

3) Compare Centrifugal governors with Inertia Governors.

- a) The response of the Centrifugal governor is slower than that of the Inertia governor.
- b) The Sensitivity of the Inertia governor is greater than that of the Centrifugal governor.
- c) Only Centrifugal force controls the Centrifugal governor while both Centrifugal and Inertia forces control the Inertia governor.
- d) The revolving parts of the Centrifugal governor are easier to balance than that of the Inertia governor.

Section A

Question 2

Why is the Watt Governor rarely used?

Ans: The Watt governor is rarely used because it is limited to only vertical position applications and its sensitivity decreases with speed increase.

Question 3

In which respect is the Porter Governor better than the Watt Governor?

Ans: The Porter is more sensitive at higher speeds than the Watt governor and the Porter governor can carry load weight unlike the Watt governor.

Question 4

For IC Engines, what type of governor will you prefer? Dead weight type or Spring controlled type? Give reasons:

Ans

A dead weight gravity controlled governor is preferred in IC ~~engines~~ Engines as the basic principle of engine operation is centrifugation.

Section A

(1)

Q The flywheel with governor
 a The flywheel is a heavy rotating wheel that reduces the jerks due to Unavailable speed fluctuations while a governor is a Speed Controlling device that Controls speed variation caused due to varying load.

b A flywheel runs as long as the engine is running while the governor runs when the engine ~~is~~ ^{does not} run at its mean speed.

c Flywheels have no influence over the mean speed of the engine while the governor has no influence on the Cycle fluctuation in speed.

d Flywheel are heavy with a large moment of inertia while governor are light with a relatively small moment of inertia.

Q2 Which type of Control the governor System is?
 Ans: Mechanical feedback Control System.

Q3