

ITI Quiz - 19-Jun-2026

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Q. ID: ITISKILL0051LM

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sambhajipur

Question Paper

Duration: 90 Mins

Total Marks: 91

ID: ITISKILL0051LM

Student Name: _____ Roll No: _____

1. Which is elastic material?

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

2. 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) 0.0001687
- B) 0.0001867
- C) 0.0001786
- D) 0.0001968

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

- A) Any where on its circumference
- B) Any where on its radius
- C) Any where on its diameter
- D) At its centre

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

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

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

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

6. 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) 125 kg/mm²
- B) 12500 kg/mm²
- C) 1.25 kg/mm²
- D) 12.5 kg/mm²

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

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

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

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

9. Which hand book referred by machine engineer?

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

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

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

11. Which specification is other than general specification?

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

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

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

13. What is the unit of strain?

- A) Metre
- B) Kg/cm²
- C) No unit
- D) Newton/metre²

14. Which process produce equilibrium conditions?

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

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

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

16. Which force acts on crank shaft?

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

17. What is a hand book?

- | | | | |
|----------------------------|--------------------------------|--------------------|---------------------|
| A) Dictionary of materials | B) Model book of various works | C) Between 5 and 6 | D) Between 8 and 10 |
|----------------------------|--------------------------------|--------------------|---------------------|

- | | |
|--|--------------------------------|
| C) Type of reference work or other collection of instruction | D) Design book of latest works |
|--|--------------------------------|

18. Who prepares the cost of estimation?

- | | |
|-----------------|----------------------|
| A) Draughts man | B) Operator |
| C) Estimator | D) Quality Inspector |

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

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

20. 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) Triangle |
| C) Cone | D) Square |

21. Which force acts on rivets?

- | | |
|------------------|----------------------|
| A) Bending force | B) Compressive force |
| C) Tensile force | D) Shear force |

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

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

23. 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 |

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

- | | |
|------------------|------------------|
| A) $\frac{h}{4}$ | B) $\frac{h}{3}$ |
| C) $\frac{h}{5}$ | D) $\frac{h}{2}$ |

25. What is the use of engineering drawing?

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

26. Which one is the ratio of stress?

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

27. What is the relative permittivity of rubber?

- | | |
|----------------------|--------------------|
| A) Between 12 and 14 | B) Between 2 and 3 |
|----------------------|--------------------|

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

- | | |
|--|--------------------------------------|
| A) Maintenance, Stock, Cost | B) Tax, Transport, Overhead expenses |
| C) Quality, Quantity, Workmanship, Method of execution | D) Colour |

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

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

30. What are the various stages of heat treatment?

- | | |
|-----------------------------------|-----------------------------------|
| A) Quenching, Cooling and Heating | B) Soaking, Quenching and Cooling |
| C) Heating, Cooling and Quenching | D) Heating, Soaking and Quenching |

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

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

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

- | | |
|-------------------|-------------------|
| A) $\frac{4r}{5}$ | B) $\frac{r}{2}$ |
| C) $\frac{3r}{4}$ | D) $\frac{3r}{8}$ |

33. What is the safe stress if the ultimate stress of a material is 35 kg/mm² and factor of safety is 5?

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

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

- | | |
|-----------------------------|--|
| A) At the corners | B) At the point of intersection of its diagonals |
| C) Longer side of rectangle | D) Shorter side of rectangle |

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

- | | |
|------------------|------------|
| A) Specification | B) Plan |
| C) Estimation | D) Drawing |

36. 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.10 lakhs
- C) Rs. 15 lakhs
- D) Rs. 12 lakhs

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

- A) Price tag
- B) Price bank
- C) Price bunch
- D) Price catalogue

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

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

39. 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

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

- A) Price catalogue
- B) Specification of materials
- C) Drawing
- D) Raw materials

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

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

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

- A) Cementide
- B) Martensite
- C) Ferrite
- D) Austenite

43. Which is thermosetting plastic?

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

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

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

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

- A) 100 kg/mm²
- B) 1000 kg/mm²

- C) 1 kg/mm²
- D) 10 kg /mm²

46. What is the process of heat treatment?

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

47. Which one is related to estimation of work?

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

48. 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. 2000
- B) Rs. 1400
- C) Rs. 3000
- D) Rs. 2400

