

087/2026

Question Booklet
Alpha Code

A

Question Booklet
Serial Number

Total No. of questions : 100

Time : 1 Hour 30 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. 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.

087/2026

Maximum : 100 marks

Time : 1 hour and 30 minutes

1. _____ hazard occur when the type of work you do, your body position and/or your working conditions put a strain on your body.
(A) Physical hazard (B) Chemical hazard
(C) Biological hazard (D) Ergonomic hazard
2. Fire extinguisher used to put out fires on metals that are capable of burning is
(A) Class A (B) Class B (C) Class C (D) Class D
3. The most important layer of atmosphere and all the weather like rainfall, fog and hailstorm occur in this layer.
(A) Troposphere (B) Stratosphere
(C) Mesosphere (D) Thermosphere
4. What is the “golden hour” for a victim with head injury?
(A) First 15 minutes (B) First 30 minutes
(C) First 45 minutes (D) First 60 minutes
5. What is ABC of first aid?
(A) Aid, Break, Control (B) Avoid bleeding control
(C) Airway, Breathing, Circulation (D) Accident, Bleeding, Circulation
6. Which property of metal has its power of returning to its original shape after the applied force is released?
(A) Malleability (B) Elasticity (C) Tenacity (D) Plasticity
7. What is called mass per unit volume of a substance?
(A) Mass (B) Weight (C) Density (D) Volume
8. At what temperature will Fahrenheit and Centigrade Thermometers give the same reading?
(A) -45°C (B) -40°C (C) -35°C (D) -30°C
9. What is the value of $\tan 45^{\circ}$ if $\sin 45^{\circ} = 1/\sqrt{2}$
(A) $1/\sqrt{2}$ (B) $\sqrt{3}/2$ (C) 1 (D) $1/\sqrt{3}$
10. Which metal contains iron as a major content?
(A) Brass metal (B) Bronze metal
(C) Zinc (D) Ferrous metals

11. Statement I : The Representative Fraction (R.F.) of a scale is defined as the ratio between actual length of an object's edge & the length of that edge on the drawing.

Statement II : A diagonal scale is capable of measuring three consecutive units or a unit and its two sub-divisions.

Options:

- (A) Only Statement I true
- (B) Only Statement II true
- (C) Both Statement I and Statement II are true
- (D) Neither Statement I nor Statement II are true

12. Statement I : The surface area of an A0 size drawing sheet is standardized to 1 m².

Statement II : The ratio between the length and width of any standard ISO A-series drawing sheet is 1 : 2^{1/2}.

Options :

- (A) Only Statement I true
- (B) Only Statement II true
- (C) Both Statement I and Statement II are true
- (D) Neither Statement I nor Statement II are true

13. Statement I : Center lines, lines of symmetry, and path lines are represented using Continuous Thin lines.

Statement II : Long-break lines are drawn as continuous thin freehand lines or continuous thin lines with zig-zags.

Options:

- (A) Only Statement I true
- (B) Only Statement II true
- (C) Both Statement I and Statement II are true
- (D) Neither Statement I nor Statement II are true

14. Statement I : A rhombus is a parallelogram with four equal sides whose diagonals bisect each other at right angles (90°).

Statement II : A trapezoid is a quadrilateral that has both pairs of opposite sides parallel to each other

Options:

- (A) Only Statement I true
- (B) Only Statement II true
- (C) Both Statement I and Statement II are true
- (D) Neither Statement I nor Statement II are true

15. Statement I : A straight line that touches a circle at exactly one point is called a tangent, and it is always perpendicular to the radius at the point of contact.

Statement II : A line segment whose endpoints both lie on the circle, but does not pass through the center, is called a secant.

Options:

- (A) Only Statement I true
- (B) Only Statement II true
- (C) Both Statement I and Statement II are true
- (D) Neither Statement I nor Statement II are true

16. Statement I : Continuous thick lines are used to show visible outlines and edges of an object.

Statement II : Center lines are drawn as continuous thin lines.

Options :

- (A) Only Statement I true
- (B) Only Statement II true
- (C) Both Statement I and Statement II are true
- (D) Neither Statement I nor Statement II are true

17. Statement I : The Centroid divides each median of a triangle internally in the ratio 1: 2 measured from the vertex to the midpoint of the opposite side.

Statement II : For an obtuse-angled triangle, Orthocenter lies strictly outside the boundary of the triangle.

