

ITI Quiz WC- 20-

Jun-2026 10:34 AM

Q. ID: ITISKILL5723QS

June 2026

Question Paper

Duration: 180 Mins

Total Marks: 50

ID: ITISKILL5723QS

Student Name: _____ Roll No: _____

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

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

2. What is the unit of strain?

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

3. 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.17700/- B) Rs.16700/-
C) Rs.15000/- D) Rs.18700/-

4. 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

5. What is the ratio between stress and strain?

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

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

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

7. 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) Hardening D) Annealing

8. 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) 540 W
C) 640 W D) 440 W

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

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

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

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

11. What is the formula for bulk modulus?

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

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

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

13. What is the purpose of tempering a steel?

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

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

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

15. 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.960/- B) Rs.652/-
C) Rs.752/- D) Rs.572/-

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

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

17. 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 @ ₹400/day)

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

18. What is a hand book?

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

19. Which process produce equilibrium conditions?

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

20. 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
 - B) 1 kg/mm^2
 - C) 100
 - D) 1000
- kg/mm^2 kg/mm^2

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

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

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

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

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

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

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

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

25. What is an over estimate?

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

26. Which one is the ratio of stress?

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

27. 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.6,000,000
- B) Rs.6,00,000
- C) Rs.60,00,000
- D) Rs.30,000,000

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

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

29. Which is elastic material?

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

30. Which is a kind of surface hardening process?

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

31. What are the various stages of heat treatment?

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

32. 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

33. 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

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

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

35. 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) 0.0001867
C) 0.0001687

B) 0.0001968
D) 0.0001786

A) Between 5 and 6
C) Between 8 and 10

B) Between 2 and 3
D) Between 12 and 14

36. 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) 372 kg
C) 410 kg

B) 525 kg
D) 312 kg

37. 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/mm²? (Pi = 22/7)

A) 1577 N
C) 1757 N

B) 1575 N
D) 1571.4 N

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

A) Working stress
C) Ultimate stress

B) Compressive stress
D) Tensile stress

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

A) Biography
C) Information Table

B) Bibliography
D) Dictionary

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

A) 20 minutes
C) 15 minutes

B) 10 minutes
D) 5 minutes

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

A) 3.5 sq.mm
C) 5 sq.mm

B) 2.5 sq.mm
D) 1.5 sq.mm

42. 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
C) 0.01

B) 0.001
D) 0.0001

43. What is the relative permittivity of rubber?

44. Which one is the most reliable estimate?

A) Cube rate estimate
C) Detailed estimate

B) Preliminary estimate
D) Plinth area estimate

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

A) Strain
C) Stress

B) Poisson's ratio
D) Factor of safety

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

A) L
C) l

B) Δl
D) e

47. What is the process of heat treatment?

A) The process of cooling to measure the dimensions
C) The process of heating and bending as per our requirement

B) The process of heating and cooling to change the structure and properties
D) The process of heating to change the dimensions

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

A) 1.43
C) 7

B) 0.7
D) 0.143

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

A) Standard schedule of rates of the average of the last 10 years
C) Standard schedule of rates of the current year

B) Standard schedule of rates of the average of last 5 years
D) Standard schedule of rates of the last year

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

A) Plan
C) Specification

B) Drawing
D) Estimation