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Question:

Define - (i) Indicated power, (ii) Mechanical efficiency, (iii) BSFC

Answer:

- i) Indicated Power (ip) is defined as the power developed by combustion of fuel in the cylinder of engine. It is always more than brake power. ii) Mechanical efficiency: ηm : It is a measure of mechanical perfection of the engine or its ability to transmit power developed in the engine cylinder to the crank shaft . It is defined as the ratio of brake power to indicated power of the engine
- iii) **B.S.F.C:** It is the weight of fuel required to develop 1KW of the brake power for period of 1 hour. Unit of B.S.F.C is Kg/KW h. It is defined as the amount of fuel consumed per unit of break power developed per hour.

B.S.F.C =
$$\frac{fuel\ consumption\ in\ Kg/hr}{Brake\ power\ in\ KW}$$