Duration: 3 hrs.

Full Marks: 70

M.Sc. BOTANY FOURTH SEMESTER ORGANIC FARMING & NURSERY MANAGEMENT MSB-406 (MDC)

(Use separate answer scripts for Objective & Descriptive)

[PART-A: Objective] Time: 20 min. Marks: 20 Choose the correct answer from the following: 1x20 = 201. A free living nitrogen fixing bacterium is: a. Clostridium b. Azotobacter c. Rhizobium d. Both A and B 2. A free living nitrogen fixing cyanobacterium which can also form symbiotic association with Azolla is: a. Nostoc b. Anabaena c. Tolypothrix d. Gleocapsa 3. The most quickly available source of nitrogen to plants are: a. Amide fertilizers b. Ammonia fertilizers c. Nitrate fertilizers d. Ammonia nitrate fertilizers **4.** Organic farming is the technique of raising crops through uses of? a. Manure b. Biofertilizer c. Resistant varieties d. All of these 5. Green manuring increases the crop yield by: a. 5-10% b. 15-25% c. 30-50% d. 80-90% 6. Aquatic fern which is an excellent biofertilizer: b. Azolla a. Salvinia c. Marsilea d. Pteridium 7. Bacterial fertilizer is: a. Nostoc b. Anabaena

c. Rhizobium d. None of these

8. What should be added to increase efficiency of biofertilizer?

a. Calcium

b. Potassium

c. Phosphorous d. Zinc

9. The proper method of application of biofertilizer in transplanted crops is:

a. Seed treatmentb. Seedling root Dipc. Main field applicationd. None of these

10. Weed management is possible through the organic method:

a. Leaf manureb. Biofertilizerc. Crop rotationd. All of these

11. For composting good carbon/nitrogen ratio is important. Which of the following will supply nitrogen to the compost? a. Green leaves b. Dried leaves c. Sawdust d. Bit of woods 12. Which one is essential garden practice? b. Pruning d. Grafting c. Cutting 13. Select the odd one. b. Tea leaves a. Egg shell c. Cow dung d. Milk water 14. A method of propagation where scion is attach to root stock: b. Grafting a. Budding d. Layering c. Cutting 15. Which one is the most rapid method of propagation? b. Cutting a. Budding d. Seed c. Micropropagation 16. Which is the most common disease of nursery? b. Root rot a. Wilt c. Black rust d. Damping off 17. Which is the major pest of nursery? a. Cut worm b. Lady bird beetle c. Mealy bug d. Snail 18. The full form of NMIS is: a. National Management Information System. b. Nursery Management Information System. c. Nursery Management of Inventory System. d. Nursery Managing Information System. 19. Mulching is not used to: a. To increase soil fertility b. To conserve moisture d. To maintain soil temperature c. To control weed 20. Which one is not included in gardening skills? b. Composting

PART-B: Descriptive

Time: 2 hrs. 40 min. Marks: 50

[Answer question no.1 & any four (4) from the rest]

1.	What are the materials required for vermicomposting? Describe the phase of composting.	5+5=10
2.	Describe: a. Crop rotation. b. Green leaf manure.	5+5=10
3.	Define biofertilizer. Write about the types of biofertilizer and its advantages.	2+5+3=10
4.	Describe biological control of pest and its advantages and disadvantages.	6+4=10
5.	What is compost? What are the benefits of composting? Describe the method of preparation.	1+4+5=10
6.	What is a nursery? Briefly discuss the importance of nursery and its role.	2+4+4=10
7.	Briefly discuss: a. Environmental benefit for organic agriculture. b. Homemade fertilizer.	5+5=10
8.	What are the different methods of asexual plant propagation? Write the advantages of asexual propagation over sexual propagation.	5+5=10

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c. Punning

d. Harvesting