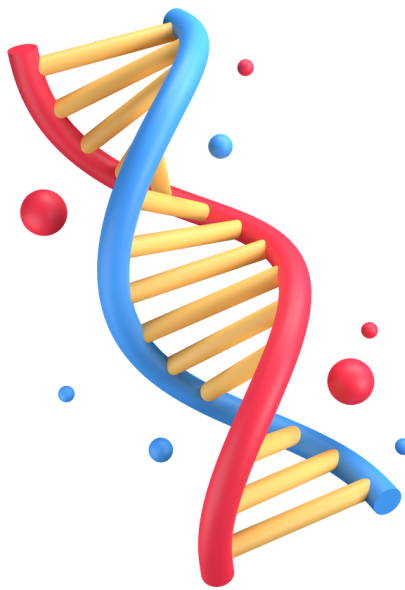


ZOOLOGY

ENTHUSIAST | LEADER | ACHIEVER



EXERCISE

Microbes in human welfare

ENGLISH MEDIUM

EXERCISE-I (Conceptual Questions)

Build Up Your Understanding

1. Which one of the following is not true about antibiotics –
 (1) First antibiotic was discovered by Alexander Fleming
 (2) The term 'antibiotic' was coined by S. Waksman in 1942.
 (3) Some persons can be allergic to a particular antibiotic
 (4) Each antibiotic is effective only against one particular kind of germ.
MH0001
2. Which one of the microorganism is used for production of citric acid in industries ?
 (1) *Lactobacillus bulgaricus*
 (2) *Penicillium citrinum*
 (3) *Aspergillus niger*
 (4) *Rhizopus nigricans*
MH0002
3. Formation of vinegar from alcohol is caused by
 (1) *Bacillus subtilis*
 (2) *Clostridium*
 (3) *Acetobacter aceti*
 (4) *Azotobacter*
MH0003
4. Biogas consists of
 (1) Carbon monoxide, methane and hydrogen
 (2) Carbon dioxide, methane and hydrogen
 (3) Carbon monoxide, ethane and hydrogen
 (4) Carbon dioxide, ethane and hydrogen
MH0004
5. Biogas is produced by anaerobic breakdown of biomass of agricultural waste by methanogenic bacteria. It is a
 (1) One step process
 (2) Two step process
 (3) Three step process
 (4) Multistep process
MH0007
6. Beer is obtained from :
 (1) Molasses (2) Grapes
 (3) Barley (4) Rye
MH0008
7. Maximum percentage of alcohol present in the product of yeast fermentation :
 (1) Brandy (2) Gin
 (3) Rum (4) Wine
MH0009
8. Which of the following Microorganisms use for swiss cheese :
 (1) *Propionibacterium* (2) *Geotrichum*
 (3) *Penicillium* (4) *Streptococcus*
MH0010
9. Rate limiting material in biogas production is :
 (1) Methane (2) Cellulose
 (3) Starch (4) Acetic acid
MH0011
10. Which group is not related with petroplantation :
 (1) Euphorbiaceae (2) Asclepiadiaceae
 (3) Apocyanaceae (4) Leguminaceae
MH0012
11. What are the advantage of gobar gas over conventional utilization :
 (1) More efficient source of energy
 (2) Used as good fertilizer
 (3) Reduces the chances of spreading of pathogens
 (4) All the above
MH0013
12. Milk is changed into curd by –
 (1) *Bacillus Megatherium*
 (2) *Acetobacter aceti*
 (3) *Xanthomonas citri*
 (4) *Lactobacillus acidophilus*
MH0014
13. *Saccharomyces cerevisiae* is used in the formation of :-
 (1) Ethanol (2) Methanol
 (3) Acetic acid (4) Antibiotics
MH0015
14. Modern farmer's can increase the yield of Paddy upto 50% by the use of :-
 (1) Cyanobacteria
 (2) Rhizobium
 (3) Mycorrhiza
 (4) Farm yard manure
MH0016