Options :

- (A) Only Statement I true
- (B) Only Statement II true
- (C) Both Statement I and Statement II are true
- (D) Neither Statement I nor Statement II are true

18. Statement I : When two or more lines of different types coincide on a drawing, hidden outlines take precedence over center lines, but visible outlines take precedence over hidden outlines.

Statement II : Chain thin lines with thick ends and changes of direction (Type J) are used specifically to indicate cutting planes for section views.

Options :

- (A) Only Statement I true
- (B) Only Statement II true
- (C) Both Statement I and Statement II are true
- (D) Neither Statement I nor Statement II are true

19. Statement I : When dimensioning a spherical radius or spherical diameter, the abbreviation ϕ must precede the dimension value.
- Statement II : Tapered features are always dimensioned by indicating the angle of taper in degrees, minutes and seconds rather than a ratio or fractional expression.
- Options :
- (A) Only Statement I true
 (B) Only Statement II true
 (C) Both Statement I and Statement II are true
 (D) Neither Statement I nor Statement II are true
20. Statement I : In the general method for constructing any regular polygon inscribed in a circle of diameter AB, the line segment AB is divided into n equal parts, and a line drawn from vertex C (constructed via arc radius AB from points A and B) through the 2nd division on AB intersects the circle at the polygon's second vertex.
- Statement II : The internal angle of any regular polygon with n sides can be constructed geometrically without a protractor only if n is a power of 2 or a prime number.
- Options :
- (A) Only Statement I true
 (B) Only Statement II true
 (C) Both Statement I and Statement II are true
 (D) Neither Statement I nor Statement II are true
21. The ability of a material to change its shape under load without cracking and to retain its new shape after the removal of load is known as
 (A) Plasticity (B) Elasticity (C) Ductility (D) Brittleness
22. Which of the following statements is / are correct about the statements based on the plutonic rocks?
 (i) Formed due to cooling of magma at a considerable depth from the earth's surface
 (ii) Cooling is quick and possess finely grained crystalline structure
 (iii) Basalt is an example of plutonic rocks
 (A) Only (i) (B) Only (i) & (ii)
 (C) Only (i) & (iii) (D) All of the above
23. Which test is performed to find out the presence of soluble earthy matter in a sample of stone?
 (A) Crystallisation test (B) Microscopic test
 (C) Smith's test (D) Attrition test

24. Which of the following statements is / are correct about the statements based on the burning of clay products?

- (i) Tiles are burnt in Sialkote kiln.
 - (ii) Terra-cotta articles are burnt in special muffle furnace
 - (iii) Hoffman's kilns are used for burning of bricks
- (A) Only (i) (B) Only (i) & (ii)
(C) Only (i) & (iii) (D) All of the above

25. The lime which is obtained by the calcinations of comparatively pure limestone is known as

- (A) Quick lime (B) Caustic lime
(C) Hydrated lime (D) Both (A) and (B)

26. Match List 1 with List 2 and select the correct answer using the codes given below

List 1	List 2
(1) Alumina	(i) Prevent shrinkage of raw bricks
(2) Silica	(ii) Imparts red colour to the bricks
(3) Lime	(iii) Imparts uniform shape to the bricks
(4) Oxide of iron	(iv) Imparts plasticity to the brick earth so that it can be moulded

- (A) 1-iv, 2-iii, 3-i, 4-ii (B) 1-iii, 2-i, 3-iv, 4-ii
(C) 1-iv, 2-i, 3-iii, 4-ii (D) 1-iii, 2-iv, 3-i, 4-ii

27. Which of the following statements is / are correct about the clay products?

- (i) Earthenware is used to indicate the wares or articles prepared from refractory clays mixed with sand and crushed pottery
 - (ii) Terra-cotta is a kind of earthenware
 - (iii) Porcelain indicate fine earthenware which is white, thin and semi transparent
- (A) Only (i) & (ii) (B) Only (ii) & (iii)
(C) Only (i) & (iii) (D) All of the above

28. Which of the following statements is / are correct based on the test of cement?

- (i) Fineness test is carried out to check proper grinding of cement
 - (ii) For initial setting time, the needle with annular collar is attached to the moving rod of Vicat apparatus
 - (iii) The purpose of soundness test is to detect the presence of uncombined lime in cement
- (A) Only (i) & (ii) (B) Only (ii) & (iii)
(C) Only (i) & (iii) (D) All of the above

