

ITI Quiz - 30-Jun-2026

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Q. ID: ITISKILL0592PM

June 2026

Question Paper

Duration: 30 Mins

Total Marks: 98

ID: ITISKILL0592PM

Student Name: _____ Roll No: _____

1. What is the weight of the iron ball has volume of 250 cc and density 7.5 gm/cc?

- A) 1750 gram
- B) 1975 gram
- C) 1875 gram
- D) 1785 gram

2. What is the ratio between ultimate stress to working stress?

- A) Bulk modulus
- B) Modulus of rigidity
- C) Factor of safety
- D) Young's modulus

3. What is the use of engineering drawing?

- A) For reducing the cost
- B) For colourful appearance
- C) For increasing the cost
- D) For estimation of material and execution of work

4. What is the relative permittivity of rubber?

- A) Between 5 and 6
- B) Between 8 and 10
- C) Between 12 and 14
- D) Between 2 and 3

5. What are the various types of heat treatment processes?

- A) Tempering, Cooling, Packing and Soling
- B) Hardening, Soaking, Painting and Packing
- C) Normalising, Heating, Cooling and Painting
- D) Annealing, Normalising, Hardening and Tempering

6. Which IE rules are to be verified on completion of wiring on any new installation?

- A) IE Rules, 1967
- B) IE Rules, 1956
- C) IE Rules, 1961
- D) IE Rules, 1960

7. Which is thermosetting plastic?

- A) Celluloid
- B) Vinyl polymers
- C) Polystyrenes
- D) Melamine resins

8. What is the total labour charges for a particular wiring work completed in 2 days by one electrician and one helper.(Electrician @ ₹800/day and helper @ Rs 400/day)

- A) Rs. 3000
- B) Rs. 2000
- C) Rs. 2400
- D) Rs. 1400

9. What is the youngs modulus if a wire of 2m long, 0.8 mm²

in cross section increases its length by 1.6 mm on suspension of 8 kg weight from it?

- A) 1.25 kg/mm²
- B) 125 kg/mm²
- C) 12.5 kg/mm²
- D) 12500 kg/mm²

10. Which process produce equilibrium conditions?

- A) Annealing and Normalising
- B) Normalising and Tempering
- C) Normalising and Tempering
- D) Annealing and Hardening

11. What is the total cost to assemble 10 personal computer systems, spares cost as given for one system: 1 TB hard disc Rs.4500/-, Intel i3 mother board Rs.7000/-, SMPS Rs.2500/-, monitor Rs.6000/-, keyboard Rs.1000/-, other material cost (Switches, USB, Cabl

- A) Rs.275000/-
- B) Rs.265000/-
- C) Rs.225000/-
- D) Rs.250000/-

12. What is the name of the point at which all the weight of the body concentrated?

- A) Centroid
- B) Initial point
- C) Central point
- D) Centre of gravity

13. What is the ratio of change in length to original length?

- A) Poisson's ratio
- B) Linear strain
- C) Lateral strain
- D) Volumetric strain

14. Which force acts on crank shaft?

- A) Shear stress
- B) Compressive stress
- C) Tensile stress
- D) Torsional stress

15. What cables are used for 132KV lines?

- A) Super tension
- B) High tension
- C) Extra high tension
- D) Extra super voltage

16. What is the total cost of painting of a class room including ceiling, if the size of length is 6m, breadth is 5m and height is 4m. (Painting + labour cost Rs.150/- per sq.m)

A) Rs.15000/-
C) Rs.18700/-

B) Rs.16700/-
D) Rs.17700/-

A) Factor of safety
C) Yield point

B) Ultimate stress
D) Young's modulus

17. What are the various stages of heat treatment?

A) Heating, Cooling and Quenching
C) Soaking, Quenching and Cooling

B) Quenching, Cooling and Heating
D) Heating, Soaking and Quenching

18. What is the name of a booklet, the rates of various terms are indicated?

A) Price bunch
C) Price tag

B) Price catalogue
D) Price bank

19. What is the centre of gravity of a solid hemisphere from its base?

A) $4r/5$
C) $3r/4$

B) $3r/8$
D) $r/2$

20. How much strain is developed in an iron rod of 1 metre length gets elongated by 1 cm, if a force of 100 kg is applied at one end?

