

Technical Aptitude:

1. The Tractor braking system is of

- a) Mechanical type
- b) Hydraulic type
- c) Pneumatic type
- d) Electrical type

2. The Power input of 1 ton air conditioner is

- a) 1kw
- b) 1.6kw
- c) 2.4kw
- d) 2.6kw

3. The refrigerator has a cooling capacity of 750 kcal/m. Its capacity in tons of refrigeration is equal to

- a) 7.5
- b) 10
- c) 15
- d) 30

4. The color code of refrigerator Ammonia is

- a) Orange
- b) White
- c) Light blue
- d) Green

5. The head used to remove any previous recording from the tape is

- a) Recording head
- b) Erasing head
- c) Play back head
- d) Running head

6. A Knee is a part of

- a) Lathe
- b) Milling machine
- c) Jig boring machine
- d) Grinding

7. Files are made of

- a) H.S.S
- b) C.I.
- c) M.S.
- d) None of these

8. The non ferrous metal with the lowest melting point is

- a) Aluminum
- b) Copper
- c) Lead
- d) Tin

9. The Front clearance angle of turning tool is maintained between

- a) 3° to 4°
- b) 8° to 12°
- c) 15° to 18°
- d) 22° to 25°

10. The number of Guide ways provided on the lathe bed is

- a) One
- b) Two
- c) Three
- d) Six

11. The formula for cutting speed in meter/minute for turning a job of diameter D mm is given by

- a) $\pi DN/100$ meter/min
- b) $\pi DN/1000$ meter/min
- c) $\pi/1000$ meter/min
- d) None of these

12. Mandrel is a

- a) Work holding device
- b) Supporting device
- c) a & b

d) None

13. The following tool is used for boring a deep hole

- a) Drill
- b) Reamer
- c) Boring bit
- d) Auger bit

14. Power Hack-saw blade cuts the material during

- a) Return stroke
- b) Forward stroke
- c) a & b
- d) None

15. For gear cutting operation the type of milling used is

- a) End milling
- b) Face milling
- c) Side milling
- d) Slit Milling

16. Open and cross belt device quick return motion mechanism is used in

- a) Horizontal shaper
- b) Vertical Shaper
- c) Slotter
- d) Planner

17. In Direct Indexing the indexing plate used rotating the job spindle is provided with

- a) 44 holes
- b) 20 holes
- c) 24 holes
- d) None of these

18. One watt-hour is equal to

- a) 36000 joules
- b) 3000 joules

c) 3600 joules

d) None of these

19. Otto cycle is also known as

- a) Bell Coleman Cycle
- b) Carnot Cycle
- c) Constant Volume Cycle
- d) Sterling Cycle

20. The brake thermal efficiency and mechanical efficiency of a diesel engine are 50% and 70% respectively. The indicator thermal efficiency is

- a) 20%
- b) 70%
- c) 60%
- d) 80%

21. The king pin is indeed

- a) Back wards
- b) Front wards
- c) Out wards
- d) In wards

22. The grade of lubricant used in gear box is

- a) SAE 30
- b) SAE 40
- c) SAE 90
- d) SAE 150

23. The number of piles provided for a truck tyre is

- a) 10
- b) 20
- c) 25
- d) 15

24. Propeller Shaft takes the drive from

- a) Clutch
- b) Flywheel

- c) Gear box
- d) Differential

- b) 3 to 5 kg/cm²
- c) 5 to 8 kg/cm²
- d) 8 to 10 kg/cm²

25. Petrol engine uses the following thermodynamic cycle

- a) Carnot Cycle
- b) Sterling Cycle
- c) Otto Cycle
- d) None

Answers :

- 1) a
- 2) b
- 3) c
- 4) c
- 5) a
- 6) b
- 7) a
- 8) d
- 9) b
- 10) b
- 11) b
- 12) a
- 13) c
- 14) b
- 15) a
- 16) d
- 17) c
- 18) c
- 19) c
- 20) b
- 21) d
- 22) c
- 23) d
- 24) c
- 25) c
- 26) c
- 27) c
- 28) d
- 29) c
- 30) b

26. In gear ration between the starter pinion and the fly wheel ring gear is

- a) 8
- b) 1:12
- c) 1:16
- d) 1:25

27. For measuring the ovality of the cylinder bore the gauge used is

- a) Dial Indicator
- b) Plug gauge
- c) Micro meter
- d) Compression gauge

28. The crank shaft made of

- a) Aluminum alloy
- b) Cast Iron
- c) Steel
- d) Forged steel alloy

29. The composition of petrol fuel is approximately given as

- a) 60% carbon, 40% hydrogen
- b) 75% carbon, 25% hydrogen
- c) 85% carbon, 15% hydrogen
- d) 95% carbon, 5% hydrogen

30. The lubricating oil pump develops a pressure of

- a) 1 to 2 kg/cm²