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Score: 13/25 (52.00%)

Code: 3814

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

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

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

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

3. Which is elastic material?

- A) Nylon (Correct)**
 C) Celluloid
 B) Polystyrenes
 D) Polycarbonates

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

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

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

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

6. What is the formula for bulk modulus?

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

7. Which force acts on crank shaft?

- A) Shear stress
 C) Tensile stress
B) Torsional stress (Correct)
 D) Compressive stress

8. 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) 1757 N
C) 1571.4 N (Correct)
 B) 1575 N
 D) 1577 N

9. What is the youngs modulus if a wire of 2m long, 0.8 mm² in cross section increases its length by 1.6 mm on suspension of 8 kg weight from it?

- A) 1.25 kg/mm²
 C) 125 kg/mm²
 B) 12.5 kg/mm²
D) 12500 kg/mm² (Correct)

10. Which hand book referred by machine engineer?

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

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

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

12. Which authority publishes schedule of rates?

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

13. What is a total cost?

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

14. Which one is included in machining estimation sheet?

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

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

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

16. Which IE rules are to be verified on completion of wiring on any new installation?

- A) IE Rules, 1956 (Correct)**
 C) IE Rules, 1961
 B) IE Rules, 1960
 D) IE Rules, 1967

17. What is the relative permittivity of rubber?

- A) Between 2 and 3**
 C) Between 8 and 10
 B) Between 5 and 6
D) Between 12 and 14 (Incorrect)

18. 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) 312 kg
B) 372 kg (Incorrect)
C) 410 kg
D) 525 kg

19. What is the estimation of milling cost of a rectangular block size 100 X 80 X 60 mm, if cost of the milling is Rs.2/sq.cm?

- A) Rs.652/-
B) Rs.752/- (Correct)
C) Rs.572/-
D) Rs.960/-

20. 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.30,000,000
B) Rs.60,00,000
C) Rs.6,00,000
D) Rs.6,000,000 (Incorrect)

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

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

22. What is the process of heat treatment?

A) The process of heating and cooling to change the structure and properties (Correct)

B) The process of heating to change the dimensions

C) The process of cooling to measure the dimensions

D) The process of heating and bending as per our requirement

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

- A) Cementite
C) Martensite

- B) Austenite (Correct)
D) Ferrite

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

A) Silver nitriding

B) Nitriding in salt-bath

C) Nitriding in Quenching tank (Incorrect)

D) Gas nitriding

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

- A) Blue (Incorrect)
C) Purple

- B) Brown
D) Pale