

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

Q. ID: ITISKILL3455QV

May 2026

Trinity, College udhyavara udupi

Question Paper

Duration: 155 Mins

Total Marks: 50

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Student Name: _____ Roll No: _____

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

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

original dimension of the substance?

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

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

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

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

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

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

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

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

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

4. 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) 0.0001
- C) 0.001
- D) 0.01

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

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

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

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

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

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

6. What are the various stages of heat treatment?

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

14. Which is a kind of surface hardening process?

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

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

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

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

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

8. Which authority publishes schedule of rates?

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

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

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

9. What is the ratio between the change in dimension to its

17. Which one is included in machining estimation sheet?

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

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

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

19. Which is thermo plastic material?

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

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

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

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

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

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

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

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

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

24. Which is elastic material?

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

25. Which process produce equilibrium conditions?

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

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

- A) δl
- B) L
- C) l
- D) e

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

- A) At the radius
- B) At the diameter

- C) On the circumference
- D) At the centre

28. What is the purpose of tempering a steel?

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

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

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

30. 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) 540 W
- B) 640 W
- C) 340 W
- D) 440 W

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

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

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

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

33. What is the use of engineering drawing?

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

34. Which hand book referred by machine engineer?

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

35. Which specification is other than general specification?

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

36. What is the estimation of milling cost of a rectangular block size $100 \times 80 \times 60 \text{ mm}$, if cost of the milling is $\text{Rs.}2/\text{sq.cm}$?

- A) $\text{Rs.}652/-$
- B) $\text{Rs.}960/-$
- C) $\text{Rs.}752/-$
- D) $\text{Rs.}572/-$

37. 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 $\text{Rs.}8/-$ per drilled holes and $\text{Rs.}12$ per drill and tap?

- A) Rs.110
C) Rs.112

- B) Rs.102
D) Rs.100

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

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

39. Which is thermosetting plastic?

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

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

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

41. What is a hand book?

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

42. What cables are used for 132KV lines?

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

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

- A) Unstable
B) Stable

C) Neutral

D) Horizontal

44. What is a total cost?

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

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

- A) Ultimate stress
C) Yield point
B) Young's modulus
D) Factor of safety

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

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

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

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

48. Which one is the ratio of stress?

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

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

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

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

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