



- B. design of crankshaft  
 C. number of cylinders  
 D. all of these
- (i) A supercharged engine as compared to an ordinary engine (1)  
 A. is lighter  
 B. requires smaller foundations  
 C. consumes less lubricating oil  
 D. all of these
- (j) During idling, a petrol engine requires \_\_\_\_\_ mixture. (1)  
 A. lean B. rich C. chemically correct
- (k) The basic requirement of a good combustion chamber is (1)  
 A. minimum turbulence  
 B. low compression ratio  
 C. high thermal efficiency and power output  
 D. low volumetric efficiency
- (l) The brake power is the power available (1)  
 A. in the engine cylinder  
 B. at the crank shaft  
 C. at the crank pin  
 D. none of these
- (m) The relative efficiency of an I.C. engine is the ratio of the indicated thermal (1)  
 efficiency to the air standard efficiency.  
 A. Correct B. Incorrect
- (n) The brake power is always greater than indicated power. (1)  
 A. Agree B. Disagree

**Attempt any four questions from Q-2 to Q-8**

- Q-2 Attempt all questions (14)**  
 (a) What is a dynamometer? Discuss the working of Prony type of dynamometer with neat sketch. (07)  
 (b) Enumerate the Willan's line method with neat sketch. (07)
- Q-3 Attempt all questions (14)**  
 (a) What is indicated power? Discuss the mechanical engine indicator method for measurement of I.P. of an Engine. (07)  
 (b) Explain the effect of different pollutants on human and plant life. (07)
- Q-4 Attempt all questions (14)**  
 (a) What is supercharging of an I.C engine? What are the advantages and limitation of supercharging? Differentiate between supercharging and turbo charging. (07)  
 (b) Compare the battery ignition and magneto ignition system in details. (07)
- Q-5 Attempt all questions (14)**  
 (a) Explain the working of a S.U. carburettor with the help of neat sketch. (07)  
 (b) What is the function of lubrication system? Explain Dry sump lubrication system with a neat sketch. (07)