15. Which one produce gas by decomposing the gobar (Dung) in gobar gas:-
 (1) Fungus
 (2) Virus
 (3) Methanogenic bacteria
 (4) Algae
MH0017
16. Which of the following is used to manufacture ethanol from starch:-
 (1) Penicillin
 (2) Saccharomyces
 (3) Azotobactor
 (4) Lactobacillus
MH0018
17. Which of the following is the pair of biofertilizers:-
 (1) Glomus and BGA
 (2) Nostoc and Baculovirus
 (3) Rhizobium and Aphid
 (4) Salmonella & Trichoderma
MH0019
18. Which bacteria is utilized in Gobar gas plant :-
 (1) Methanogens
 (2) Nitrifying bacteria
 (3) Ammonifying bacteria
 (4) Denitrifying bacteria
MH0020
19. During the formation of bread it becomes porous due to release of CO₂ by the action of :-
 (1) Yeast (2) Bacteria
 (3) Virus (4) Protozoans
MH0021
20. During anaerobic digestion of organic waste, such as in producing biogas, which one of the following is left undergraded :-
 (1) Lipids (2) Lignin
 (3) Hemi-cellulose (4) Cellulose
MH0022
21. The term "antibiotic" was coined by :-
 (1) Edward Jenner
 (2) Louis Pasteur
 (3) Selman waksman
 (4) Alexander Fleming
MH0023
22. A free living nitrogen-fixing cyanobacterium which can also form symbiotic association with the water fern Azolla is :
 (1) Anabaena (2) Tolypothrix
 (3) Chlorella (4) Rhizobium
MH0025
23. The technology of biogas production was developed in India mainly due to the efforts of
 (1) IARI (2) KVIC
 (3) both (1) and (2) (4) WHO
MH0026
24. Biogas produced by anaerobic fermentation of waste biomass consists of :
 (1) methane
 (2) traces of H₂, H₂S and N₂
 (3) CO₂
 (4) all of these
MH0027
25. Which one of the following is used in the making of bread :
 (1) *Rhizopus stolonifer*
 (2) *Saccharomyces cerevisiae*
 (3) *Zygasaccharomyces*
 (4) *Saccharomyces ludwigi*
MH0028
26. A common biocontrol agent for the control of plant diseases caused by fungi is
 (1) *Agrobacterium* (2) *Glomus*
 (3) *Trichoderma* (4) *Baculovirus*
MH0030
27. Which one of the following microbes forms symbiotic association with plants and helps them in their nutrition ?
 (1) *Glomus* (2) *Trichoderma*
 (3) *Azotobacter* (4) *Aspergillus*
MH0031
28. Lactic acid bacteria (LAB) grow in milk and convert it to curd and also improve its nutritional quality by increasing :-
 (1) Vitamin A (2) Vitamin B₁₂
 (3) Vitamin B₆ (4) Vitamin C and A
MH0032

29. The puffed-up appearance of dough is due to –
 (1) Growth of LAB
 (2) Production of O₂ & ethanol
 (3) Production of CO₂
 (4) Growth of yeast *Monascus*
MH0033
30. Select the correct match -
 (1) *Aspergillus niger* - Acetic acid
 (2) Streptokinase - Immunosuppressive
 (3) Cyclosporin - A - Clot buster
 (4) Statins - Cholesterol lowering agent
MH0035
31. Biogas is the mixture of gases produced by the microbial activity. The type of the gas produced depends upon –
 (1) type of microbes
 (2) type of organic substrate / waste
 (3) size of digester
 (4) 1 & 2 both
MH0036
32. Which biocontrol agent is very common in root ecosystem & is effective against several plant pathogens.
 (1) Baculoviruses
 (2) *Trichoderma*
 (3) Nucleopolyhedrovirus
 (4) Ladybird beetle & Dragonflies
MH0037
33. Which of the following bacterium is associated with production of bioinsecticide is ?
 (1) *Bacillus subtilis*
 (2) *Bacillus thuringiensis*
 (3) *Agrobacterium*
 (4) *Azotobacter*
MH0038
34. Biopesticides include :-
 (1) Only bioinsecticide
 (2) Only bioherbicide
 (3) Bioinsecticide & bioherbicide
 (4) Bioherbicide, bioinsecticide & biofertilisers
MH0039
35. *Bacillus thuringiensis* is used to control :-
 (1) Moth (2) Flies
 (3) Mosquito (4) All the above
MH0040
36. *Trichoderma* has proved a useful microorganism for :-
 (1) Gene transfer in higher plants
 (2) Biological control of soil-borne plant pathogens
 (3) Bioremediation of contaminated soils
 (4) reclamation of wastelands
MH0041
37. Microbial insecticide is :
 (1) *Bacillus polymixa*
 (2) *Bacillus brevis*
 (3) *Bacillus subtilis*
 (4) *Bacillus thuringiensis*
MH0042
38. Ladybird is useful to get rid of
 (1) Aphids (2) Mosquitoes
 (3) Boll worm (4) Jassids
MH0043

