

Sadhu Vaswani College ,Bairagarh, Bhopal
B.Sc.I Year Annual Exam-Model Question Paper

Session 2023-24

Paper- Microbiology- Minor/Elective

Microbial Techniques

Time Allowed-Three Hours

Max.Marks:75

Mini. Marks-25

Note-Attempt all questions

Section-‘ A’

Objective Type Questions

Choose correct one-

3x2=6

I. Compound Microscope was discovered by

- | | |
|----------------------------|------------------|
| (a) Antony van Leuwen hock | (b)Louis Pasteur |
| (b) Jonsan and Hans | (d)None of these |

II. Direct Microscopic count can be done with the aid of

- | | |
|--------------------|----------------------|
| (a)Neuberg Chamber | (b) Anarobic Chamber |
| (c) Mineral Oil | (d) Olive Oil |

III.Chemical used in method of Sterlization

- | | |
|-------------|------------------|
| (a)Phenol | (b)Alcohol |
| (c)Halogens | (c) All of above |

Section-‘B’

Short answer type questions

4x9=36

Note:- There are six questions in section-B.Attempt any four

Q.2. What is microscope ,Explain different types of lenses used in microscope

With their uses.

Q.3. What is dye and stains, Explain the chromospheres and auxochrome concept with examples.

Q.4. Explain the nutritional requirements of bacteria.

Q.5. Define medium. What is the role of peptone, NaCl and Agar in the medium.

Q.6. Explain isolation of bacteria by streak plate technique and spread plate technique.

Q.7. Define sterilization. Explain the uses of moist heat to control microorganisms.

Section 'C'-Long answer type questions 2x14=28

There are four questions in section C. Attempt any two questions

Q.8. Define.....2 marks each

1. Microscope
2. Objective lens
3. Bright field microscope
4. Pure Culture
5. Magnification
6. Leuco dyes

Q.9. Explain use of enzyme production for identification of organisms.

Q.10. What is mordant, How it is classified, Explain mechanism of action with suitable example.

Sadhu Vaswani College ,Bairagarh, Bhopal
B.Sc.I Year Annual Exam-Model Question Paper
Session 2023-24
Biotechnology
Microbiology --Minor/Elective

Time Allowed-Three Hours

Maximum Marks-70

Minimum Marks-25

Section-‘A’-Objective type Questions

Q.1.Choose correct options

3X2=6

I.Scientist famous for classification of Bacteria

- (a) Ivanowsky (b) Bergey
(c) Leeuwenhock (d) Louis Pasteur

II. Who discovered Virus

- (a) Edward Jenner (b) Leeuwenhock
(b) Beijennck (d) Ivanowsky

III. Fugi growing on dung are

- (a)Autotrophous (b) Hetrotrophus
(c) Hydrotrophus (d) Saprophytic

Section-‘B’

Short answer type questions

4x9=36

Note:- There are six questions in section-B.Attempt any four

Q.2.Explain classification of Bacteria.

Q.3.Explain Transformation in Bacteria.

Q.4.Explain mycoplasma structure with diagram.

Q.5.Explain any two methods used for measurement of microbial growth.

Q.6.Describe fermenter and its mechanisam.

Section 'C'-Long answer type questions 2x14=28

There are four questions in section C. Attempt any two questions

Q.7. Describe cell structure with labelled diagram

Q.8. Describe Quantification of microbial growth

Q.9. Describe chemicals used in control of microbes and their applications

Q.10. Describe gram positive and negative staining

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B.Sc.I Year Annual Exam-Model Question Paper

Session 2023-24

BOTANY

Major I-Applied Botany

Time Allowed-Three Hour

Maximum Marks-70

Minimum Marks-25

Section-‘A’-Objective type Questions

Q.1.Choose correct options

3X2=6

1.Father of Botany is

(a) Carolus Linnaeus

(b)Theophrastus

(c) John Ray

(d) Robert Hook

2.Deasease caused due to water pollution

(a) Malaria

(b)Diabetes

(c) Jaundice

(d) Viral Fever

3. Botanical name of Amla is

(a) Aloe barbedensis

(b)Emblica officinalis

(c) Terminalia tomentosa

(d)Allium sativum

Section-‘B’

Short answer type questions

4x9=36

Note:- There are six questions in section-B.Attempt any four

Q2.What are Pollutants

Q3.What is Phytoremediation

Q4.Explain Organogenesis

Q5.Describe types of Plasmids

Q6.Describe Interferon.

Section 'C'-Long answer type questions 2x14=28

There are four questions in section C.Attempt any two question

Q.7 Write an essay on Environmental Pollution

Q.8 Describe the role of Computer inmodern Agriculture.

