

ITI Quiz W/C - 02- May-2026 01:19 PM

Q. ID: ITISKILL3455QV

May 2026

Trinity, College udhyavara udupi

Answer Key

Duration: 155 Mins

Total Marks: 50

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

- A) Case hardening
- B) Induction hardening
- C) Nitriding
- D) Carburising

Answer: D) Carburising

2. Which specification is other than general specification?

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

Answer: B) Detailed specification

3. 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

4. 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

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

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

Answer: B) Austenite

6. 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 last year
- D) Standard schedule of rates of the average of last 5 years

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

7. What is a total cost?

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

Answer: A) Raw materials cost and machining cost

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

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

Answer: C) Brown

9. 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.572/-
- B) Rs.752/-
- C) Rs.960/-
- D) Rs.652/-

Answer: B) Rs.752/-

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

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

Answer: C) Nitriding in salt-bath

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

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

Answer: D) Normalising

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

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

Answer: A) 7

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

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

Answer: B) At its centre

14. Which is thermosetting plastic?

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

Answer: C) Melamine resins

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

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

Answer: B) At the centre

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

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

Answer: A) Unstable

17. Which is thermo plastic material?

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

Answer: B) Vinyl polymers

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

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

Answer: D) 5 minutes

19. What cables are used for 132KV lines?

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

Answer: B) Extra super voltage

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

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

Answer: C) Triangle

21. Which is a kind of surface hardening process?

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

Answer: C) Nitriding

22. 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

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

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

Answer: D) $\frac{h}{4}$

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

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

Answer: B) 50 sq.mm

25. 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

Answer: B) Specification of materials

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

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

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

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

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

Answer: B) Price catalogue

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

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

Answer: A) $\frac{3r}{8}$

29. 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

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

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

Answer: D) Hooks law

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

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

Answer: A) Ultimate stress

32. 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 B) 0.1
C) 0.0001 D) 0.001

Answer: A) 0.01

33. What are the various stages of heat treatment?

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

Answer: D) Heating, Soaking and Quenching

34. What is a hand book?

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

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

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

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

Answer: C) delta l

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

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

Answer: A) Hardening

37. Which one is the ratio of stress?

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

Answer: A) Load and area

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

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

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

39. 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

40. 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.112 | B) Rs.102 |
| C) Rs.100 | D) Rs.110 |

Answer: A) Rs.112

41. What is the purpose of tempering a steel?

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

Answer: A) To reduce the brittleness

42. Which authority publishes schedule of rates?

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

Answer: B) Government department

43. 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 |

Answer: A) Strain

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

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

Answer: A) At its centre

45. 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) 340 W | B) 640 W |
| C) 440 W | D) 540 W |

Answer: D) 540 W

46. Which hand book referred by machine engineer?

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

Answer: D) Mark standard

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

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

Answer: B) 300%

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

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

Answer: C) Centre of gravity

49. Which is elastic material?

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

Answer: A) Nylon

50. 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

Answer: B) Centre of gravity
