

2022

**B. Sc. (Honours) in AGRICULTURE**

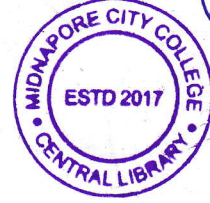
**1st Semester Examination**

**Fundamentals of Agronomy**

PAPER — AGS-106

Full Marks : 50

Time : 2 hours



*The figures in the right-hand margin indicate marks.*

*Candidates are required to give their answers  
in their own words as far as practicable.*

*Illustrate the answers wherever necessary.*

Answer from **all** the Groups as directed.

**GROUP—A**

1. Answer any **five** questions : 2×5=10

✓(a) Define tillage. Give one example of secondary tillage implements.

(b) Define puddling. Mention the name of most suitable crop for puddling.

/139

(Turn Over)

(2)

- (c) What is meant by crop geometry? 5
- Define nutrition.
- Discuss the scope of agronomy.
- (f) What are the principles of crop rotation? 5
- Explain infiltration.
- Name the agricultural sectors in which following revolutions occurred: White, Blue, Yellow and Green.



**GROUP—B**

2. Answer any four questions :
- (a) Discuss conservation tillage and minimum tillage. 5
  - Mention the factors affecting plant population. What is the importance of plant population? 5
  - Explain the 'criteria of essentiality'. How many essential plant nutrients are there? 5
  - (d) "Transpiration is a necessary evil,"— Explain. 5
  - (e) Discuss different methods of soil moisture measurement. 5

/139

(Continued)

(3)

- What is irrigation? Mention the different methods of irrigation. 5



**GROUP—C**

3. Answer any two questions :
- Define weeds. Classify weeds according to their ontogeny. Write down the principles of weed management. 10
  - (b) Explain IWM. Define allelopathy. What is meant by growth and development of a crop? Discuss crop weed competition. Discuss any two advantages of using herbicide. 2+1+3+2+2=10
- (c) Write Short notes on : 2½×4=10
- (i) RAW
  - (ii) Percolation
  - (iii) Dribbling
  - (iv) Bulky organic manure
- Write the differences between the following topics : 2+2+2+2+2=10
- Broadcasting vs Line-sowing
  - Pesticide vs Herbicide
  - Fertilizer vs Organic Manure
  - (iv) Cropping Pattern vs Cropping System
  - Evaporation vs Transpiration

★★★

B.Sc./1<sup>st</sup> Sem/AGS-106/23

BL23/139—90