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

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

50. What is the ratio between stress and strain?

- A) Youngs Modulus
- B) Poisson's ratio
- C) Factor of safety
- D) Yield point

51. 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.250000/-
- B) Rs.265000/-
- C) Rs.225000/-
- D) Rs.275000/-

52. Which is thermo plastic material?

- A) Neoprene
- B) Butyl rubber
- C) Nylon
- D) Vinyl polymers

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

- A) Youngs modulus
- B) Yield point
- C) Ultimate stress
- D) Factor of safety

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

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

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

- | | |
|--------------|-----------------|
| A) Neutral | B) Both A and B |
| C) Un-stable | D) Stable |

56. What is a total cost?

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

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

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

58. Which affects the centre of gravity of the object

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

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

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

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

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

61. What is an over estimate?

- | | |
|---|--|
| A) When an estimate perfectly matches the actual estimate | B) When an estimate is fell short of the actual estimate |
| C) No work started as per estimate | D) When an estimate is exceeded to actual estimate |

62. Which one is included in machining estimation sheet?

- | | |
|-------------------|-----------------------|
| A) Tax | B) Advertisement cost |
| C) Transport cost | D) Raw material cost |

63. Which one is the most reliable estimate?

- | | |
|-------------------------|-------------------------|
| A) Preliminary estimate | B) Plinth area estimate |
| C) Cube rate estimate | D) Detailed estimate |

64. 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.100 | B) Rs.110 |
| C) Rs.112 | D) Rs.102 |

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

- | | |
|--------------------|-----------------------|
| A) Tensile stress | B) Working stress |
| C) Ultimate stress | D) Compressive stress |

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

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

67. Which one of the following geometrical shapes centre of gravity lies from its base is $1/3$ of its height?

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

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

- | | |
|-----------------|--------------|
| A) Neutral | B) Stable |
| C) Both A and B | D) Un-stable |

69. What is a under estimate?

- | | |
|--|---|
| A) An estimate perfectly matches with actual | B) An estimate is fell short of the actual estimate |
| C) No work started as per estimate | D) An estimate is exceeded the actual estimate |

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

- | | |
|------------------------------|--|
| A) At the corners | B) At the point of intersection of its diagonals |
| C) Shorter side of rectangle | D) Longer side of rectangle |

71. Which authority publishes schedule of rates?

- | | |
|---------------------|--------------------------|
| A) Partnership firm | B) Individual |
| C) Corporate | D) Government department |

72. 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.6,00,000 | B) Rs.60,00,000 |
| C) Rs.6,000,000 | D) Rs.30,000,000 |

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

- | | |
|------------------------------|-----------------------------------|
| A) At its centre | B) Any where on its circumference |
| C) Any where on its diameter | D) Any where on its radius |

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

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

75. 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) 440 W
- B) 540 W
- C) 340 W
- D) 640 W

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

- A) Phosphorus
- B) Manganese
- C) Silicon
- D) Sulphur

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

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

78. 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) 1571.4 N
- B) 1577 N
- C) 1757 N
- D) 1575 N

79. What is the formula for bulk modulus?

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

80. 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.16700/-
- B) Rs.17700/-
- C) Rs.18700/-
- D) Rs.15000/-

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

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

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

- A) 2.5 sq.mm
- B) 1.5 sq.mm
- C) 3.5 sq.mm
- D) 5 sq.mm

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

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

84. 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) 0.1
- B) 0.001
- C) 0.0001
- D) 0.01

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

- A) Strain
- B) Factor of safety
- C) Poisson's ratio
- D) Stress

86. 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.752/-
- B) Rs.960/-
- C) Rs.652/-
- D) Rs.572/-

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

- A) e
- B) L
- C) delta l
- D) I

88. What cables are used for 132KV lines?

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

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

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

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

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

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

- A) Less than 20%
- B) Less than 10%
- C) Less than 8%
- D) Less than 5%