

Duration: 180 Mins

Total Marks: 58

Q.ID: ITISKILL3748EP

1. 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

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

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

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

Answer: C) delta l

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

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

Answer: B) Quantity, availability and transportation of materials

4. 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, 1960
 D) IE Rules, 1967

Answer: B) IE Rules, 1956

5. What is the ratio between stress and strain?

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

Answer: C) Youngs Modulus

6. What is a total cost?

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

Answer: A) Raw materials cost and machining cost

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

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

Answer: D) 1.5 sq.mm

8. 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) 0.0001687
 D) 0.0001867

Answer: B) 0.0001786

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

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

Answer: A) Linear strain

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

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

Answer: D) Ultimate stress

11. What is the unit of strain?

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

Answer: A) No unit

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

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

Answer: A) Factor of safety

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

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

Answer: B) Ultimate stress

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

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

Answer: D) At its centre

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

- A) Shorter side of rectangle
 B) At the point of intersection of its diagonals

- C) At the corners D) Longer side of rectangle

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

16. What is a hand book?

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

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

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

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

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

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

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

Answer: D) Triangle

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

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

Answer: B) Poisson's ratio

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

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

Answer: D) Information Table

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

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

Answer: B) Price catalogue

22. 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) 0.001 B) 0.01
C) 0.0001 D) 0.1

Answer: B) 0.01

23. What is the other term of pocket reference in engineering

works?

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

Answer: D) Hand book

24. Which one is the most reliable estimate?

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

Answer: C) Detailed estimate

25. Which one is the ratio of stress?

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

Answer: B) Load and area

26. Which force acts on rivets?

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

Answer: D) Shear force

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

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

Answer: A) 50 sq.mm

28. Which is elastic material?

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

Answer: C) Nylon

29. What is the formula for bulk modulus?

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

Answer: B) Volumetric stress/Volumetric strain

30. Which force acts on crank shaft?

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

Answer: D) Torsional stress

31. 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

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

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

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

Answer: B) Unstable

33. 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%

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

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

Answer: A) Estimation

35. What is an over estimate?

- A) No work started as per estimate
- B) When an estimate is fell short of the actual 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

36. 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

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

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

Answer: B) Centre of gravity

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

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

Answer: B) $h/4$

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

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

Answer: C) Specification of materials

40. Which is thermosetting plastic?

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

Answer: C) Melamine resins

41. 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/mm^2
- B) 10 kg/mm^2
- C) 1 kg/mm^2
- D) 100 kg/mm^2

Answer: B) 10 kg/mm^2

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

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

Answer: A) Mass

43. 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/mm^2
- B) 12.5 kg/mm^2
- C) 125 kg/mm^2
- D) 12500 kg/mm^2

Answer: D) 12500 kg/mm^2

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

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

Answer: B) Stable

45. Which authority publishes schedule of rates?

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

Answer: D) Government department

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

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

Answer: D) 2.54 cm

47. Which one is included in machining estimation sheet?

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

Answer: A) Raw material cost

48. Who prepares the cost of estimation?

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

Answer: A) Estimator

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

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

Answer: C) Hooks law

50. Which is thermo plastic material?

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

Answer: D) Vinyl polymers

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

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

Answer: B) $3r/8$

52. What is the use of engineering drawing?

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

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

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

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

Answer: D) Modulus of rigidity

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

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

Answer: D) At the centre

55. Which hand book referred by machine engineer?

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

Answer: D) Mark standard

56. 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) 1577 N
- B) 1757 N
- C) 1575 N
- D) 1571.4 N

Answer: D) 1571.4 N

57. 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) 7
- C) 0.7
- D) 0.143

Answer: B) 7

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

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

Answer: C) Strain