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Score: 15/25 (60.00%)

Code: 3685

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

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

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

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

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

- A) Stable
B) Neutral
C) **Unstable (Correct)**
D) Horizontal

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

- A) Square (Incorrect)
B) Rhombus
C) **Triangle**
D) Cone

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

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

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

- A) 2.24 cm
B) **2.54 cm (Correct)**
C) 3.25 cm
D) 2.75 cm

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

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

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

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

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

- A) Hooks law
B) Young's modulus

C) Bulk modulus

D) **Poisson's ratio (Correct)**

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

- A) L
B) **Δl (Correct)**
C) l
D) e

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

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

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

- A) Dictionary
B) Biography
C) Bibliography
D) **Information Table (Correct)**

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

- A) **Estimation (Correct)**
B) Drawing
C) Specification
D) Plan

14. What is the use of engineering drawing?

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

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

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

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

- A) Silicon
B) **Sulphur**
C) Manganese (Incorrect)
D) Phosphorus

17. What cables are used for 132KV lines?

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

18. Which specification is other than general specification?

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

19. 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.102 B) Rs.100
C) Rs.112 (Correct) D) Rs.110

20. 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) 440 W
C) 540 W D) 640 W (Incorrect)

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

- A) Cementide (Incorrect) **B) Austenite**

- C) Martensite D) Ferrite

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

- A) Annealing **B) Normalising (Correct)**
C) Hardening D) Tempering

23. Which is a kind of surface hardening process?

- A) Cementide B) Ferrite
C) Nitriding D) Tempering (Incorrect)

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

- A) Blue **B) Brown**
C) Purple (Incorrect) D) Pale

25. What is the purpose of tempering a steel?

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