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Score: 12/25 (48.00%)

Code: 7804

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

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

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

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

3. Which is thermo plastic material?

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

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

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

5. What is the unit of strain?

- A) Kg/cm^2
 B) Newton/metre^2
 C) Metre
 D) **No unit (Correct)**

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

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

7. Which one is the ratio of stress?

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

8. What is the formula for bulk modulus?

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

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

- A) Newtons law
 B) **Hooks law (Correct)**
 C) Joules law
 D) Charles law

10. 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) 1757 N
 B) 1575 N
 C) **1571.4 N (Correct)**
 D) 1577 N

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

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

12. What is a under estimate?

- A) No work started as per estimate
 B) An estimate perfectly matches with actual
 C) **An estimate is fell short of the actual estimate (Correct)**
 D) An estimate is exceeded the actual estimate

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 main factor to be considered while preparing a detailed estimate?

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

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

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

16. Which one is the most reliable estimate?

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

17. What cables are used for 132KV lines?

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

18. 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.652/-
- C) Rs.572/-

- B) Rs.752/-**
- D) Rs.960/- (Incorrect)

19. 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 @ Rs 400/day)

- A) Rs. 2000
- C) Rs. 3000

- B) Rs. 2400 (Correct)**
- D) Rs. 1400

20. What is the total cost to assemble 10 personal computer systems, spares cost as given for one system: 1 TB hard disc Rs.4500/-, Intel i3 mother board Rs.7000/-, SMPS Rs.2500/-, monitor Rs.6000/-, keyboard Rs.1000/-, other material cost (Switches, USB, Cabl

- A) Rs.275000/-**
 - C) Rs.225000/- (Incorrect)
- B) Rs.250000/-
 - D) Rs.265000/-

21. Which affects the centre of gravity of the object

- A) Weight
- C) Density

- B) Mass (Correct)**
- D) Shape

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

- A) Initial point
- C) Centroid

- B) Centre of gravity (Correct)**
- D) Central point

23. 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)

24. What is the name of heat treatment process done to relieve strain and stress?

- A) Normalising
- C) Hardening

- B) Annealing**

- D) Tempering (Incorrect)

25. What is the purpose of tempering a steel?

- A) To reduce the brittleness**

- B) To remove the ductility (Incorrect)

- C) To increase the hardness
- D) To increase the brittleness