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GIET UNIVERSITY, GUNUPUR – 765022

B.Sc (Ag) (Fourth Semester) Examinations, June' 2021

AG-225 - Crop Production Technology-II(RABI CROPS)

Time: 2 hrs

Maximum: 50 Marks

**The figures in the right hand margin indicate marks.****PART – A****Q.1. Fill in the blanks with suitable word / figure.****(0.5 x 10 = 5 Marks)**

- Botanically sunflower seed is a \_\_\_\_\_.
- \_\_\_\_\_ gene is responsible for dwarfism and non lodging in wheat.
- Recommended seed rate of kabuli type bengalgram is \_\_\_\_\_ kg ha<sup>-1</sup>.
- The most suitable herbicide for application to wheat is \_\_\_\_\_.
- Scientific name of linseed is \_\_\_\_\_.
- \_\_\_\_\_ is the important critical stage for moisture stress in wheat
- The sour taste of leaves and pods of chickpea is due to the presence of \_\_\_\_\_.
- Kent is a variety of \_\_\_\_\_ crop.
- Pungency in mustard oil is due to \_\_\_\_\_.
- The inflorescence of sugarcane is called \_\_\_\_\_.

**Q. 2. Define (or) Explain the following in one or two sentences.****(1.0 x 5 = 5 Marks)**

- Nipping:
- CRI:
- Desuckering:
- Propping:
- Critical period of soil moisture:

**Q3. Match the following****(0.5 x 10 = 5 Marks)**

| Column – A |                        | Column – B |                    |
|------------|------------------------|------------|--------------------|
| (a)        | King of fodder crops   | (i)        | Mustard            |
| (b)        | TPS                    | (ii)       | Oilseed production |
| (c)        | Carthamin              | (iii)      | Sunflower          |
| (d)        | King of pulses         | (iv)       | Wheat              |
| (e)        | Pusa jaikishan         | (v)        | Berseem            |
| (f)        | Rachana                | (vi)       | Sugarcane          |
| (g)        | Yellow revolution      | (vii)      | Field pea          |
| (h)        | <i>Phalaris minor</i>  | (viii)     | Potato             |
| (i)        | Photo insensitive crop | (ix)       | Chickpea           |
| (j)        | Trench method          | (x)        | Safflower          |

**Q4. Write True or False against each statement**

**(0.5 x 10 = 5 Marks)**

- a. The inflorescence of sunflower is called spike.
- b. The seed rate of kabuli type of chickpea is more than desi type.
- c. Adsali system is applicable for sugarbeet
- d. Water requirement of rajmash is 100 mm.
- e. Only one irrigation is available for barley, then it should be applied at active tillering stage.
- f. Sugarbeet is a tropical crop.
- g. The juice quality of sugarcane is increased due to application excess nitrogen.
- h. Red rot is a common disease of sugarcane.
- i. Seed of sugarcane is called pod
- j. Kalyansona is a variety of barley

**PART – B**

**Attempt ANY FIVE questions. All question carries equal marks**

**(6.0 x 5 = 30 Marks)**

- 5. Briefly discuss the agro-techniques of wheat under any four of the following sub-heads:  
(a) Seed rate (b) Sowing time (c) Spacing (d) Depth of sowing (e) Methods of sowing
- 6. Briefly discuss the agro-techniques of sunflower cultivation?
- 7. Write in details various planting methods of sugarcane and state their merits and demerits.
- 8. Why seed inoculation is required in pulses? State in brief about sowing time, seed rate and fertiliser management in chickpea.
- 9. Differentiate between rapeseed and mustard? Briefly discuss the cultivation of rapeseed and mustard under any three of the following sub-heads:  
(a) Fertiliser management (b) Water management (c) Weed management (d) Post-harvest management
- 10. Briefly discuss the production of berseem under any four of the following sub-heads:  
(a) Seed treatment (b) Methods of sowing (c) Cultivar groups (d) Nutritive value (e) Harvesting

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