EXERCISE-I (Conceptual Questions)

ANSWER KEY

Que.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Ans.	4	3	3	2	3	3	1	1	2	4	4	4	1	1	3
Que.	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Ans.	2	1	1	1	2	3	1	3	4	2	3	1	2	3	4
Que.	31	32	33	34	35	36	37	38							
Ans.	4	2	2	3	4	2	4	1							

EXERCISE-II (Previous Year Questions)

AIPMT/NEET

AIPMT 2008

1. Which one of the following is being tried in India as a biofuel substitute for fossil fuels ?
 (1) Jatropha
 (2) Musa
 (3) Aegilops
 (4) Azadirachta

MH0044

AIPMT Mains 2011

2. Which one of the following is a wrong matching of a microbe and its industrial product, while the remaining three are correct ?
 (1) *Aspergillus niger* - citric acid
 (2) Yeast - Statins
 (3) *Acetobacter aceti* - acetic acid
 (4) *Clostridium butylicum* - lactic acid

MH0045

3. Read the following statement having two blanks (A and B) :
 "A drug used for ____ (A) ____ patients is obtained from a species of the organism ____ (B) ____."
 The one correct option for the two blanks is:

Blank - A

- (1) AIDS
 (2) Heart
 (3) Organ-transplant
 (4) Swine flu

Blank - B

- Pseudomonas*
Penicillium
Trichoderma
Monascus

MH0046

AIPMT Pre 2012

4. Yeast is used in the production of :-
 (1) Bread and beer
 (2) Cheese and butter
 (3) Citric acid and lactic acid
 (4) Lipase and pectinase

MH0047

5. A patient brought to a hospital with myocardial infarction is normally immediately given :-
 (1) Cyclosporin-A
 (2) Statins
 (3) Penicillin
 (4) Streptokinase

MH0048

6. Which one of the following is an example of carrying out biological control of pests/diseases using microbes?
 (1) Bt-Cotton to increase cotton yield
 (2) Lady bird beetle against aphids in mustard
 (3) *Trichoderma* sp. against certain plant pathogens.
 (4) Nucleopolyhedrovirus against white rust in Brassica

MH0049

7. The most abundant prokaryotes helpful to humans in making curd from milk and in production of antibiotics are ones categorised as:
 (1) Chemosynthetic autotrophs
 (2) Heterotrophic bacteria
 (3) Cyanobacteria
 (4) Archaeobacteria

MH0050

8. *Monascus purpureus* is a yeast used commercially in the production of :-
 (1) citric acid
 (2) blood cholesterol lowering statins
 (3) ethanol
 (4) streptokinase for removing clots from the blood vessels.

