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**Term End Examination 2025-2026**
**Programme – B.Sc.(Ag)-Hons-2024**
**Course Name – Farm Machinery and Power**
**Course Code - CC-BAG375 (T)**
**( Semester III )**

**Full Marks : 50** **Time : 2:0 Hours**

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

## Group-A

(Multiple Choice Type Question) 1 x 20=20

1. *Choose the correct alternative from the following :*

(i) Infer the correct option : In 4-stroke engine there is one power stroke for every _____ revolutions of the crank shaft.

a) 1 b) 2
c) 3 d) 4

(ii) Infer one instrument that is not a hand tools?

a) M.B Plough b) Shorel
c) Spade d) Mamaunty

(iii) Infer one tools that is not a tractor drawn tillage tools?

a) Cultivator b) Augar plough
c) Harrow d) Plank

(iv) Infer one tool that is not the secondary tillage tool?

a) Disc plough b) Disc harrow
c) M.B Plough d) None of these

(v) Show the correct option : What is the Vertical section of plough influences.

a) Pulverization b) Depth of cut
c) Width of cut d) Direction of pull

(vi) Relate the two primary tillage equipment's are____.

a) M.B plough and disc harrow b) Disc plough and disc harrow
c) Disc harrow and cultivator d) M.B Plough and disc plough

(vii) Demonstrate the correct option : The mowers are designed to cut_____.

a) Wheat b) Paddy
c) Mustard d) Grasses

(viii) Infer the correct option : Working width of disc plough can be increased by_____.

a) Disc angle b) Gang angle

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c) Disc section d) Horizontal section

(ix) Show a option that is known as Correcting the seed rate____

a) Standarization b) Filtration
c) Calibration d) Testing

(x) Interpret the tillage pattern.

a) Head land pattern b) Gathering
c) Casting d) All of these

(xi) Infer a option that is not relate to spark ignition engine.

a) Spark plug b) Carburetor
c) Fuel injector d) Ignition coil

(xii) Relate the most effective air cleaner in the case of diesel engine?

a) Whirl type b) Oil bath type
c) Wet type d) Dry type

(xiii) Interpet the correct option : A carburettor is used to supply _____

a) Petrol,air and lubricating oil b) Air and diesel
c) Petrol and lubricating oil d) Petrol and air

(xiv) Illustrate what happen If petrol engine is used in diesel engine.

a) Low power will be produced b) Efficiency will be low
c) Higher knocking will occur d) Black smoke will be produced

(xv) Show one type of engine there has maximum compression ratio.

a) Diesel engine b) Petrol engine
c) Gas engine d) All of these

(xvi) Demonstrate the correct answer : The heart of the tractor engine is ____

a) Clutch b) Transmission gear
c) Gear box d) Differential

(xvii) Interpet the correct option : Tillage is the mechanical manipulation of the _____

a) Soil b) Crop
c) water d) Air

(xviii) Infer one scientist name that was invented a traction engine or tractor.

a) J.watt (1894) b) Rodolph(1895)
c) N.Hudson (1798) d) H.harries(1890)

(xix) Demonstrate the correct answer : Thermostats are designed to start opening at ____to ____Celsius.

a) 82°-85°C b) 70°-75°C
c) 70°-72°C d) 72°-78°C

(xx) Infer the correct temperature of optimum engine temperature is _____

a) 60°C b) 82°c
c) 100°c d) 120°c

## Group-B

(Short Answer Type Questions) 2.5 x 10=25

2. Illustrate about disadvantages of disc plough? (2.5)
3. Explain about Hydraulic control system. (2.5)
4. Briefly explain the Theoretical field capacity. (2.5)
5. Briefly explain the callibration of seed drill. (2.5)
6. Briefly explain about the thermo-siphon method. (2.5)
7. compare the casting and gathering. (2.5)
8. Discuss about cost calculation of farm tractor by using straight line method. (2.5)

9. Distinguish between petrol and diesel engine. (2.5)
10. Discuss about Carburetor and write the function of carburetor. (2.5)
11. Distinguish benefits and limitations of farm mechanization. (2.5)

**OR**

Distinguish between seed drill and seed cum fertilizer drill. (2.5)

## Group-C

(Long Answer Type Questions) 5 x 1=5

12. Discuss about the power transmission system of the tractor. (5)

**OR**

Discuss about the mouldboard plough implement. (5)

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