

ITI Quiz - 31-Mar-2026

07:04 PM

Q. ID: ITISKILL3515UW

March 2026

Answer Key

Duration: 30 Mins

Total Marks: 98

Q.ID: ITISKILL3515UW

1. Which one is included in machining estimation sheet?

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

Answer: C) Raw material cost

2. 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

Answer: D) At its centre

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

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

Answer: B) Quality, Quantity, Workmanship, Method of execution

4. Which one is related to estimation of work?

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

Answer: A) Bill of material

5. Which authority publishes schedule of rates?

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

Answer: B) Government department

6. 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

Answer: D) Hooks law

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

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

Answer: D) Stable

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

A) Carburising

B) Case hardening

C) Nitriding

D) Induction hardening

Answer: A) Carburising

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

A) 25 sq.mm

B) 50 sq.mm

C) 5 sq.mm

D) 100 sq.mm

Answer: B) 50 sq.mm

10. 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 last year

C) Standard schedule of rates of the average of last 5 years

D) Standard schedule of rates of the current year

Answer: D) Standard schedule of rates of the current year

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

A) Unstable

B) Horizontal

C) Stable

D) Neutral

Answer: A) Unstable

12. What is the use of engineering drawing?

A) For colourful appearance

B) For increasing the cost

C) For reducing the cost

D) For estimation of material and execution of work

Answer: D) For estimation of material and execution of work

13. 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/mm^2 ? ($\pi = 22/7$)

A) 1575 N

B) 1757 N

C) 1577 N

D) 1571.4 N

Answer: D) 1571.4 N

14. What is the unit of strain?

A)

Newton/metre²

B) Kg/cm²

C) Metre

D) No unit

Answer: D) No unit

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

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

Answer: A) Unstable

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

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

Answer: A) Less than 5%

17. Which force acts on rivets?

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

Answer: A) Shear force

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

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

Answer: A) Strain

19. What is a hand book?

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

Answer: A) Type of reference work or other collection of instruction

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

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

Answer: B) At the centre

21. 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.102
- C) Rs.112
- D) Rs.110

Answer: C) Rs.112

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

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

Answer: A) 2.54 cm

23. Which is the suitable nitriding process for all alloyed and

unalloyed steels?

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

Answer: B) Nitriding in salt-bath

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

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

Answer: B) Poisson's ratio

25. 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. 2400
- B) Rs. 1400
- C) Rs. 3000
- D) Rs. 2000

Answer: A) Rs. 2400

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

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

Answer: B) Modulus of rigidity

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

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

Answer: B) IE Rules, 1956

28. Which process produce equilibrium conditions?

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

Answer: C) Annealing and Normalising

29. 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/-
- B) Rs.16700/-
- C) Rs.17700/-
- D) Rs.18700/-

Answer: C) Rs.17700/-

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

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

Answer: D) Annealing

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

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

Answer: C) Hand book

32. What is the young's 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) 12500 kg/mm²
C) 1.25 kg/mm²
- B) 12.5 kg/mm²
D) 125 kg/mm²

Answer: A) 12500 kg/mm²

33. 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
C) 640 W
- B) 340 W
D) 540 W

Answer: D) 540 W

34. 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
C) 0.143
- B) 7
D) 1.43

Answer: B) 7

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

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

Answer: D) Specification of materials

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

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

Answer: D) Ultimate stress

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

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

Answer: D) Austenite

38. What is the formula for bulk modulus?

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

Answer: D) Volumetric stress/Volumetric strain

39. 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

Answer: B) Stable

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

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

Answer: B) Centre of gravity

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

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

Answer: A) 300%

42. What is the process of heat treatment?

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

Answer: A) The process of heating and cooling to change the structure and properties

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

- A) Pale
C) Brown
- B) Blue
D) Purple

Answer: C) Brown

44. 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) 525 kg
C) 410 kg
- B) 312 kg
D) 372 kg