A) 0.01
C) 0.1

B) 0.0001
D) 0.001

21. Which authority publishes schedule of rates?

A) Individual
C) Partnership firm

B) Government department
D) Corporate

22. What is the centre of gravity of a right circular cone from its base?

A) $h/4$
C) $h/3$

B) $h/2$
D) $h/5$

23. Which of the impurity in cast iron makes it hard and brittle?

A) Phosphorus
C) Silicon

B) Sulphur
D) Manganese

24. Where the centre of gravity of a circle lies?

A) Any where on its diameter
C) Any where on its circumference

B) Any where on its radius
D) At its centre

25. What is the ratio between the change in dimension to its original dimension of the substance?

A) Stress
C) Poisson's ratio

B) Factor of safety
D) Strain

26. What is the ratio of ultimate load to area of original cross section?

27. What is the term used for the method of calculating various quantities and expenditure on a particular job or process?

A) Plan
C) Specification

B) Drawing
D) Estimation

28. What describes the detailed specification for the item of work?

A) Colour
C) Maintenance, Stock, Cost

B) Quality, Quantity, Workmanship, Method of execution
D) Tax, Transport, Overhead expenses

29. What is the name of the heat treatment process, where the metal is heated and quenched in water or oil?

A) Normalising and Tempering
C) Tempering

B) Hardening
D) Annealing

30. What is the name of the point at which all the weight of the body concentrated?

A) Central point
C) Centre of gravity

B) Initial point
D) Centroid

31. What percentage of water absorbed by a good building stone?

A) Less than 20%
C) Less than 5%

B) Less than 8%
D) Less than 10%

32. Which state of equilibrium's example is, A cone resting on its base?

A) Both A and B
C) Un-stable

B) Stable
D) Neutral

33. What is the centre of gravity of a rectangular body?

A) At the point of intersection of its diagonals
C) Longer side of rectangle

B) At the corners
D) Shorter side of rectangle

34. What is the centre of gravity of a semi circle of diameter 12 cm?

A) 2.75 cm
C) 2.24 cm

B) 3.25 cm
D) 2.54 cm

35. Where the centre of gravity of a circle lies?

A) At its centre

B) Any where on its diameter

C) Any where on its circumference

D) Any where on its radius

36. What is the minimum permissible size of aluminium wire used in estimation?

A) 1.5 sq.mm

B) 3.5 sq.mm

C) 5 sq.mm

D) 2.5 sq.mm

37. What is a under estimate?

A) An estimate is fell short of the actual estimate

B) An estimate perfectly matches with actual

C) No work started as per estimate

D) An estimate is exceeded the actual estimate

38. What is the name of heat treatment process done to relieve strain and stress?

A) Tempering

B) Normalising

C) Hardening

D) Annealing

39. Which state of equilibrium's example is A cone resting on its tip?

A) Stable

B) Horizontal

C) Unstable

D) Neutral

40. What is the centre of gravity of a rectangular body?

A) Longer side of rectangle

B) Shorter side of rectangle

C) At the corners

D) At the point of intersection of its diagonals

41. What is the centre of gravity of a sphere?

A) At the centre

B) On the circumference

C) At the diameter

D) At the radius

42. What is colour of a metal piece when heated to 250 Degree C while doing the tempering process?

A) Brown

B) Pale

C) Purple

D) Blue

43. Which one is included in machining estimation sheet?

A) Advertisement cost

B) Raw material cost

C) Transport cost

D) Tax

44. Which symbol is used to express change in length?

A) delta l

B) L

C) l

D) e

45. What is the purpose of tempering a steel?

A) To increase the brittleness

B) To remove the ductility

C) To increase the hardness

D) To reduce the brittleness

46. Which force acts on rivets?

A) Tensile force

B) Bending force

C) Shear force

D) Compressive force

47. Which is thermo plastic material?

A) Neoprene

B) Butyl rubber

C) Vinyl polymers

D) Nylon

48. What is the tensile strain if a force of 3.2 KN is applied to a bar of original length 2800 mm extends the bar by 0.5 mm?

A) 0.0001968

B) 0.0001867

C) 0.0001786

D) 0.0001687

49. What is the term used for maximum stress attained by a material before rupture?

A) Ultimate stress

B) Tensile stress

C) Working stress

D) Compressive stress

50. Which process steel is heated in a carbonaceous atmosphere for the penetration of carbon?

A) Induction hardening

B) Case hardening

C) Nitriding

D) Carburising

51. What is the term, for the details of materials, brand name, grade of quality, rating of current and voltage etc.?

A) Price catalogue

B) Raw materials

C) Specification of materials

D) Drawing

52. Which one is the most reliable estimate?

A) Cube rate estimate

B) Preliminary estimate

C) Detailed estimate

D) Plinth area estimate

53. What is the total construction cost of a house construction area of 3000 sq.ft. (cost of construction Rs.2000/- per sq.ft including material and labour)?

