

164/24

Question Booklet Alpha Code

A

Question Booklet Sl. No.

A

Total Number of Questions : 100

Time : 90 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/her 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.



CIVILIANZ

CENTRE FOR CIVIL ENGG. COMPETITIVE EXAMS

GATE • AE • JE-CIVIL

1. In the following solid objects which has 5 triangular faces ?
A) Pentagonal prism
B) Pentagonal pyramid
C) Hexagonal pyramid
D) Hexagonal prism
2. The tool used to draw vertical lines by sliding along T-square
A) Protractor
B) Flexi curve
C) Compass
D) Set square
3. The conversion of 600 mm in 1 : 20 scale is related with normal scale is
A) 30 cm
B) 3 cm
C) 6 cm
D) 60 cm
4. Where is the front elevation placed in first angle projection ?
A) Above the plan
B) Below the plan
C) Right side to the plan
D) Left side to the plan
5. In the given choices which one is a four-sided figure in which all the sides are equal but not at right angle ?
A) Trapezium
B) Rectangle
C) Rhombus
D) Square
6. Which of the following statement is not true ?
A) Dimension lines should not cross other lines
B) Centre lines should not be used as dimension lines
C) Dimension lines are continuous thick lines
D) Hidden lines may be avoided for dimensioning purposes
7. The sizes of letters and numerals in drawing for Sub-titles and headings are
A) 12, 13, 14 and 15
B) 6, 8, 10 and 12
C) 2, 3, 4 and 5
D) 3, 4, 5 and 6
8. The scale which shows only two consecutive units is
A) Diagonal scale
B) Vernier scale
C) Plain scale
D) Isometric scale
9. Which of the following rules related to measurement is false ?
A) The measurement should be for the finished item of work
B) The method of measurement may not be uniform
C) The dimensions should be entered in the order of L, B & D or Height or Thickness
D) The description of item should be self explanatory

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10. An estimate is preparing from the following data Drawing, Rate and
- A) Labours
 - B) Specification
 - C) Materials
 - D) Transportation
11. The tolerances in measurements and calculations for weights should be
- A) 1 tonne
 - B) 0.1 tonne
 - C) 0.01 tonne
 - D) 0.001 tonne
12. Some changes or additional works due to material deviation of a structural nature from the originally approved design, a _____ estimate is prepared.
- A) Revised estimate
 - B) Complete estimate
 - C) Supplementary estimate
 - D) Quantity estimate
13. _____ is the amount paid every year towards the capital invested by a party.
- A) Annuity
 - B) Mortgage
 - C) Sinking fund
 - D) Capital value
14. The measurement of brick work should be taken to nearest
- A) 0.04 m
 - B) 0.03 m
 - C) 0.02 m
 - D) 0.01 m
15. Rate analysis of any item depends on Labour, cost of material and
- A) escalation in cost
 - B) miscellaneous
 - C) sundries
 - D) contractors profit
16. The term _____ is used to designate a procedure of valuing an item on the basis of the materials and labours used actually.
- A) sub work
 - B) prime work
 - C) hour work
 - D) day work
17. The term _____ is used to denote the actual amount incurred in producing a commodity.
- A) price
 - B) value
 - C) cost
 - D) money
18. For painting, areas should be worked out
- A) nearest to 1.25 m²
 - B) nearest to 1.0 m²
 - C) nearest to 0.25 m²
 - D) nearest to 1.5 m²

19. The value of the property after being discarded at the end of utility period, without broken into pieces is known as
 A) sentimental value B) potential value
 C) speculative value D) salvage value
20. For measurement of stone work _____ Indian Standard shall be followed.
 A) 1328-1970 B) 200-1974 C) 303-1975 D) 617-1969
21. The process of taking out stones from natural rock is known as
 A) Dressing B) Quarrying C) Cladding D) Weathering
22. A tool used to check the verticality of the structure is called
 A) Mason' square B) Trowel
 C) Plumb bob D) Spirit level
23. Hydraulicity is the property of lime.
 A) To set and harden even under water B) To get cracked immediately
 C) To provide glossy white surface to D) To set in absence of water and air
24. The timber piece whose breadth and thickness exceeds 50 mm, but are less than 200 mm in length is called
 A) Batten B) Scantling
 C) Baluk D) Pole
25. Which of the following stress can Plain cement concrete endure ?
 A) Compressive stress
 B) Shear stress
 C) Tensile stress
 D) Tensile, compressive and shear stresses
26. Which one of the following mechanical properties enables a metal to be made in to thin sheets ?
 A) Hardness B) Ductility
 C) Toughness D) Malleability
27. Cast iron is a product of
 A) Blast furnace B) Cupola
 C) Bessemer converter D) Open hearth furnace

