

1. The radiator tubes are manufactured by using

- a. Cast iron tubes
- b. Aluminum tubes
- c. Brass tubes
- d. Steel tubes

Ans: c

2. If we know the engine speed, bore, stroke, number of cylinders and m.e.p in the cylinders, we can calculate

- a. FHP
- b. IHP
- c. BHP

Ans: b

3. Knowing the IHP and FHP of an engine, we can calculate

- a. Compression ratio
- b. rpm
- c. SAF
- d. BHP

Ans: d

4. Which one of the following is not a trade name of tractor in India

- a. Kirloskar
- b. Escort
- c. Standard
- d. HMT

Ans: c

5. The ratio between the power output of an engine and the energy in the fuel burned to produce that power is called

- a. Volumetric efficiency
- b. Thermal efficiency
- c. Mechanical efficiency

Ans: b

6. The air volume in the cylinder with the piston at B.D.C divided by the clearance volume is called

- a. Compression ratio
- b. Piston displacement
- c. Cylinder ratio

Ans: a

7. The power used in overcoming friction in the engine is called

- a. BHP
- b. IHP
- c. FHP

Ans: c

8. The average pressure during the power stroke minus the average pressure during the intake, compression and exhaust strokes is called

- a. IHP
- b. Compression ratio
- c. BHP
- d. m.e.p

Ans: d

9. IHP minus FHP equals

- a. BHP
- b. SAF HP

c. m.e.p

Ans: a

10. Engine torque is highest at

a. High speed

b. Low speed

c. Intermediate speed

Ans: c

11. BHP divided by IHP is

a. Thermal efficiency

b. Mechanical efficiency

c. Volumetric efficiency

Ans: b

12. The percentage of the energy in the petrol burnt in the engine which is actually utilized in propelling the

car is as little as

a. 25%

b. 60%

b. 35%

d. 15%

Ans: a

13. In the diesel engine, the compression ratio is as high as

a. 10:1

b. 15:1

c. 5:1

Ans: b

14. The device for smoothing out the power impulses from the engine is called the

a. Flywheel

b. Camshaft

c. Crankshaft

d. Clutch

Ans: a

15. The amount of air fuel mixture taken in by the engine on the suction stroke is a measure of the engine's

a. Compression ratio

b. Volumetric efficiency

c. Clearance volume

Ans: b

16. The size of an engine cylinder is referred to in terms of its

a. Diameter and bore

b. Bore and length

c. Bore and stroke

Ans: c

17. In an operating engine, the hottest part of the piston is the

a. Head

b. Ring grooves

c. Skirt

d. Pin bosses

Ans: a

18. In normal operation the part of the exhaust valve that gets the hottest is

a. Face

b. Middle of Stem

c. Centre of head

d. Edge of margin

Ans: c

19. The power developed inside the engine cylinder is called

a. IHP

b. FHP

c. BHP

Ans: a

20. The ratio of the cylinder volume at BDC and the clearance volume is called

a. Clearance ratio

b. Volumetric ratio

c. Compression ratio

Ans: c

21. As a rule when comparing the front and rear wheel cylinder pistons, it will be found that the pistons in the

front wheel cylinders are

a. The same size

b. Larger in diameter

c. Smaller in diameter

Ans: b

22. Twisting and untwisting of the crankshaft is called

a. Torsional vibration

b. Power impulsion

c. Torsional balance

Ans: a

23. The rotating effect of the connecting rod on the connecting rod bearing produces

a. Pressure load

b. Inertia load

c. Centrifugal load

Ans: c

24. Important bearing characteristics include

a. Embeddability, compression and fatigue

b. Embeddability, conformability and fatigue resistance

Ans: b

25. In the engine there must be relative motion between the piston and the connecting rod

a. Atmospheric pressure, inertia and torsional vibration

b. Centrifugal force, inertia and combustion pressure

c. Inertia, engine speed and centrifugal force

Ans: b

26. Two of the three connecting rod bearing loads that increase as engine speeds increase are