MH0051

AIPMT Mains 2012

9. In gobar gas, the maximum amount is that of :-
 (1) Propane
 (2) Carbon dioxide
 (3) Butane
 (4) Methane

MH0052

10. Consider the following four statements (a-d) and select the option which includes all the correct ones only.

- (a) Single cell *Spirulina* can produce large quantities of food rich in protein, minerals, vitamins etc.
 (b) Body weight-wise the microorganism *Methylophilus methylotrophus* may be able to produce several times more proteins than the cows per day.
 (c) Common button mushrooms are a very rich source of vitamin C.
 (d) A rice variety has been developed which is very rich in calcium.

Options :

- (1) Statements (b) , (c) and (d)
 (2) Statements (a) , (b)
 (3) Statements (c) , (d)
 (4) Statements (a) , (c) and (d)

MH0053

NEET-UG 2013

11. A good producer of citric acid is :

- (1) *Saccharomyces*
 (2) *Aspergillus*
 (3) *Pseudomonas*
 (4) *Clostridium*

MH0054

12. During sewage treatment, biogases are produced which include :

- (1) hydrogensulphide, nitrogen, methane
 (2) methane, hydrogensulphide, carbon dioxide
 (3) methane, oxygen, hydrogensulphide
 (4) hydrogensulphide, methane, sulphur dioxide

MH0055

Re-AIPMT 2015

13. Match the following list of microbes and their importance :

(a) <i>Saccharomyces cerevisiae</i>	(i)	Production of immunosuppressive agents
(b) <i>Monascus purpureus</i>	(ii)	Ripening of Swiss cheese
(c) <i>Trichoderma polysporum</i>	(iii)	Commercial production of ethanol
(d) <i>Propionibacterium sharmanii</i>	(iv)	Production of blood cholesterol lowering agents

	(a)	(b)	(c)	(d)
(1)	(iii)	(i)	(iv)	(ii)
(2)	(iii)	(iv)	(i)	(ii)
(3)	(iv)	(iii)	(ii)	(i)
(4)	(iv)	(ii)	(i)	(iii)

MH0058

NEET-I 2016

14. Which of the following is wrongly matched in the given table ?

	Microbe	Product	Application
(1)	<i>Trichoderma pdyspomm</i>	Cyclosporin A	immunosuppressive drug
(2)	<i>Monascus purpureus</i>	Statins	lowering of blood cholesterol
(3)	<i>Streptococcus</i>	Streptokinase	removal of clot from blood vessel
(4)	<i>Clostridium bufylicum</i>	Lipase	removal of oil stains

MH0060

15. The primitive prokaryotes responsible for the production of biogas from the dung of ruminant animals, include the :-

- (1) Halophiles
 (2) Thermoacidophiles
 (3) Methanogens
 (4) Eubacteria

MH0061

NEET-II 2016

16. Match **Column-I** with **Column-II** and select the correct option using the codes given below

	Column-I		Column-II
(a)	Citric acid	(i)	Trichoderma
(b)	Cyclosporin A	(ii)	Clostridium
(c)	Statins	(iii)	Aspergillus
(d)	Butyric acid	(iv)	Monascus

Codes :

	a	b	c	d
(1)	i	iv	ii	iii
(2)	iii	iv	i	ii
(3)	iii	i	ii	iv
(4)	iii	i	iv	ii

MH0062

17. The source of cyclosporin-A is :-

- (1) *Acetobacter aceti*
- (2) *Saccharomyces cerevisiae*
- (3) *Aspergillus niger*
- (4) *Trichoderma polysporum*

MH0063

18. Statins commercially used as blood cholesterol lowering agents are produced by :-

- (1) *Agrobacterium tumefaciens*
- (2) *Trichoderma polysporum*
- (3) *Monascus purpureus*
- (4) *Trichoderma viridae*

MH0064

19. Which of the following is a free living biocontrol microbial agent for plant pathogen?

- (1) *Mucor*
- (2) *Glomus*
- (3) *Trichoderma*
- (4) *Rhizobium*

MH0065

20. Biological control agent obtained from :-

- (1) *Bacillus thuringiensis*
- (2) *E.coli*
- (3) *Agrobacterium tumefaciens*
- (4) *Meloidogyne incognitia*

