap
- (A) Soil pipe (B) Vent pipe  
(C) Waste pipe (D) Anti-Syphonage pipe
61. The disposal of sewage into natural water courses such as streams, rivers, sea and lake is known as
- (A) Chemical privy (B) Disposal by dilution  
(C) Dry privy (D) Septic tank
62. The bacterias which exist under dark and stagnate conditions in the absence of oxygen are known as
- (A) Self purification (B) Aerobic bacterias  
(C) Sewage treatment (D) Anaerobic bacterias
63. The symbol  stands for
- (A) Elbow (B) Valve  
(C) Tee (D) Union
64. \_\_\_\_\_ is a form of ball valve use to control the flow of a liquid or gas.
- (A) Tap (B) Pipe  
(C) Stop cock (D) Drainage
65. \_\_\_\_\_ is an inspection chamber in a drainage system.
- (A) Septic tank (B) Manhole  
(C) Gully trap (D) All of these
66. Which of the following is used in toilet under water closet ?
- (A) Nahini trap (B) Strap  
(C) Q trap (D) Bottle trap
67. Effluent quality control is typically aimed at
- (A) Public health protection (B) Prevention of Eutrophication  
(C) Promotion of water reuse (D) All of these

68. \_\_\_\_\_ forces non-toxic artificially created smoke through waste and drain pipes under a slight pressure to find leak.
- (A) Leak test (B) Water test  
(C) Smoke test (D) Pressure test
69. If water flowing through a tap or valve is suddenly arrested, it will produce a noise like hammering and it is known as
- (A) Knock (B) Sound  
(C) Arrest (D) Water hammer
70. The most commonly used dis-infectant for sterilization of water is \_\_\_\_\_.
- (A) Chlorine (B) Sodium  
(C) Calcium (D) Carbon
71. Ground water is usually free from
- (A) Dissolved impurities (B) Suspended impurities  
(C) Minerals (D) Gases
72. Closed impeller type of centrifugal pumps is largely used for pumping water supplies, because
- (A) Efficiency is high (B) Low head  
(C) High head (D) Low suction head
73. The driving motor is placed below the pump bowl in a
- (A) Centrifugal pump (B) Air lift pump  
(C) Submersible pump (D) Reciprocating pump
74. The pump suitable for lifting water from very deep tubewells of the order of 100 to 150 m deep is
- (A) Rotary pump (B) Centrifugal pump  
(C) Submersible pump (D) Air lift pump
75. The pump which is not a kinetic energy pump is
- (A) Rotary pump (B) Mono block pump  
(C) Single stage pump (D) Dual stage pump

76. At what frequency maintenance works are be carried in water heater ?  
(A) 3 months (B) 6 months  
(C) 1 year (D) 9 months
77. The distance between manhole and gully chambers should not exceed  
(A) 15 m (B) 10 m  
(C) 6 m (D) 7 m
78. Waste fittings for wash basine shall be of nominal side  
(A) 32 mm (B) 40 mm  
(C) 50 mm (D) 63 mm
79. The minimum height between the top of the water closet pan and the underside of the high level flashing cistern is  
(A) 200 cm (B) 125 cm  
(C) 100 cm (D) 30 cm
80. The trap which prevent the self syphonage is  
(A) Anti-D-Trap (B) Greese trap  
(C) Bottle trap (D) S trap
81. How much is the average quantity of sewage per capita per day ?  
(A) 150 litre/day/person (B) 135 litre/day/person  
(C) 125 litre/day/person (D) 100 litre/day/person
82. What instrument is used while conducting air test in pipe ?  
(A) Manometer (B) Phonoscope  
(C) Stethoscope (D) Pyrometer
83. How much is the weight of 15 mm C.P. pillar tap ?  
(A) 650 gm (B) 750 gm  
(C) 250 gm (D) 375 gm
84. Which side of the mixing tap hot water line to be connected ?  
(A) On right side (B) Left side  
(C) Middle (D) Lower side

85. Popup waste is replacement of what ?  
(A) Rubber plug of chain (B) Floating paper  
(C) Towel (D) Cotton
86. \_\_\_\_\_ is an appliance for heating water in bathroom.  
(A) Sink (B) Geyser  
(C) Stove (D) Wash basin
87. Which one of the following receives human excreta directly from the user ?  
(A) Urinal (B) Wash basine  
(C) Water closet (D) Bidet
88. The minimum horizontal distance between a ground water well and septic tank should be  
(A) 15 m (B) 7 m  
(C) 10 m (D) 12 m
89. \_\_\_\_\_ pump is used for pumping sewage.  
(A) Airlift pump (B) Rotary pump  
(C) Centrifugal pump (D) Submersible pump
90. The slope provided for self-cleaning velocity to 150 mm diameter drain pipe  
(A) 1 : 40 (B) 1 : 60  
(C) 1 : 90 (D) 1 : 30
91. Important part of water closet is  
(A) Pan (B) Foot rest  
(C) Trap (D) Flush tank
92. S.W.H. means :  
(A) Solar Water Heating (B) Sky Wind Heating  
(C) Standard Wind Heating (D) Solar Wind Heating

93. The amount of heat required to raise the temperature of one pound of water through 1° F at Sea level is
- (A) S.W.H. (B) H.T.F.  
(C) B.T.U. (D) S.H.
94. \_\_\_\_\_ is the energy in transmit from one matter of body to another due to temperature difference.
- (A) Heat (B) Electricity  
(C) Air (D) Temperature
95. \_\_\_\_\_ is the degree of hotness and coldness of the body.
- (A) Heat (B) Temperature  
(C) Humidity (D) Weather
96. Specific heat of water is \_\_\_\_\_
- (A) 1 (B) 7  
(C) 3 (D) 10
97. In passive heating system water is circulated in the loop naturally due to \_\_\_\_\_ action.
- (A) Air syphon (B) Thermo syphon  
(C) Reflex action (D) Water syphon
98. How to prevent algae growth in overhead tank ?
- (A) By using Chlorine (B) By using Sodium  
(C) By using Calcium (D) By using Copper sulphate
99. Rotary pumps are easily repair. Why ?
- (A) No valve (B) 2 valve  
(C) One suction (D) Two delivery
100. What remedy is carried out, while spindle of valve rotates continuously ?
- (A) Change the spindle (B) Change the pipe line  
(C) Apply the water (D) Apply the oil to the line

**SPACE FOR ROUGH WORK**

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