Q.9 Write down Botanical name, family and economic importance of

i.) Ashwagandha

ii) Tulsi

iii) Neem

iv) Giloy

Q.10 Explain Recombinant DNA Technique

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B.Sc.I Year Annual Exam-Model Question Paper

Session 2023-24

BOTANY

Major II- Basic Botany

Time Allowed-Three Hours

Maximum Marks-70

Minimum Marks-25

Section- 'A'-Objective type Questions

Q.1.Choose correct options

3X2=6

I.Father of Taxonomy is

(a) Theophrastus

(b) Carolus Linnaeus

(c) Varahmihir

(d) A.P.de Candole

II.Pitcher Plant is modification of

(a) Stem

(b) Leaf

(c) Root

(d) Flower

III.In which stage duplication of DNA takes place

(a) Prophase

(b)Metaphase

(b) Interphase

(d)Anaphase

Section- 'B'

Short answer type questions

4x9=36

Note:- There are six questions in section-B.Attempt any four

Q.2 Describe Morphological Characters of Fungi

Q.3 Describe Verticillaster inflorescence

Q.4 Give the example of the following fruits

i.) Hesperidium (ii) Berry (iii) Balausta (iv) Drupe

Q.5 Describe structure and function of nucleus

Q.6 Describe nutrition in Fungi

Section 'C'-Long answer type questions 2x14=28

There are four questions in section C. Attempt any two question

Q.7. Describe Alternation of Generations in Algae

Q.8 Describe Life Cycle of Riccia with diagrams

Q.9 Describe different types of Stellar Organization

Q.10 Describe the process of Conjugation in Bacteria with diagram

Sadhu Vaswani Autonomous College ,Bairagarh, Bhopal

B.Sc.II Year Annual Exam-Model Question Paper

Session 2023-24

BOTANY

Major I- Plant Anatomy and Embryology

Time Allowed-Three Hours

Maximum Marks-70

Minimum Marks-25

Section-‘A’-Objective type Questions

Q.1.Choose correct options

3X2=6

I.Cortical Vascular Bundals are present in

(a) Boerhaavia

(b) Nyctanthus

(c) Bignonia

(d) Dracaena

II.Who among the following is a scientist of Indian Embryology

(a) Prof.B.M. Johari

(b) Prof P. Maheshwari

(c) Prof.N Rangaswamy

(d) Prof.C. Sehgal

III.Embryo develops from

(a) Egg

(b) Zygote

(b) Embryo Sac

(d) Antipodal Cell

Section-‘B’

Short answer type questions

4x9=36

Note:- There are six questions in section-B.Attempt any four

Q.2 Define Tissue and their types

Q.3Explain Dendrochronology

Q.4Explain Microsporogenesis

Q.5 Describe types of pollination

Q.6 Explain Apomixis

Section 'C'-Long answer type questions 2x14=28

There are four questions in section C. Attempt any two question

Q.7 Explain Tunica Corpus Theory of shoot apex development

Q.8 Differentiate between internal structure of monocot and dicot stem with diagram

Q.9 Describe Secondary growth in dicot stem

Q.10 Describe the structure and development of female gametophyte

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B.Sc.II Year Annual Exam-Model Question Paper

Session 2023-24

BOTANY

Major II- Industrial Botany

Time Allowed-Three Hours

Maximum Marks-70

Minimum Marks-25

Section- 'A'-Objective type Questions

Q.1.Choose correct options

3X2=6

I.Botanical Name of Sal is

(a) *Shoria robusta*

(b) *Tactona grandis*

(c) *Acacia nilotica*

(d) *Azadiracta indica*

II.Botanical name of Rice is

(a) *Oryza sativa*

(b) *Zea mays*

(b) *Triticum vulgure*

(c) *Brassica campastris*

III.The maximum loan amount that can be availed under the scheme PMMY is

(a) 5 lakh

(b) 10 lakh

(b) 50 Thousand

(d) 1 lakh

Section- 'B'

Short answer type questions

4x9=36

Note:- There are six questions in section-B.Attempt any four

Q.2Explain Sap wood and Heart wood

Q.3 Write down Botanical name, family and characters of palash leaves

Q.4 Explain the extraction process of neem oil

Q.5 Write down short note on natural colours

Q.6.Describe the process of fermentation

Section 'C'-Long answer type questions 2x14=28

There are four questions in section C. Attempt any two question

Q.7 Describe Timber yielding plants of India and their uses

Q.8 Describe the processing method of Tea

Q.8 Write an essay on perfume industry in India

Q.9 Explain the process edible oil processing

Q.10 Write an essay on sugar industry of India