29. The coarse sand passing through a sieve with a clear opening of
 (A) 1.5875 mm (B) 3.175 mm (C) 4.75 mm (D) 7.62 mm
30. The inert or chemically inactive materials which form the bulk of cement concrete are
 (A) Cement (B) Aggregates (C) Steel (D) Water
31. Recommended slump value for normal RCC work?
 (A) 20 – 40 mm (B) 50 – 60 mm
 (C) 80 – 150 mm (D) 100 – 150 mm
32. What is the minimum grade of concrete recommended for RCC work as per IS 456?
 (A) M 5 (B) M 10 (C) M 15 (D) M 20
33. For a concrete with mix proportion 1 : 3 : 6, the quantity of water required in litres per 50 kg of cement mix is?
 (A) 60 L (B) 45 L (C) 32 L (D) 34 L
34. Recommended cement to sand mortar for Reinforced brick work?
 (A) 1 : 2 (B) 1 : 3 (C) 1 : 4 (D) 1 : 5
35. Which industrial wood product is made by gluing together thin sheets of wood with grains placed crosswise?
 (A) Veneers (B) Lamin Board
 (C) Plywood (D) Particle Board
36. Which of the following is a natural defect caused during the growth of a tree when a branch is broken or cut off?
 (A) Rindgalls (B) Burls (C) Knot (D) Shake
37. Formation of bubbles on a painted surface caused by trapped air or water is called?
 (A) Flaking (B) Blistering (C) Blooming (D) Chalking
38. Which of the following component can function as both a base and a drier in oil paints?
 (A) Zinc white (B) White lead (C) Red lead (D) Litharge
39. Which metal is alloyed with copper to produce bell metal?
 (A) Zinc (B) Nickel (C) Tin (D) Lead
40. What are the dimensions of a standard slump cone?
 (A) 10 CM * 10 CM * 20 CM (B) 15 CM * 20 CM * 30 CM
 (C) 10 CM * 20 CM * 30 CM (D) 10 CM * 15 CM * 20 CM

41. Which method of site exploration is useful when hard soil is available with in a maximum depth of 1.5 m?
- (A) Probing (B) Auger boring
(C) Test pits (D) Wash boring
42. Which is the basic requirement to be fulfilled by a foundation to be satisfactory?
- (A) Location (B) Settlement
(C) Stability (D) All of the above
43. Which is the measure to be adopted to prevent unequal settlement of the sub soil?
- (A) The masonry work should be raised evenly
(B) Foundation should be on rock or hard moorum
(C) Mortar to be used in the masonry should be stiff and inline with the workability desired
(D) All of the above
44. Which is the piles is used to resist inclined loads?
- (A) Guide piles (B) Sheet piles
(C) Batter piles (D) Friction piles
45. Which type of stone masonry is no mortar is used in joints?
- (A) Coursed rubble masonry (B) Ashlar masonry
(C) Dry rubble masonry (D) Random rubble masonry
46. What is obtained by cutting a triangular portion of the brick through its width and making angle of 45° to 60° with the length of the brick?
- (A) Mitred closer (B) Bat
(C) Queen closer (D) Bevelled closer
47. What is the minimum thickness of a single Flemish bond?
- (A) 1 brick (B) $1\frac{1}{2}$ brick (C) 2 brick (D) $2\frac{1}{2}$ brick
48. Which joint is employed to connect the members at an angle other than a right angle?
- (A) Splayed joint (B) Butt joint
(C) Halved joint (D) Oblique-shoulder joint
49. Which type of carpentry joint the Tenon is short and does not extend to the full depth of mortise?
- (A) Joggle Tenon joint (B) Dovetail joint
(C) Halved joint (D) Housed joint