MH0066

NEET(UG) 2017

21. Which of the following is correctly matched for the product produced by them ?

- (1) *Methanobacterium* : Lactic acid
- (2) *Penicillium notatum* : Acetic acid
- (3) *Saccharomyces cerevisiae* : Ethanol
- (4) *Acetobacter aceti* : Antibiotics

MH0067

NEET(UG) 2018

22. Conversion of milk to curd improves its nutritional value by increasing the amount of

- (1) Vitamin D
- (2) Vitamin A
- (3) Vitamin B₁₂
- (4) Vitamin E

MH0068

NEET(UG) 2019

23. Match the following organisms with the products they produce :-

- | | |
|-------------------------------------|-------------------|
| (a) <i>Lactobacillus</i> | (i) Cheese |
| (b) <i>Saccharomyces cerevisiae</i> | (ii) Curd |
| (c) <i>Aspergillus niger</i> | (iii) Citric Acid |
| (d) <i>Acetobacter aceti</i> | (iv) Bread |
| | (v) Acetic Acid |

Select the **correct** option.

- | | (a) | (b) | (c) | (d) |
|-----|-------|------|-------|-------|
| (1) | (ii) | (iv) | (v) | (iii) |
| (2) | (ii) | (iv) | (iii) | (v) |
| (3) | (iii) | (iv) | (v) | (i) |
| (4) | (ii) | (i) | (iii) | (v) |

MH0084

24. Which of the following can be used as a biocontrol agent in the treatment of plant disease?

- (1) *Trichoderma*
- (2) *Chlorella*
- (3) *Anabaena*
- (4) *Lactobacillus*

MH0085

25. Which of the following is a commercial blood cholesterol lowering agent?

- (1) Cyclosporin A
- (2) statin
- (3) Streptokinase
- (4) Lipases

MH0086

26. Select the **correct** group of biocontrol agents.

- (1) *Bacillus thuringiensis*, Tobacco mosaic virus, Aphids
- (2) *Trichoderma*, *Baculovirus*, *Bacillus thuringiensis*
- (3) *Oscillatoria*, *Rhizobium*, *Trichoderma*
- (4) *Nostoc*, *Azospirillum*, *Nucleopolyhedrovirus*

MH0087

NEET(UG) 2019 (Odisha)

27. A biocontrol agent to be a part of an integrated pest management should be
- (1) Species-specific and symbiotic
 - (2) Free living and broad spectrum
 - (3) Narrow spectrum and symbiotic
 - (4) Species-specific and inactive on non-target organisms

MH0088

28. Which of the following statements about methanogens is not correct ?
- (1) They can be used to produce biogas.
 - (2) They are found in the rumen of cattle and their excreta
 - (3) They grow aerobically and breakdown cellulose-rich food.
 - (4) They produce methane gas.

MH0089

29. Among the following pairs of microbes, which pair has both the microbes that can be used as biofertilizers?
- (1) *Aspergillus* and *Rhizopus*
 - (2) *Rhizobium* and *Rhizopus*
 - (3) *Cyanobacteria* and *Rhizobium*
 - (4) *Aspergillus* and *Cyanobacteria*

MH0090

NEET(UG) 2020

30. Match the following columns and select the correct option.

Column - I

(a) *Clostridium butylicum*(b) *Trichoderma polysporum*(c) *Monascus purpureus*(d) *Aspergillus niger*

Column - II

(i) Cyclosporin - A

(ii) Butyric Acid

(iii) Citric Acid

(iv) Blood cholesterol lowering agent

- | | (a) | (b) | (c) | (d) |
|-----|-------|-------|------|-------|
| (1) | (iv) | (iii) | (ii) | (i) |
| (2) | (iii) | (iv) | (ii) | (i) |
| (3) | (ii) | (i) | (iv) | (iii) |
| (4) | (i) | (ii) | (iv) | (iii) |

MH0091

NEET(UG) 2020 (COVID-19)

