

Exdascraje of heritega Panu
18/engob/074
mechanics of machines

SQA1

1) compare flywheel with governor
a) flywheels have no influence over the mean speed of the engine while the governor has no influence on the cyclic fluctuations in speed

b) flywheels are heavy with a large moment of inertia while governors are light with a relatively small moment of inertia

c) A flywheel runs as long as the engine is running while the governor runs when the engine doesn't run at its mean speed

2) which type of control the governor system is

Answer Mechanical feedback control system

3) compare centrifugal governor with inertia governor

a) The response of the centrifugal governor is slower than that of the inertia governor

b) Only centrifugal force controls the centrifugal governor while both centrifugal and inertia forces control the inertia ~~forces~~ governor

c) The sensitivity of the inertia governor is greater than that of the centrifugal governor

d) The revolving parts of the centrifugal governor are easier to balance than that of the inertia governor.

SAQ 2

Q. 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.

SAQ 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 dead weight unlike the watt governor.

SAQ 4

For I.C. engines, what type of governor will you prefer? Dead weight type or spring controlled type? Give reason.

Ans.

A lead weight gravity controlled governor is preferred in I.C. engines as the basic principle of engine operation is centrifugal.