50. A vertical member which is employed to sub divide a window or a door opening vertically
 (A) Mullion (B) Transom (C) Louver (D) Sash
51. Which type of windows the shutters of which open like doors?
 (A) Pivoted windows (B) Louvered windows
 (C) Casement windows (D) Double-hung windows
52. The outside vertical member of the shutter through out its length
 (A) Style (B) Rail (C) Panel (D) Horn
53. The inner and under surface of an arch is
 (A) Intrados (B) Soffit (C) Crown (D) Extrados
54. Example for two centered arch is
 (A) Lancet (B) Ogee
 (C) Drop arch (D) Elliptical arch
55. A plane continuous curve formed in hand rails at junctions where flight changes direction is known as
 (A) Circlet (B) Loop (C) Ring (D) Wreath
56. The line joining intersection of the face of each riser and the top of each tread is called
 (A) Pitch line (B) Tread line
 (C) Springing line (D) Balustrade
57. The steps of a spiral stairs are
 (A) Comnod step (B) Flier
 (C) Winders (D) Bullnose steps
58. In king post truss, the member which directly supports the frame work of the roof is
 (A) Strut (B) Tie beam
 (C) King post (D) Principal rafter
59. Thin plate tapering and rectangular piece of wood used as roof tiles are
 (A) Shingles (B) Tiles
 (C) Slates (D) Flat pan tiles
60. In case of timber flooring the intermediate wall constructed on the surface of oversite concrete is known as
 (A) Air wall (B) Bridging wall
 (C) Joist wall (D) Sleeper wall

61. The floor finish which uses a mixture of marble chips, cement and pigment is termed as
 (A) Granolithic floor (B) Terrazo floor
 (C) Mosaic floor (D) Monolithic floor
62. The maximum size of coarse aggregate used in the construction of building should be
 (A) 20 mm – 25 mm (B) 25 mm – 30 mm
 (C) 25 mm – 40 mm (D) 10 mm – 20 mm
63. Steel is used as reinforcement because
 (A) It is cheaper than any other material
 (B) It is stronger than any other material
 (C) It's coefficient of thermal expansion is nearly same as that of concrete
 (D) It forms a good bond than any other material
64. The form work of sides of beams, walls and columns can be removed after _____ days.
 (A) 14 (B) 28 (C) 10 (D) 4
65. In one way slab, the ratio of longer span to shorter span is
 (A) Greater than or equal to 1 (B) Greater than or equal to 2
 (C) Less than or equal to 1 (D) Less than or equal to 2
66. According to IS 1172 - 1993, the recommended water consumption for nurses' homes, medical quarters, hostel and boarding schools is
 (A) 45 litres per capita per day (B) 50 litres per capita per day
 (C) 135 litres per capita per day (D) 150 litres per capita per day
67. Which of the following statements is/are correct about the treatment of water?
 (i) Screening removes floating matter from surface water
 (ii) Aeration removes objectionable taste and odour
 (iii) Filtration removes very fine suspended impurities and colloidal impurities
 (A) Only (i) and (ii) (B) Only (ii) & (iii)
 (C) Only (i) & (iii) (D) All of the above
68. A diverging tube fitted at the exit of the runner of a hydraulic turbine is called
 (A) Mouth piece (B) Draft tube (C) Penstock (D) Tailrace
69. The fitting inserted into a water main to provide a connection for a service pipe without shutting down the main is called
 (A) Ferrule (B) Goose neck (C) Stop cock (D) Curb valve

70. Which of the following is not a method of water disinfection?
 (A) Boiling method
 (B) Zeolite process
 (C) Silver treatment
 (D) Potassium permanganate treatments
71. Calculate the net internal wall plastering area of room with internal dimensions of 3 m × 4 m and a height of 3 m. The room has one door of size 1 m × 1 m and one window of size 2 m × 1.5 m. Deduct the area of openings.
 (A) 42 Sq.m (B) 38 Sq.m (C) 21 Sq.m (D) 36 Sq.m
72. Calculate the area of a rectangular plot measuring 50 m × 20 m in hectares?
 (A) 1000 Hectare (B) 100 Hectare
 (C) 1 Hectare (D) 0.10 Hectare
73. Calculate the dry volume of mortar required for plastering a 100 m² RCC ceiling with 12 mm thick plaster. Allow 20% extra mortar for surface unevenness and 25% increase to convert wet mortar into dry mortar.
 (A) 2 Cu.m (B) 1.94 Cu.m (C) 1.80 Cu.m (D) 1.44 Cu.m
74. The unit weight of a 10 mm diameter steel bar is
 (A) 0.395 Kg/m (B) 0.617 Kg/m (C) 0.89 Kg/m (D) 1.58 Kg/m
75. A square plot has an area of 1024 Sq.m. If the plot is to be fenced along all four sides, what is the total length of fencing required?
 (A) 128 metre (B) 96 metre (C) 64 metre (D) 32 metre
76. A septic tank is a
 (A) sedimentation tank
 (B) digestion tank
 (C) combination of sedimentation and digestion tank
 (D) aeration tank
77. A valve which allows the water to flow in one direction but prevents its flow in the reverse direction, is known as
 (A) Sluice valve (B) Reflux valve
 (C) Haunch (D) Pressure relief valve
78. What is the first stage in sewage treatment process?
 (A) Sedimentation (B) Screening
 (C) Filtration (D) Softening
79. Which device is used to prevent sewer gases from entering the building?
 (A) Filter (B) Trap
 (C) Ventilator (D) Vacuum pump