A) Rs.60,00,000

B) Rs.6,000,000

C) Rs.6,00,000

D) Rs.30,000,000

54. What is the ratio between stress and strain?

A) Yield point

B) Factor of safety

C) Poisson's ratio

D) Youngs Modulus

55. Who prepares the cost of estimation?

A) Draughts man

B) Quality Inspector

C) Operator

D) Estimator

56. Which is a kind of surface hardening process?

A) Ferrite

B) Nitriding

C) Cementite

D) Tempering

57. What is a total cost?

- A) Advertisement cost only
- B) Machining cost only
- C) Raw material cost only
- D) Raw materials cost and machining cost

58. What is the tensile stress if a square rod of 10 mm side is tested for a tensile load of 1000 kg?

- A) 1000 kg/mm²
- B) 10 kg /mm²
- C) 1 kg/mm²
- D) 100 kg/mm²

59. What is the maximum percentage of stretch of its original length is allowable for elastic materials?

- A) 200%
- B) 300%
- C) 400%
- D) 100%

60. Which law states that within elastic limit stress is directly proportional to strain?

- A) Charles law
- B) Newtons law
- C) Joules law
- D) Hooks law

61. What is the estimation of milling cost of a rectangular block size 100 X 80 X60 mm, if cost of the milling is Rs.2/sq.cm?

- A) Rs.960/-
- B) Rs.652/-
- C) Rs.752/-
- D) Rs.572/-

62. Which state of equilibrium's example is, A cone resting on its base?

- A) Stable
- B) Bothe A and B
- C) Un-stable
- D) Neutral

63. Which specification is other than general specification?

- A) Main specification
- B) Bulk specification
- C) Brief specification
- D) Detailed specification

64. What is the ratio between lateral strain and longitudinal strain?

- A) Young's modulus
- B) Bulk modulus
- C) Hooks law
- D) Poisson's ratio

65. What is the weight of a rectangular block of a cost iron of 250cm X 20cm X 8cm (density of cast iron is 7.8 gm/cm³)?

- A) 372 kg
- B) 410 kg
- C) 312 kg
- D) 525 kg

66. What is the unit of strain?

- A) Newton/metre²
- B) No unit

C) Metre

D) Kg/cm²

67. What is the centre of gravity of a semi circle of diameter 12 cm?

- A) 2.75 cm
- B) 2.24 cm
- C) 3.25 cm
- D) 2.54 cm

68. Which standard schedule of rates to be considered for estimation?

- A) Standard schedule of rates of the last year
- B) Standard schedule of rates of the average of last 5 years
- C) Standard schedule of rates of the current year
- D) Standard schedule of rates of the average of the last 10 years

69. What is the centre of gravity of a right circular cone from its base?

- A) h/4
- B) h/5
- C) h/2
- D) h/3

70. What force will be required to punch a hole of 10 mm dia in a 1 mm thick plate, if the allowable shear stress is 50N/mm²? (Pi = 22/7)

- A) 1575 N
- B) 1577 N
- C) 1571.4 N
- D) 1757 N

71. What is the total wattage in a room if 2 tube lights of 50W rating, 2 fans of 80W rating, 2 numbers of light points of 60W rating, one fan point of 60W rating and one 3 pin socket of 100W rating?

- A) 540 W
- B) 440 W
- C) 340 W
- D) 640 W

72. What is the total estimation cost for making the component of 8 drilled hole dia 10 mm and 4 Numbers of M6 taps in the plate, if Rs.8/- per drilled holes and Rs.12 per drill and tap?

- A) Rs.102
- B) Rs.100
- C) Rs.112
- D) Rs.110

73. Which affects the centre of gravity of the object

- A) Density
- B) Shape
- C) Weight
- D) Mass

74. Which is elastic material?

- A) Polycarbonates
- B) Celluloid
- C) Polystyrenes
- D) Nylon

75. What is the centre of gravity of a sphere?

- A) On the circumference
- B) At the diameter
- C) At the radius
- D) At the centre

76. Which state of equilibrium's example is A cone resting on its tip?

- | | |
|-------------|---------------|
| A) Unstable | B) Neutral |
| C) Stable | D) Horizontal |

77. What is the name of the structure formed, if a steel is heated for about 723 Degree C?

- | | |
|--------------|---------------|
| A) Cementite | B) Ferrite |
| C) Austenite | D) Martensite |