a. Centrifugal and inertia loads

b. Torsional and pressure loads

c. Pressure and inertia loads

d. Pressure and centrifugal loads

Ans: a

27. When different forces act at angles on connecting rod bearing, the combining of these forces produces a

a. Remaining force

b. Canceling force

c. Resultant force

Ans: c

28. The active material in a charged negative plate is

a. Lead sulphate

- b. Lead peroxide
- c. Lead metal
- d. Lead per chloride

Ans: c

29. The three general types of friction bearings are

- a. Journal, ball and roller
- b. Journal, guide and thrust
- c. Journal, shaft and thrust

Ans: b

30. Petrol and Gasoline is called a hydrocarbon because it consists essentially of

- a. Carbon and Hydrogen
- b. Oxygen and Hydrogen
- c. Carbon and Oxygen

Ans: a

31. Almost all bearing used in automotive engines are

- a. Guide bearings
- b. Friction bearings
- c. Antifriction bearings

Ans: b

32. The brake shoes are curved to conform to the inner diameter of the

- a. Tyre
- b. Wheel
- c. Pedal
- d. Brake drum

Ans: d

33. It is cheaper if we use gaskets of

- a. Rubber asbestos type
- b. Copper asbestos type
- c. Steel asbestos type

Ans: a

34. With an increase in temperature the resistance of carbon is

- a. Unchanged
- b. Decreased
- c. Increased

Ans: c

35. When petrol burns completely, two of the compounds that are formed are

- a. Carbon dioxide and water
- b. Water and oxygen
- c. Hydrocarbon and oxygen

Ans: a

36. Due to heat of combustion, with increase in temperature the molecules

- a. Move slower
- b. Vaporize
- c. Move faster

Ans: c

37. When air is heated, it

- a. Contracts and becomes heavier
- b. Expands and becomes heavier
- c. Expands and becomes lighter

Ans: c

38. Changing position of an object against an opposing force is called

- a. Power
- b. Torque

c. Energy

d. Work

Ans: d

39. A liquid that boils at a relatively high temperature is said to have

a. A low viscosity

b. A high viscosity

c. A high volatility

d. A low volatility

Ans: d

40. The ease with which a liquid changes to a vapour is called its

a. Vapourability

b. Boiling point

c. Viscosity

d. Volatility

Ans: d

41. The pump part that rotates and causes water circulation between the radiator and engine is called

a. Impeller

b. Fan

c. Bypass

Ans: a

42. The bearing having the least friction is the

a. Sleeve bearing

b. Antifriction bearing

c. Friction bearing

Ans: b

43. Conformability of an engine bearing is

a. Ability of a bearing to withstand the wear and tear

b. Resistivity to corrosion

c. Ability of the bearing to adjust itself to variations in shaft alignment and journal shape

d. Ability of a bearing to permit foreign particles to embed in it

Ans: c

44. The most commonly used material for tyre tubes is

a. Butyl

b. Natural rubber

c. Butane

Ans: a

45. When the plates of battery cell are made larger in size, we get increased

a. Current

b. Voltage

c. Cell resistance

Ans: a

46. When preparing electrolyte, it is important to remember that

a. Acid and water should be poured together

b. Water should be poured into acid

c. Acid should be poured into water

Ans: c

47. Aluminium alloy pistons are preferred because

a. They are good absorbers of shock

b. They are having less weight

c. They have good water resistance

d. They are very strong in tension

Ans: b

48. The material used for the piston of modern passenger cars are

- a. Brass pistons
- b. Cast iron pistons
- c. Aluminium alloy pistons
- d. Steel pistons

Ans: c

49. Piston compression rings are manufactured by

- a. Aluminium
- b. Cast iron
- c. Steel
- d. Bronze

Ans: b

50. Gudgeon pins or piston pins are made by

- a. Piston material itself
- b. Cork
- c. Cast iron
- d. Hardened and ground steel

Ans: d