80. Which system consists of supply and distribution of pipes, fixtures, taps and valve connections?
 (A) Drainage system
 (B) Water distribution system
 (C) General water and sewer controlling system
 (D) House plumbing system
81. Which type of trap is used in Indian water closet?
 (A) S trap (B) P trap (C) U trap (D) Gully trap
82. What is the name of the liquid flowing in sewer?
 (A) Sewer (B) Sewage
 (C) Sewerage (D) Stormwater
83. Which factor does sanitary sewage quantity directly depends on?
 (A) Rate of water supply (B) Area
 (C) Population (D) Precipitation
84. Long channel aeration units in activated sludge process are known as
 (A) Contact bed (B) Oxidation ditch
 (C) Septic tank (D) Sludge digestion tank
85. Which one of the following is not the part of manholes?
 (A) Access shaft (B) Benching (C) Ladders (D) Gullies
86. In case of third angle projection, which one of the following statement is incorrect?
 (A) Plane of projection lies in between observer and object
 (B) Object lies in between plane projection and observer
 (C) Object is placed below the plane of projection
 (D) Object is placed behind the plane of projection
87. If a line is parallel to horizontal plane and inclined to vertical plane, its projection on _____ plane will show the true inclination of line.
 (A) Vertical plane (B) Horizontal plane
 (C) Picture plane (D) Central plane
88. The solid generated by the revolution of a right angled triangle about of its perpendicular sided which is fixed is
 (A) Cylinder (B) Sphere (C) Cone (D) Frustum
89. Which one of the following statement is true?
 (A) Isometric length = $1.00 \times$ true length
 (B) Isometric length = $0.95 \times$ true length
 (C) Isometric length = $0.85 \times$ true length
 (D) Isometric length = $0.82 \times$ true length

90. If the axis of a solid is perpendicular to VP, which view should be drawn first?
 (A) Top view (B) Front View
 (C) Right side view (D) Left side view
91. The percentage of covered area with respect to the plot area.
 (A) Coverage (B) Covered area
 (C) Built up area (D) Floor area ratio
92. Livestock buildings/ farms having a total built-up area exceeding 250 square metres, for raising domesticated animals and exceeding 100 square meters for raising domesticated birds, shall be included in _____ group.
 (A) Group G1 (B) Group G2 (C) Group G3 (D) Group I
93. Maximum Permissible Coverage for Educational (B) – up to Higher Secondary is
 (A) 35 (B) 45 (C) 60 (D) 65
94. Minimum size of urinals provided shall not be less than
 (A) 1.00 m × 1.2 m (B) 0.60 m × 1.00 m
 (C) 1.5 m × 1.00 m (D) 0.60 m × 0.70 m
95. In case of low and medium voltage lines up to and including 11,000 volts, the minimum horizontal clearance from overhead electric lines in meters.
 (A) 1.00 m (B) 1.20 m (C) 1.50 m (D) 2.00 m
96. The entablature is the structural and decorative portion that lies
 (A) Above the column capital (B) Below the pedestal
 (C) Inside the tympanum (D) At the base of the column
97. Which term refers to the top interior face of a pedimented facade?
 (A) Frieze (B) Cornice (C) Tympanum (D) Capital
98. The pediment is usually :
 (A) A circular opening in a wall (B) A triangular gable-like top feature
 (C) A column base (D) A horizontal band below the floor
99. Which is not a component of the entablature?
 (A) Architrave (B) Frieze (C) Cornice (D) Capital
100. In classical order composition, the frieze is located
 (A) Above the cornice
 (B) Between the architrave and cornice
 (C) Below the pedestal
 (D) Inside the capital

SPACE FOR ROUGH WORK

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