78. Which one of the following geometrical shape's centre of gravity lies from its base is $\frac{1}{3}$ of its height?

- | | |
|-------------|-----------|
| A) Rhombus | B) Cone |
| C) Triangle | D) Square |

79. Which one is related to estimation of work?

- | | |
|---------------------|----------------------|
| A) Bill of material | B) Hand book |
| C) Packing | D) Information table |

80. What is the main factor to be considered while preparing a detailed estimate?

- | | |
|---------------------------|---|
| A) Brand of the materials | B) Shape of material |
| C) Location of material | D) Quantity, availability and transportation of materials |

81. Which one is the ratio of stress?

- | | |
|-----------------------|----------------------|
| A) Load and direction | B) Load and diameter |
| C) Load and time | D) Load and area |

82. Which one of the following geometrical shapes centre of gravity lies from its base is $\frac{1}{3}$ of its height?

- | | |
|-------------|-----------|
| A) Triangle | B) Square |
| C) Rhombus | D) Cone |

83. What is the minimum permissible area of conductor (U/G cable) for three and half cores cable?

- | | |
|--------------|-------------|
| A) 25 sq.mm | B) 5 sq.mm |
| C) 100 sq.mm | D) 50 sq.mm |

84. Which heat treatment process is done to refine the grain structure of the steel?

- | | |
|--------------|----------------|
| A) Tempering | B) Hardening |
| C) Annealing | D) Normalising |

85. What is the process of heat treatment?

- | | |
|--|---|
| A) The process of heating and cooling to change the structure and properties | B) The process of heating to change the dimensions |
| C) The process of heating and bending as per our requirement | D) The process of cooling to measure the dimensions |

86. Which hand book referred by machine engineer?

- | | |
|----------------------|------------------|
| A) Oxford Dictionary | B) Mark standard |
| C) Parry's cheorikal | D) CRC |

87. What is the ratio of shear stress to shear strain?

- | | |
|--------------------------|------------------------|
| A) Yield point | B) Bulk modulus |
| C) Modulus of elasticity | D) Modulus of rigidity |

88. What is the safe stress if the ultimate stress of a material is 35 kg/mm^2 and factor of safety is 5?

- | | |
|----------|--------|
| A) 1.43 | B) 0.7 |
| C) 0.143 | D) 7 |

89. Which is the suitable nitriding process for all alloyed and unalloyed steels?

- | | |
|--------------------------------|---------------------|
| A) Nitriding in Quenching tank | B) Silver nitriding |
| C) Nitriding in salt-bath | D) Gas nitriding |

90. Which affects the centre of gravity of the object?

- | | |
|-----------|------------|
| A) Mass | B) Density |
| C) Weight | D) Shape |

91. What is the other term used for reference table?

- | | |
|----------------------|---------------|
| A) Bibliography | B) Dictionary |
| C) Information Table | D) Biography |

92. What is the other term of pocket reference in engineering works?

- | | |
|--------------|--------------|
| A) New book | B) Good book |
| C) Hand tool | D) Hand book |

93. How much time is allowed normally in soaking zone for a 10mm thick metal piece while hardening?

- | | |
|---------------|---------------|
| A) 5 minutes | B) 20 minutes |
| C) 10 minutes | D) 15 minutes |

94. What is the formula for bulk modulus?

- | | |
|--|--|
| A) Compressive stress/Compressive strain | B) Volumetric stress/Volumetric strain |
| C) Shear stress/Shear strain | D) Tensile stress/Tensile strain |

95. What is a hand book?

- | | |
|--------------------------------|--|
| A) Model book of various works | B) Type of reference work or other collection of instruction |
| C) Dictionary of materials | D) Design book of latest works |

96. What is the total cost of Air-conditioners installed in a college, 40 class room-each 1 Air-conditioner, Computer lab 5 Air- conditioners and conference hall 5 Air-conditioners (Cost of one air conditioner Rs.30000/- including installation)?

- | | |
|-----------------|-----------------|
| A) Rs. 20 lakhs | B) Rs. 15 lakhs |
| C) Rs. 12 lakhs | D) Rs.10 lakhs |

97. What is an over estimate?

- | | |
|------------------------------------|--|
| A) No work started as per estimate | B) When an estimate is exceeded to actual estimate |
|------------------------------------|--|

- | | |
|---|--|
| C) When an estimate perfectly matches the actual estimate | D) When an estimate is fell short of the actual estimate |
|---|--|

98. What is the centre of gravity of a solid hemisphere from its base?

- | | |
|-----------|-----------|
| A) $3r/4$ | B) $3r/8$ |
| C) $r/2$ | D) $4r/5$ |