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28. Which of the following types of glasses is also known as hard-glass ?
- A) Soda-lime glass
 - B) Potash-lead glass
 - C) Common glass
 - D) Potash-lime glass
29. The process of coating iron or steel sheets with a thin coat of Zinc to prevent iron from rusting is called
- A) Metal cladding
 - B) Galvanisation
 - C) Electroplating
 - D) Tinning
30. The most commonly used admixture which prolongs the setting and hardening time is
- A) Gypsum
 - B) Sodium silicate
 - C) Calcium chloride
 - D) All of the above
31. The horizontal layer of mortar upon which bricks are laid in a brick masonry is called
- A) Butt joint
 - B) Lap joint
 - C) Bed joint
 - D) Closer joint
32. Sand does not show any bulking when
- A) Partially saturated
 - B) Contains small amount of impurities
 - C) Voids are partially filled with air
 - D) Completely saturated
33. A brick laid with its length parallel to the face of the wall is called
- A) Header
 - B) Stretcher
 - C) Perpend
 - D) Closer
34. A projecting stone which is usually provided to serve as support for roof truss is called
- A) Course
 - B) Copping
 - C) Cornice
 - D) Corbel
35. What is the name of member that supports the boards in the centering of arches ?
- A) Turning piece
 - B) Props
 - C) Ribs
 - D) Lagging
36. Arch constructed over a wooden joist or flat arch is known as
- A) Pointed arch
 - B) Segmental arch
 - C) Relieving arch
 - D) Stilted arch

A

37. What is a rafter provided at junction of two slopes ?
A) Jack rafter B) Common rafter C) Hip rafter D) Principle rafter
38. Which one is an isolated footing for a column ?
A) Pad footing B) Strip footing
C) Combined footing D) Wall footing
39. The external jamb of a door or a window opening at right angles to the wall face is known as
A) Sill B) Reveal C) Rebate D) Panel
40. A vertical window built in the sloping side of the pitched roof is
A) Gable window B) Bay window C) Dormer window D) Corner window
41. Tapering step are used to change the direction of flight is
A) Splayed step B) Commode C) Winder D) Bullnose step
42. What is the weight per metre length of 6 mm diameter round bar ?
A) 0.22 kg/m B) 0.39 kg/m C) 0.62 kg/m D) 1.58 kg/m
43. What is the minimum distance between centres of any two adjacent rivet holes to the nominal diameter of the rivet ?
A) 1.00 time B) 1.50 times
C) 2.00 times D) 2.50 times
44. The bond in which headers and stretchers are laid in alternate course is known as
A) Flemish bond B) English bond C) Dutch bond D) Header bond
45. Removable of probs to slabs spanning up to 4.5 m is
A) 7 days B) 14 days C) 3 days D) 21 days
46. The type of flooring perfectly noiseless and is used in theatre is named as
A) Linoleum floor B) Rubber floor C) Cork floor D) Glass floor
47. Compressive strength of 1:2:4 mix 150 mm size concrete cube at 28 days is expressed in
A) 10 N/mm² B) 15 N/mm² C) 20 N/mm² D) 25 N/mm²

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48. Recommended slump of concrete for road construction is
A) 20 to 40 mm
B) 40 to 50 mm
C) 80 to 150 mm
D) 90 to 100 mm
49. The diagonal piece of timber used to give rigidity to the framework is known as
A) Sheeting
B) Bracing
C) Ledger
D) Ranger
50. Beam is used for the span is more than 20 m and load is heavy is called
A) Rolled steel Joist
B) Floor Beam
C) Lintel
D) Plate girders
51. Which stone joint is used in structures like sea wall where lateral pressure is more ?
A) Butt joint
B) Rebated joint
C) Tabled joint
D) Rusticated joint
52. Which is useful for large number of people or vehicles are to be moved from floor to floor ?
A) Stair
B) Ramp
C) Ladder
D) Lift
53. The most accurate and common method for measuring distance with a chain or tape is called
A) Chaining
B) Pacing
C) Ranging
D) Odometer
54. Revenue chain is commonly used for measuring field in
A) Topographical survey
B) City survey
C) Cadastral survey
D) Location survey
55. The size of chain survey field book is
A) 20 cm × 20 cm
B) 20 cm × 12 cm
C) 120 cm × 20 cm
D) 20 cm × 1.2 cm

56. The bearing of line in the direction of the progress of survey is called
- | | |
|---------------------|--------------------|
| A) Four bearing | B) Back bearing |
| C) Backward bearing | D) Forward bearing |
57. The horizontal angle which the magnetic meridian makes with the true meridian is known as
- | | |
|-------------------------|------------------|
| A) Magnetic declination | B) Dip |
| C) Inclination | D) None of these |
58. In plane table surveying _____ method is used for locating the station points only.
- | | |
|-----------------|--------------|
| A) Traversing | B) Radiation |
| C) Intersection | D) Resection |
59. _____ is a fixed reference point of known elevation.
- | |
|------------------|
| A) Bench mark |
| B) Change point |
| C) Back Sight |
| D) Reduced Level |
60. The process of tracing contour lines on the surface of the earth is called
- | |
|--------------------------|
| A) Horizontal equivalent |
| B) Contour interval |
| C) Contouring |
| D) Contour map |
61. Multiply the length of the line by the Cosine of its reduced bearing gives
- | | |
|-------------|--------------|
| A) Latitude | B) Departure |
| C) Angle | D) Length |
62. _____ are regular bends provided in the lines of communication like roads, railways etc. to bring about the gradual change of direction.
- | | |
|----------------|------------|
| A) Straight | B) Tangent |
| C) Long chords | D) Curves |

