

(6 Pages)

Reg. No. :

Code No. : 30525 E Sub. Code : ASBO 32

B.Sc. (CBCS) DEGREE EXAMINATION,
NOVEMBER 2021.

Third Semester

Botany — Main

Skill Based Subject — ORGANIC FARMING

(For those who joined in July 2020 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. Which among the following phenomenon is not exhibited by soil colloidal particle?
 - (a) Plasticity
 - (b) Adhesion and cohesion
 - (c) Flocculation
 - (d) Sedimentation

2. Most of the soil organism is
 - (a) Psychrophiles
 - (b) Mesophiles
 - (c) Thermophiles
 - (d) Hygrophiles
3. Which of the following elements is almost non-essential for plants?
 - (a) Calcium
 - (b) Molybdenum
 - (c) Zinc
 - (d) Sodium
4. Soil fertility is reduced due to
 - (a) Over irrigation
 - (b) Continuous cropping
 - (c) Imbalanced use of fertilizers
 - (d) Poor drainage
5. Composted manure is produced from
 - (a) Farmyard manure and green manure
 - (b) Farm refuse and household refuse
 - (c) Organic remains of biogas plants
 - (d) Rotten vegetables and animal refuse

6. Soil mulch is useful in
- (a) Minimize evaporation losses
 - (b) Improving aeration
 - (c) Improving drainage
 - (d) Removing weed
7. A water-fern, which is used as a green manure in rice fields is
- (a) *Salvinia* (b) *Azolla*
 - (c) *Pteridium* (d) *Gleichenia*
8. Which of the following is a green manure?
- (a) *Sesbania* (b) *Maize*
 - (c) *Rice* (d) *Sorghum*
9. Vermicomposting is done by
- (a) Fungus (b) Bacteria
 - (c) Worms (d) Animals
10. Which among the following is not an ingredient of *Panchagavya*?
- (a) Cow dung (b) Cow urine
 - (c) Milk (d) Butter

PART B — ($5 \times 5 = 25$ marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) Describe the physical properties of the soil.

Or

- (b) Explain the water retention capacity of the soil.

12. (a) Give an account of farmyard manure.

Or

- (b) Establish the utility of green leaf manures.

13. (a) Explain the formation of humus.

Or

- (b) List down the advantages of composting.

14. (a) What is mean by biofertilizers? How are they useful?

Or

- (b) Explain the importance of biofertilizers.

15. (a) Explain the pit method of vermicomposting.

Or

- (b) List down the applications of *Panchagavya*.

PART C — (5 × 8 = 40 marks)

Answer ALL questions choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Write an essay on the types of soil.

Or

- (b) How will you reclamate acidic soil?

17. (a) Describe the properties of fishery wastes.

Or

- (b) Explain the properties of Poultry wastes.

18. (a) Discuss the various methods of composting.

Or

- (b) Analyse the practice of mulching.

19. (a) Critically analyse the mass cultivation of *Rhizobium*.

Or

- (b) How will you produce *Azolla* on a large scale?

20. (a) Discuss the heap method of vermicomposting.

Or

(b) How will you prepare *Panchagavya*?