31. For the commercial and industrial production of Citric Acid, which of the following microbes is used ?

- (1) *Aspergillus niger*
- (2) *Lactobacillus sp*
- (3) *Saccharomyces cerevisiae*
- (4) *Clostridium butylicum*

MH0092

32. Match the following columns and select the correct option :-

Column-I	Column-II
(a) Dragonflies	(i) Biocontrol agents of several plant pathogens
(b) <i>Bacillus thuringiensis</i>	(ii) Get rid of Aphids and mosquitoes
(c) Glomus	(iii) Narrow spectrum insecticidal applications
(d) Baculoviruses	(iv) Biocontrol agents of lepidopteran plant pests
	(v) Absorb phosphorus from soil

- (1) (a)-(iii), (b)-(v), (c)-(iv), (d)-(i)
- (2) (a)-(ii), (b)-(i), (c)-(iii), (d)-(iv)
- (3) (a)-(ii), (b)-(iii), (c)-(iv), (d)-(v)
- (4) (a)-(ii), (b)-(iv), (c)-(v), (d)-(iii)

MH0093

33. Cyclosporin A, used as immuno suppression agent, is produced from :

- (1) *Monascus purpureus*
- (2) *Saccharomyces cerevisiae*
- (3) *Penicillium notatum*
- (4) *Trichoderma polysporum*

MH0094

NEET(UG) 2021

34. Match List - I with List - II.

List-I		List-II	
(a)	<i>Aspergillus niger</i>	(i)	Acetic Acid
(b)	<i>Acetobacter aceti</i>	(ii)	Lactic Acid
(c)	<i>Clostridium butylicum</i>	(iii)	Citric Acid
(d)	<i>Lactobacillus</i>	(iv)	Butyric Acid

Choose the **correct** answer from the options given below.

- (a) (b) (c) (d)
- (1) (iii) (i) (iv) (ii)
- (2) (i) (ii) (iii) (iv)
- (3) (ii) (iii) (i) (iv)
- (4) (iv) (ii) (i) (iii)

MH0095

NEET(UG) 2021 (Paper-2)

35. Which of the following match is incorrect ?

- (1) Miller's experiment – 1953
- (2) Discovery of Penicillin – 1945
- (3) Human Genome Project – 1990
- (4) Rediscovery of Mendelian results – 1900

MH0116

36. Baculoviruses are employed as

- (1) Biogas production
- (2) Biocontrol agents
- (3) Sewage treatment agents
- (4) Biofertiliser

MH0117

NEET(UG) 2022

37. Identify the microorganism which is responsible for the production of an immunosuppressive molecule cyclosporin A:

- (1) *Clostridium butylicum*
- (2) *Aspergillus niger*
- (3) *Streptococcus cerevisiae*
- (4) *Trichoderma polysporum*

MH0118

EXERCISE-II (Previous Year Questions)

ANSWER KEY

Que.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Ans.	1	4	3	1	4	3	2	2	4	2	2	2	2	4	3
Que.	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Ans.	4	4	3	3	1	3	3	2	1	2	2	4	3	3	3
Que.	31	32	33	34	35	36	37								
Ans.	1	4	4	1	2	3	4								

EXERCISE-III

Master Your Understanding

EXERCISE-III(A) NCERT BASED QUESTIONS

1. Nutritionally curd is more suitable than milk. Which of the following reason not supporting to this view
 (1) It increasing vitamin B₁₂
 (2) It checks disease causing microbes
 (3) LAB convert lactose into lactic acid
 (4) It provide additional proteins

MH0096

2. Large holes in "Swiss cheese" are due to production of large amount of CO₂ by bacterium
 (1) *Leuconostoc mesenteroides*
 (2) *Propionibacterium sharmanii*
 (3) *Thermococcus proteus*
 (4) *Staphylococcus thermophiles*

