

110/2015

Maximum : 100 marks

Time : 1 hour and 15 minutes

1. A heat engine converts :
 - (A) Heat energy into mechanical energy
 - (B) Mechanical energy into heat energy
 - (C) Heat energy into electrical energy
 - (D) Chemical energy into electrical energy

2. The engine valves are closed by :
 - (A) Cam shaft
 - (B) Crank shaft
 - (C) Valve spring
 - (D) Piston

3. Inlet valve is made up of :
 - (A) Nickel chromium alloy steel
 - (B) High carbon steel
 - (C) Tungsten steel
 - (D) Mild steel

4. Indicated Horse power equation is :
 - (A) $\frac{2\pi NT}{4500}$
 - (B) $\pi r^2 h$
 - (C) $\frac{BHP}{IHP} \times 100$
 - (D) $\frac{PLAN}{4500} \times K$

5. Piston rings are made up of :
 - (A) Stainless steel
 - (B) High grade cast iron
 - (C) High Carbon steel
 - (D) Aluminium alloy

6. The function of FIP is :
 - (A) Stormising the fuel
 - (B) Filtering the fuel
 - (C) To deliver specific quantity of fuel at specific time
 - (D) Suck the fuel from the fuel tank

7. Which one of the governor is also called spring loaded centrifugal governor?
- (A) Mechanical (B) Hydraulic
(C) Pneumatic (D) Servo
8. Ohm's Law expressed resistance is :
- (A) $\frac{\text{Voltage}}{\text{Current}}$ (B) $\frac{\text{Current}}{\text{Voltage}}$
(C) Current \times Voltage (D) $\frac{\text{Resistance}}{\text{Voltage}}$
9. Positive plate of lead acid battery consists of grid filled with a paste of :
- (A) Pb (B) PbO₂
(C) PbSO₄ (D) H₂SO₄
10. Radiator pressure cap contains :
- (A) Pressure valve (B) Thermostat valve
(C) Rotary valve (D) Pressure and Vacuum valve
11. The oil pump is generally driven by :
- (A) Crank shaft (B) Cam shaft
(C) Distributor (D) Fan
12. What is the purpose of heat dam in a piston?
- (A) to enable the piston run cooler
(B) to keep the water temperature constant
(C) to balance the piston
(D) to reduce the piston weight
13. What do you mean by compression ratio?
- (A) $\frac{\text{Swept Volume}}{\text{Clearance Volume}}$ (B) $\frac{\text{Total Volume}}{\text{Clearance Volume}}$
(C) $\frac{\text{Total Volume}}{\text{Swept Volume}}$ (D) $\frac{\text{Clearance Volume}}{\text{Swept Volume}}$