

Pramukh Swami Science and H.D. Patel Arts College, Kadi
CC- Agriculture and Soil Sciences
Internal Examination Semester III

Subject: AS-302 (Farm Layout, development, management and field plot technique)

Time: 2 hrs

Date: 09/11/2016

Marks: 40

Q-1 Answer all questions. Each question carries 1 mark .

(10*1=10)

- (1) Spark plug is used in which type of engine?
(a) Petrol engine (b) Diesel engine (c) Steam engine (d) Boiler
- (2) Travel of piston from one dead centre to other dead centre is termed as _____ ?
(a) Stroke length (b) Swept volume (c) Clearance volume (d) Compression ratio
- (3) Which one is link between piston and crank?
(a) Connecting rod (b) Piston pin (c) Push rod (d) Crank shaft
- (4) In a two stroke cycle engine, one cycle is completed in the following number of revolutions of crank shaft ?
(a) 2 (b) 3 (c) 1 (d) 4
- (5) The cam shaft speed of four stroke engine is _____ ?
(a) Double than crank shaft speed (b) Equal to crank shaft speed
(c) Four times of crank shaft speed (d) Half of crank shaft speed
- (6) During suction stroke in a petrol engine, it draws _____ inside the cylinder ?
(a) Vapour of petrol only (b) Air only (c) Mixture of petrol & air (d) Only air
- (7) A four stroke engine has
(a) Inlet & exhaust valves (b) Inlet & exhaust ports (c) Transfer ports (d) All of the above
- (8) Function of piston rings is _____ ?
(a) To connect piston & connecting rod (b) To transmit force from piston to crank
(c) To maintain a gas tight joint between the piston & the cylinder
(d) To convert reciprocating motion into rotary motion
- (9) Which pin is used to connect the piston & the connecting rod at the small end?
(a) Crank pin (b) Gudgeon pin (c) Spark pin (d) Small pin
- (10) In an IC engine which energy is converted into mechanical energy?
(a) Chemical energy of fuel (b) Potential energy (c) Kinetic energy (d) Electrical energy

Q-2. Answer any 4 questions. Each question carries 05 marks.

(4*5=20)

- (1) Define heat engines. Compare I.C engines and E.C engines.
- (2) Give classification of heat engine in detail.
- (3) Give functions of following components used in I.C engines.
(a) Cylinder (b) Piston (c) Connecting rod (d) Flywheel (e) Spark plug
- (4) Make comparison between two stroke & four stroke I.C engines.
- (5) Explain construction of I.C engine with properly labeled diagram.

Q-3. Answer any 1 questions. Each question carries 10 marks.

(1*10=10)

- (1) Explain brief working of four stroke cycle engine with diagram.
- (2) Explain brief working of two stroke cycle engine with diagram.