MH0097

3. Which of the following is not a product of distillation
 (1) Whisky (2) Brandy
 (3) Wine (4) Rum

MH0098

4. Which of the following alcohol is produced by distillation
 (1) Beer (2) Wine
 (3) Both 1 and 2 (4) Rum

MH0099

5. Which of the following bacteria was associated with discovery of penicillin
 (1) *Streptococcus*
 (2) *Staphylococcus*
 (3) *Saccharomyces cerevisiae*
 (4) *Propionibacterium*

MH0100

6. Full potential of penicillin as an effective antibiotic was established by
 (1) Alexander Flemming
 (2) Ernest chain
 (3) Howard Florey
 (4) Both 2 and 3

MH0101

7. Which of the following is "Clot buster"
 (1) Citric acid (2) Streptokinase
 (3) Cyclosporin (4) Statins

MH0102

8. Which of the following chemicals, used as an immunosuppressive agent in organ transplantation
 (1) Streptokinase (2) Cyclosporin - A
 (3) Statins (4) Citric acid

MH0103

9. Match the following

A. Pectinases	i. Blood cholesterol Lowering agents
B. Streptokinases	ii. Immunosuppressive agents
C. Cyclosporin-A	iii. Clot-busters
D. Statin	iv. Clearifying agents

A	B	C	D
(1) iv	iii	ii	i
(2) iv	iii	i	ii
(3) iii	iv	ii	i
(4) i	ii	iii	iv

MH0104

10. Match the following

A. Citric acid	i. <i>Haemolytic streptococcus</i>
B. Streptokinase	ii. <i>Aspergillus niger</i>
C. Cyclosporin-A	iii. <i>Monascus purpureus</i>
D. Statins	iv. <i>Trichoderma polysporum</i>

A	B	C	D
(1) i	ii	iii	iv
(2) ii	i	iii	iv
(3) ii	i	iv	iii
(4) iv	ii	iii	i

MH0105

EXERCISE-III(B) (ANALYTICAL QUESTIONS)

11. Functioning of statin is based on
 (1) Competitive inhibition
 (2) Endproduct inhibition
 (3) Allosteric inhibition
 (4) Negative feedback inhibition

MH0106

12. The technology of biogas production was developed in India mainly due to efforts of
 (1) IARI (2) KVIC
 (3) IPM (4) Both 1 and 2

MH0107

13. *Bacillus thuringiensis* show their inhibitory effect on which part of the insect body
- (1) Gut
 - (2) Respiratory tract
 - (3) Nervous system
 - (4) Circulatory system

MH0108

14. Which of the following biological agents are used for species specific, narrow spectrum insecticidal applications
- (1) Adenoviruses
 - (2) Nucleopolyhedrosis viruses
 - (3) Retroviruses
 - (4) Trichoderma

MH0109

15. Which of the following is one of the advantage of application of viruses as bioinsecticides
- (1) They are less effective
 - (2) They are host specific
 - (3) They are costly
 - (4) They can not obtain easily

MH0110

16. In which of the following conditions use of baculoviruses is desirable
- (1) When they are used as part of IPM
 - (2) When an ecologically sensitive area is being treated
 - (3) When beneficial insects are being conserved
 - (4) All of the above

MH0111

17. Use of biofertilizer is the part of

- (1) Inorganic farming
- (2) Organic farming
- (3) Energy cropping
- (4) Energy plantation

MH0112

18. Members of which of the following fungal genus mainly participate in the mycorrhiza formation

- (1) *Azotobacter*
- (2) *Fusarium*
- (3) *Rhizopus*
- (4) *Glomus*

MH0113

19. Which of the following is not an advantage of mycorrhiza

- (1) Phosphorus absorption
- (2) Resistance to root borne pathogens
- (3) Nitrogen fixation
- (4) Tolerance to salinity and draught

MH0114

20. Cultivation of which of the following crop plant specially get benefitted by application of cyanobacteria

- (1) Maize
- (2) legumes
- (3) Wheat
- (4) Rice

MH0115

EXERCISE-III

ANSWER KEY

Que.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Ans.	4	2	3	4	2	4	2	2	1	3	1	4	1	2	2	4	2	4	3	4