(6 pages)

Reg. No. : .....

Code No.: 10664 E Sub. Code: JSPB 3 B/ SSBO 3 B

> B.Sc. (CBCS) DEGREE EXAMINATION, NOVEMBER 2019.

> > Third Semester

Plant Biology and Plant Biotechnology/Botany - Main

Skill Based Subject - ORGANIC FARMING

(For those who joined in July 2016 onwards)

Time: Three hours

Maximum: 75 marks

PART A —  $(10 \times 1 = 10 \text{ marks})$ 

Answer ALL questions.

Choose the correct answer:

- 1. Soil is defined as
  - (a) Highly homogenous colloidal system
  - (b) Simple physical biological system
  - (c) Superficial layer of the earth surface
  - (d) None of the above

- 2. Study of soil science is known as
  - (a) Ecology
- (b) Edaphology
- (c) Geology
- (d) Cytology
- 3. Which one of the following is not a organic manure?
  - (a) Cattle dung
  - (b) Piggery waste
  - (c) VAM fungi
  - (d) Poultry waste
- of poultry wastes is used to prepare manure.
  - (a) Skin

- (b) Hair
- (c) Excreta
- (d) All the above
- 5. Which of the following is used as green manure?
  - (a) Sesbania
- (b) Azola

(c) Grass

- (d) All the above
- Colour of the humus is
  - (a) Green

- (b) Blue
- (c) Brown
- (d) Yellow

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7.	CRYEMA test is used to identify			
	(a)	VAM	(b)	Rhizobium
	(c)	Aspergillus	(d)	Bacillus
8.	The fungal partner in VAM belongs to the class			
	(a)	Basidiomycetes		
3	(b)	Ascomycetes		
	(c)	Zygomycetes		
i.	(d)	Glomeromycetes	8	
9.	Which of the following is used in			
	Vermicomposting?			
	(a)	Leaves	(b)	Vegetables
	(c)	Earthworms	(d)	All the above
10.	Panchagavya is prepared from			
	(a)	Human waste		
	(b)	Animal waste		
	(c)	Bird waste		
	(d)	Animal excreta		

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PART B - (5 × 5 = 25 marks)

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

Answer should not exceed 250 words.

11. (a) Define fertility of soil.

Or

- (b) Why should the soil be aerated?
- 12. (a) Write briefly about fishery wastes.

Or

- (b) Explain the merits of cattle dung and urine.
- (a) List the suitable plants used as green manure.

Or

- (b) Give the importance of mulching.
- (a) Highlight the importance of Rhizobium.

Or

- (b) Highlight the benefits of VAM to plants.
- (a) Describe the importance of panchagavya to the crops.

Or

(b) Write the importance of vermicompost.

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[P.T.O.]

## PART C — $(5 \times 8 = 40 \text{ marks})$

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

Answer should not exceed 600 words.

16. (a) Describe the various horizons of soil profile.

Or

- (b) Discuss the water retentivity of soil.
- 17. (a) Write an essay on organic manure.

Or

- (b) Describe the method of manure preparation from slaughter and poultry wastes.
- 18. (a) Explain the methods of humus formation.

Or

- (b) Write an elaborate notes on mulching.
- (a) Describe in detail the methods of Rhizobium production in large scale.

Or

(b) Discuss about mass production of VAM.

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 (a) Discuss the method of vermicompost preparation in bed and pit.

Or

(b) Write an essay on production of Panchagavya.

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