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63. In a ranging process the surveyor gives a signal to the assistant, 'both hands above head and then brought down' it means

- A) Correct
- B) Fix the rod
- C) Moves slowly
- D) Continue to move to the left

64. Which instrument is a combination of EDM, electronic theodolite and micro processor ?

- A) Total Station
- B) Tacheometer
- C) Distomite
- D) Tellurometer

65. GPS stands for

- A) Global Positioning System
- B) Global System Post
- C) Geographic Positioning System
- D) None of these

66. _____ is used for orienting the plane table to magnetic north.

- A) Spirit level
- B) Alidade
- C) Plumb bob
- D) Compass

67. Which method of irrigation is called trickle irrigation ?

- A) Furrow
- B) Sprinkler
- C) Drip
- D) Border strip

68. What is the name of the impervious barrier constructed across a perennial river to raise the water level on the upstream side ?

- A) Barrage
- B) Weir
- C) Notch
- D) Mouth piece

A

69. What is the total depth of water required by a crop during the entire period in the field ?

- A) Duty
B) Base period
C) Delta
D) Crop period

70. Which crops are sown in autumn season and harvested in spring season ?

- A) Kharif
B) Zaid
C) Rabi
D) None of these

71. What is the name for accumulation of water in the form of an artificial lake ?

- A) Spill ways
B) Barrages
C) Groynes
D) Reservoir

72. When does hydrograph called as unit hydrograph ?

- A) 1 cm of runoff from rainfall
B) 3 cm of runoff from rainfall
C) 1 mm of runoff from rainfall
D) 3 mm of runoff from rainfall

73. Where did the Central Road Research Institute started ?

- A) Lucknow
B) Nagpur
C) New Delhi
D) Mumbai

74. What is the restriction given to lengthy straight routes while setting road alignment ?

- A) Minimum
B) Maximum
C) Depends on gradient
D) Depends on rise and fall

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75. Which alternative road is provided to divert traffic to avoid obstruction ?

- A) Ring
- B) Loop
- C) Trunk
- D) By pass

76. What is another name of continuous bay method in cement concrete road construction ?

- A) Alternate
- B) Strip
- C) Expansion
- D) Traverse

77. What is the process for filling the ballast around the sleepers ?

- A) Creep
- B) Turn table
- C) Boxing
- D) Coning

78. What is the length of bull-headed rail ?

- A) 16.7 m
- B) 18.29 m
- C) 18.6 m
- D) 19.2 m

79. Which warning signal is first seen by the driver in railway station ?

- A) Disc signal
- B) Home signal
- C) Outer signal
- D) Routing signal

80. Which foundation is provided for heavy works at a depth of 12 m to 15 m below the level of standing water surface ?

- A) Raft
- B) Caisson
- C) Cofferdam
- D) Combined

A

81. The horizontal tunnels constructed at shallow depths along the banks of the river to intercept the ground water table are called
- A) Springs
B) Canals
C) Lakes
D) Infiltration galleries
82. The growth of population may be conveniently represented by
- A) Straight line curve
B) Semi-logarithmic curve
C) Logistic curve
D) All of the above
83. For an area developed in haphazard way, the type of layout used for the distribution of pipe is known as
- A) Dead end system
B) Ring system
C) Grid iron
D) Radial system
84. For the sewers of diameter less than 600 mm the type of joint preferred is
- A) Collar joint
B) Spigot and socket joint
C) Bandage joint
D) Mechanical joint
85. The privy pit should be located at least _____ from the well or other ground water supply.
- A) 50 m
B) 10 m
C) 3 m
D) 30 m
86. The spacing of manholes for pipes having a diameter greater than 2 m is
- A) 150 – 200 m
B) 90 – 150 m
C) 300 m
D) 45 – 90 m
87. The capacity of a strained body for doing work on the removal of the straining force is called
- A) Resilience
B) Strain energy
C) Impact energy
D) Proof stress

95. Choose from the following is not an analytical entity.
- A) Line
B) Arc
C) Spline
D) Parabola
96. The shortcut for mirror command is
- A) M
B) MC
C) MIR
D) MI
97. In which system of drawing in CAD the line can be drawn with distance and angle ?
- A) Relative co-ordinate
B) Polar co-ordinate
C) Cartesian co-ordinate
D) Absolute co-ordinate
98. What is the lowest RAM in which Auto CAD 19 will work ?
- A) 1GB
B) 2GB
C) 3GB
D) 4GB
99. What is the highest dots per inch (DPI), one can print a drawing ?
- A) 800 dpi
B) 1000 dpi
C) 1200 dpi
D) 1400 dpi
100. What is the use of 'Q' shortcut key in Auto CAD ?
- A) Quit
B) Quick calc
C) Save as
D) 'Q' leader

Space for Rough Work