Answer: B) 312 kg

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

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

Answer: D) $3r/8$

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

- A) L
C) Δl
- B) l
D) e

Answer: C) Δl

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

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

Answer: D) At the centre

48. Which one is the ratio of stress?

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

Answer: A) Load and area

49. What is the relative permittivity of rubber?

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

Answer: B) Between 2 and 3

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

- A) 1 kg/mm^2 B) 10 kg/mm^2
C) 1000 kg/mm^2 D) 100 kg/mm^2

Answer: B) 10 kg/mm^2

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

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

Answer: A) Information Table

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

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

Answer: C) Centre of gravity

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

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

Answer: C) 1.5 sq.mm

54. 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.30,000,000 D) Rs.6,000,000

Answer: B) Rs.60,00,000

55. 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

Answer: C) 0.0001786

56. 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) 0.01
C) 0.0001 D) 0.001

Answer: B) 0.01

57. What is a total cost?

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

Answer: C) Raw materials cost and machining cost

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

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

Answer: A) Normalising

59. 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.652/- B) Rs.960/-
C) Rs.752/- D) Rs.572/-

Answer: C) Rs.752/-

60. What are the various stages of heat treatment?

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

Answer: B) Heating, Soaking and Quenching

61. Which is elastic material?

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

Answer: C) Nylon

62. Which force acts on crank shaft?

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

Answer: A) Torsional stress

63. What is a under estimate?

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

Answer: B) An estimate is fell short of the actual estimate

64. What is an over estimate?

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

Answer: C) When an estimate is exceeded to actual estimate

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

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

Answer: C) Linear strain

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

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

Answer: A) 5 minutes

67. Which is thermosetting plastic?

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

Answer: C) Melamine resins

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

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

Answer: B) $h/4$

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

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

Answer: B) Factor of safety

70. Which is thermo plastic material?

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

Answer: A) Vinyl polymers

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

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

Answer: D) 1875 gram

72. Which is a kind of surface hardening process?

- A) Tempering
B) Ferrite
C) Cementite
D) Nitriding

Answer: D) Nitriding

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

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

Answer: C) Estimation

74. 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.265000/-
B) Rs.275000/-
C) Rs.250000/-
D) Rs.225000/-

Answer: B) Rs.275000/-

75. Which one of the following geometrical shape's centre of gravity lies from its base is $1/3$ of its height?

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

Answer: D) Triangle

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

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

Answer: A) Sulphur

77. 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

Answer: C) Rs. 15 lakhs

78. 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

Answer: B) At the point of intersection of its diagonals

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

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

Answer: D) Price catalogue

80. 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

Answer: A) At its centre

81. Which affects the centre of gravity of the object

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

Answer: D) Mass

82. Which one is the most reliable estimate?

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

Answer: D) Detailed estimate

83. Who prepares the cost of estimation?

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

Answer: D) Estimator

84. 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

Answer: D) Quantity, availability and transportation of materials

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

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

Answer: C) $h/4$

86. What is the ratio between stress and strain?

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

Answer: B) Youngs Modulus

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

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

Answer: A) $3r/8$

88. What is the purpose of tempering a steel?

- A) To increase the hardness
- B) To reduce the brittleness
- C) To remove the ductility
- D) To increase the brittleness

Answer: B) To reduce the brittleness

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

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

Answer: B) At the point of intersection of its diagonals

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

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

Answer: D) Triangle

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

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

Answer: D) Annealing, Normalising, Hardening and Tempering

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

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

Answer: C) Hardening

93. Which hand book referred by machine engineer?

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

Answer: A) Mark standard

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

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

Answer: A) Ultimate stress

95. What cables are used for 132KV lines?

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

Answer: A) Extra super voltage

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

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

Answer: D) Mass

97. Which specification is other than general specification?

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

Answer: B) Detailed specification

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

- A) 2.54 cm
- C) 2.24 cm

- B) 3.25 cm
- D) 2.75 cm

Answer: A) 2.54 cm
