

Duration: 90 Mins

Total Marks: 58

Q.ID: ITISKILL6818TU

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

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

Answer: D) delta l

2. Which is elastic material?

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

Answer: B) Nylon

3. 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) 0.0001786
C) 0.0001867 D) 0.0001687

Answer: B) 0.0001786

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

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

Answer: B) 50 sq.mm

5. What is the use of engineering drawing?

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

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

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

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

Answer: D) h/4

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

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

Answer: A) IE Rules, 1956

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

- A) Horizontal B) Stable

C) Unstable

D) Neutral

Answer: C) Unstable

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

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

Answer: A) Poisson's ratio

10. Which is thermosetting plastic?

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

Answer: A) Melamine resins

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

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

Answer: A) Quantity, availability and transportation of materials

12. Which one is included in machining estimation sheet?

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

Answer: D) Raw material cost

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

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

Answer: C) 3r/8

14. 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

15. What is an over estimate?

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

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

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

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

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

Answer: A) At the centre

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

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

Answer: C) Mass

18. Who prepares the cost of estimation?

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

Answer: D) Estimator

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

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

Answer: B) Estimation

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

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

Answer: B) Ultimate stress

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

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

Answer: C) 300%

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

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

Answer: A) Information Table

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

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

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

24. Which hand book referred by machine engineer?

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

Answer: A) Mark standard

25. Which authority publishes schedule of rates?

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

Answer: D) Government department

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

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

Answer: B) Linear strain

27. Which one is the ratio of stress?

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

Answer: C) Load and area

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

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

Answer: A) Specification of materials

29. What is the unit of strain?

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

Answer: B) No unit

30. Which is thermo plastic material?

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

Answer: D) Vinyl polymers

31. Which force acts on crank shaft?

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

Answer: A) Torsional stress

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

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

Answer: D) Ultimate stress

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

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

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

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

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

Answer: A) Hooks law

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

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

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

36. Which force acts on rivets?

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

Answer: B) Shear force

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

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

Answer: A) At its centre

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

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

Answer: C) Triangle

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

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

Answer: C) Factor of safety

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

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

Answer: B) Modulus of rigidity

41. 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
C) 1571.4 N
- B) 1757 N
D) 1577 N

Answer: C) 1571.4 N

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

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

Answer: B) Strain

43. What is a hand book?

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

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

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

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

Answer: A) 10 kg/mm^2

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

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

Answer: C) Price catalogue

46. Which one is related to estimation of work?

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

Answer: A) Bill of material

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

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

Answer: C) 7

48. Which one is the most reliable estimate?

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

Answer: A) Detailed estimate

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

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

Answer: C) Centre of gravity

50. 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) 0.0001
- B) 0.1
- C) 0.01
- D) 0.001

Answer: C) 0.01

51. What is a under estimate?

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

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

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

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

Answer: B) 1.5 sq.mm

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

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

Answer: D) Hand book

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

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

Answer: B) 2.54 cm

55. What is the formula for bulk modulus?

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

Answer: B) Volumetric stress/Volumetric strain

56. 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

Answer: A) Stable

57. 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) 12.5 kg/mm²
- B) 12500 kg/mm²
- C) 125 kg/mm²
- D) 1.25 kg/mm²

Answer: B) 12500 kg/mm²

58. What is a total cost?

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

Answer: C) Raw materials cost and machining cost