11. ENHANCEMENT OF FOOD PRODUCTION

MULTIPLE CHOICE QUESTIONS (1 MARK EACH)

1	Wheat -Atlas 66 has high contents of
	A protein
	B vitamin
	C carbohydrates
	D Fats
2	Species of is involved in cheese formation.
	A <u>Penicillium</u>
	B Lactobacillus
	C Saccharomyces
	D Leuconostoc
3	Aspergillus niger is used to prepare vit
	$A \stackrel{\circ}{D}$
	B B2
	C B12
	D <u>C</u>
4	Saccharomyces cerevisiae is used to produce enzyme
	A <u>Invertase</u>
	B Pectinase
	C Lipase
	D Cellulase
5	Select the odd one from given herbicides.
	A <u>Cactoblastis</u>
	B Alternaria
	C Fusarium
	D Phytophthora
6	associated with plants like <i>Azolla</i> and <i>Cycas</i> can be used as a
	biofertilizers.
	A <u>Anabaena</u>
	B Nostoc
	C Plectonema
	D Oscillatoria
7	Antibiotic Chloromycetin is obtained from
	A Streptomyces erythreus
	B Penicillium chrysogenum
	C Streptomyces venezuelae
	D Streptomyces griseus
8	Indian curd is prepared by inoculating milk with
	A <u>Lactobacillus acidophilus</u>
	B Lactobacillus bulgaricus
	C Penicillium roquefortii
0	D Penicillium camembertii
9	Which of the following is not the variety of rice?
	A. Jaya
	B. Padma
	C. Ratna
1.0	D. Parbhani- Kranti
10	Identify the variety of crop plant developed for resistance against black rot
	A. Pusa Sawani
	B. Pusa Shubhra
	C. Pusa Sadabahar

- D. Pusa Swarnim
- 11 The mother of bee hive is
 - A. Worker bee
 - B. Drones
 - C. Queen bee
 - D. Cater
- Leaves of which plant are used to feed silkworm?
 - A. Mango
 - B. Tulsi
 - C. Mulberry
 - D. Strawberry
- 13. Identify the marine water fish from the following-
 - A. Common carp
 - B. Catla
 - C. Silver carp
 - D. Pomphret

VERY SHORT ANSWER TYPE QUESTIONS (1 MARK EACH)

- 1 What is biofortification?
- 2 Name biofortified wheat variety for high protein content.
- **3** What is the main function of a fermenter?
- 4 Name the chamber in which the suspended objects are filtered and removed during sewage treatment?
- 5 What is mycorrhiza?
- Name the tank to which the sewage water is passed after the preliminary treatment?
- What are flocs with respect to sewage treatment
- 8 Small part of activated sludge is passed back into primary sedimentation tank. If the above statement is correct then rewrite as it is and in case it is incorrect then reframe it.
- **9** When was plant breeding started?
- 10 Define germplasm collection.
- Which sugarcane variety is grown in north India?
- Name the variety of flat bean developed for insect and pest resistance.
- What is explant?
- What is MOET?
- Aspergillosis and Favus are poultry diseases. What is the causative agent for these diseases?
- What is monoculture fishery?
- 17 Define breed.
- What is the biological name of little bee?

SHORT ANSWER TYPE QUESTIONS(SA-I) (2 MARKS)

- 1 Rearrange the names of tanks used in sewage treatment as per the flow of procedure.
 - a) settling tank
 - b) Grit Chamber
 - c) aeration tanks
 - d) primary sedimentation tank.
- **2** Give names of two organisations which provide most commonly used models of biogas plants.

- A young girl is health conscious. Her dietician advised her to include mushrooms in her diet. What must be the reason?
- 4 Match the column A with B and rewrite correct pairs.

	A	В
i.	Atlas 66	a)vit A
ii.	Rice	b) vit C
iii.	Spinach	c)protein
iv.	bitter gourd	d)Iron

- 5 Name two bacteria which are responsible for fermenting dough of idli, dosa.
- 6 Name two acids produced by using *Aspergillus niger*?
- 7 Name two amino acids found in fortified Maize variety?
- **8** Explain plant breeding for disease resistance with suitable examples.
- 9 Differentiate between callus culture and suspension culture.
- Enlist various steps involved in hybridization technique in sequence.
- 11 Give any two advantages of micropropagation.
- SCP is useful and is a source of protein. Give two examples of bacteria used as source of SCP.
- Give an account of dairy farm management.
- Draw a diagram of artificial bee hive to show any two of honey super, entrance reducer, queen excluder and hive bodies.
- 15 Give an account of lac culture.

SHORT ANSWER TYPE QUESTIONS(SA-II) (3 MARKS)

1 Match the column A with B and rewrite correct pairs

	A	В
I.	Mycoherbicides	a)Cactoblastis
II.	Bacterial herbicides	b) Alternaria
III.	Insects as herbicides	c)Xanthomonas

- 2 State any three benefits of using Biogas.
- Write chemical reactions to represent Methanogenesis.
- 4 Describe the structure of a biogas plant.
- 5 State any three benefits of mycorrhiza.
- 6 State any three benefits of Biofertilizers.

Match the column A with B and rewrite correct pairs.

A	В
1) citric acid	a) in medicine for
	solubility of Ca ⁺⁺
2) fumaric acid	b) confectionary
3) gluconic acid	c) in resins as wetting
	agents

- **8** Write an account of Indian hybrid crops.
- 9 Write an account of mutation breeding.
- 10 How aseptic conditions are maintained in tissue culture?
- 11 Explain sericulture in detail.

LONG ANSWER TYPE QUESTIONS (LA) (4 MARKS EACH)

1 Match the column A with B and rewrite correct pairs.

\mathbf{A}	В
a)Penicillium roquefortii	i)Alcohol
b)Lactobacillus bulgaricus.	ii) Cheese
c)Lactobacillus acidophilus	iii) Yoghurt
d)Saccharomyces cerevisiae	iv)curd

- 2 Explain the process of sewage water treatment before it can be discharged into natural bodies.
- 3 Match the column A with B and rewrite correct pairs.

	\mathbf{A}	В
i.	Symbiotic N2 fixing bacteria	a) VAM
ii.	Free-living N2 fixing bacteria	b) <i>Rhizobium</i>
ii.	Phosphate solubilizer	c) Nostoc
iv.	Endomycorrhizae	d) Microccocus

- 4 Define plant breeding. Mention any three objectives of plant breeding.
- 5 Mention various advantages of single cell protein.