

PARUL UNIVERSITY
COLLEGE OF AGRICULTURE

B.Sc.,(Hons.) Agriculture Summer 2017 - 18 Examination

Semester: 3

Date: 07/06/2018

Subject Code: 20106201

Time: 02:00 pm to 04:30 pm

Subject Name: Farm Power and Machinery

Total Marks: 60

Instructions

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

Q.1 Do as Directed.**A. Fill in the blanks. (Each of 1.00 marks)****(10)**

1. Nozzle is a Part of.....
2. Width of cut measuring unit is.....
3. PTO full name is.....
4. M.B plough full name is.....
5. Gunner is a part of..... plough.
6. SI engine full form is ignition.
7. Solar energy is a energy.
8. Power available from a farm labour is.....
9. In a diesel engine fuel is ignited by.....
10. Crankshaft is used to.....

B. Multiple choice type questions. (Each of 1.00 mark)**(10)**

1. In Disc plough Tilt angle is.....

a) 15-25°	c) 25-35°
b) 35-45°	d) 45-55°
2. M.B Plough is used for.....

a) Primary tillage	c) Both
b) Secondary tillage	d) None
3. Disc Plough is used for.....

a) Primary tillage	c) Both
b) Secondary tillage	d) None
4. Sprayer is used for.....

a) Primary tillage	c) Plant protection
b) Secondary tillage	d) None
5. In Disc plough disc diameter is.....cm

a) 10-30	c) 60-90
b) 30-50	d) 100-150
6. Compression ratio for SI engine is

a) 1-4	c) 6-10
b) 16-20	d) None
7. Compression ratio for CI engine is

a) 1-4	c) 6-10
b) 16-20	d) None
8. The mixing of air fuel in case of SI engine takes place in

a) Carburettor	c) Both
b) Inlet Manifold	d) None
9. Petrol is also known as

a) CNG	c) Both
b) Gasoline	d) None
10. Pumps use Power.

a) Human	c) Electrical
b) Mechanical	d) None

Q.2 Do as Directed.

A. Define the following. (Any five)

(05)

1. Primary tillage.
2. Secondary tillage.
3. Objective of tillage.
4. Function of M.B plough.
5. Harvesting.
6. Cylinder bore.
7. Function of carburettor.

B. Answer the following. (Any Five)

(05)

1. Enlist the sequence of farm operation
2. Write any two names of primary tillage implements.
3. Enlist the components of M.B. plough.
4. Enlist the components of Disc plough.
5. Enlist different sources of farm power.
6. Enlist different types of lubrication system used in engine.
7. Enlist different types of cooling system used in engine.

Q.3 Write short notes. (Any five)

(15)

1. Seed drill.
2. Cultivator.
3. Rotary tiller.
4. Cooling system.
5. Mechanical farm power.
6. Lubrication system.

Q.4 Attempt any Three/Long Questions/Example

(15)

1. M.B. Plough.
2. Disc Plough.
3. Differentiate SI and CI engine.
4. Differentiate renewable and non renewable energy source.