**QUESTION BANK- 2024 to 2025**

**B-104**

**B.Sc. MICROBIOLOGY (I) YEAR**

**MYCOLOGY, PHYCOLOGY AND PROTOZOOLOGY**

Q1. Describe in detail general characteristics of fungi. (CO1)

Q2. Give the scheme of classification of fungi as proposed by Alexopolus and mention the chief characteristics of each group. (CO1)

Q3. Write short notes on the following: (CO5)

1. Protozoa
2. Nematodes

Q4. Write short notes on the following: (CO4)

1. *Oedogonium*
2. *Volvox*
3. *Vaucheria*
4. *Chlamydomonas*

Q5. Give detailed account on economic importance of fungi. (CO2)

Q6. Write short notes on the following: (CO2)

1. *Alternaria*
2. *Mucor*
3. *Rhizopus*
4. *Aspergillus*

Q7. Attempt the following: (CO2 and CO4)

1. Importance of Protozoa and Nematodes
2. Cystocarp of *Polysiphonia*
3. Important characteristics of *Synchytrium*
4. Economic Importance of algae
5. Asexual reproduction in fungi
6. Gongrosira stage of *Vaucheria*
7. Life cycle of *Puccinia*

Q8. Give an account of general characteristics of algae and its economic importance. (CO3)

Q9. Write short notes on: (CO2 and CO4)

1. Coenobium
2. Sexual reproduction in *Vaucheria*
3. *Penicillium*

Q10. Write in detail about the thallus organization in fungi. (CO1)

Q11. Define the following terms: (CO2 and CO4)

1. Algal Bloom
2. Coenobium
3. Mycorrhiza

Q12. Give an illustrated account of thallic structure and reproduction in *Rhizopus.* (CO2)

Q13. Give a detailed account of asexual reproduction in fungi. (CO1)

Q1. Describe in detail the differential characteristics of *Chlamydomonas* and *Volvox.*(CO4)

Q 15. Describe major characteristics required for the classification of algae. (CO3)

Q16. Write down the names of five diseases caused by fungi and their causal organisms and symptoms. (CO2)

Q17. What is haustorium? Describe its function. (CO1)

Q18. Give an illustrated account of methods of asexual reproduction in fungi. (CO1)

Q19. What do you mean by holocarpic and eucarpic fungi? (CO1)

Q20. Write a note on the ultrastucture of a fungal cell. (CO1)

Q21. Give an outline of Ainsworth classification upto the level of classes, mentioning at least one characteristic feature of each class. (CO1)

Q22. Give an outline of classification of Eumycota as proposed by Ainsworth (1973). (CO1)

Q23. Describe life-history of *Synchytrium endobioticum.* (CO2)

Q24. What causes wart disease of potato? Describe the general symptoms of this disease. How this disease can be controlled? (CO2)

Q25. Write any five characteristic features of Oomycetes. (CO2)

Q26. Describe in brief the sexual reproduction in *Rhizopus stolonifer.*(CO2)

Q27. Give any four major differences between *Rhizopus* and *Mucor.* (CO2)

Q28. Write an essay on economic importance of fungi. (CO2)

Q29. Write a brief note on economic importance of *Aspergillus.* (CO2)

Q30. Write at least three differences between *Penicillium* and *Aspergillus.* (CO2)

Q31. Draw a pictorial life cycle of *Ustilago.*(CO2)

Q32. Draw the life cycle of *Puccinia graminis.*(CO2)

Q33. Give a detailed account of positive aspects of fungi. (CO2)

Q34. Write an essay on economic importance of algae. (CO3)

Q35. Discuss algal classification in detail. (CO3)

Q36. Discuss the general characteristics of algae. (CO3)

Q37. Draw the structure of the following: (a) *Volvox* (b) *Chlamydomonas* (c) *Cladophora* (CO4)

Q38. Discuss the following: (a) Gongrosira stage (b) Palmella stage (CO4)

Q39. Differentiate between Nematodes and Protozoa. (CO5)

Q40. Name any five diseases of plants caused by fungi. (CO2)

Q41. Explain the following terms: (a) Facultative saprophytic fungi (b) Coenobium (c) Algal Bloom (d) Dwarf male (e) Pseudopodium (CO4) **(June-2022)**

Q42. Write notes on the following: (a) Classification of fungi (b) Asexual reproduction in fungi (CO1)**(June-2022)**

Q43. Describe the alternation of generation in *Polysiphonia.* (CO4) **(June-2022)**

Q44. Give a detailed account on economic importance of fungi. (CO2) **(June-2022)**

Q45. Write notes on the following: (a) Cladophora (b) Oedogonium (CO4) **(June-2022)**

Q46. Describe the general characters of algae and also differentiate between algae and fungi. (CO2 and CO4) **(June-2022)**

Q47. Write an essay on the economic importance of algae. (CO3) **(June-2022)**

Q48. Describe the life cycle of *Puccinia graminis* (CO2) **(June-2022)**

Q49.Write notes on the following: (a) classification of protozoa (b) economic importance of nematodes. (CO5) **(June-2022)**

Q50. Draw only labeled diagrams of the following: (a) *Chlamydomonas* (b)*Rhizopus* (c) *Aspergillus* (d) *Volvox* (e) *Vaucheria* ( CO2 and CO4) **(June-2022)**

Q51. (a) Explain the siphonaceous form in algae (CO2 and CO4) **(June-2023)**

(b) Define symbiotic fungi.

© What is nannandrous form?

(d)What is singlecell protein?

(e) Define agar agar

Q52. Write short notes on the following: (CO2 and CO4) **(June-2023)**

1. *Chlamydomonas*
2. *Mucor*
3. *Synchytrium*
4. *Cladophora*

Q53. Describe the thallus organisation in algae. (CO3) **(June-2023)**

Q54.Write noteson the following: (CO5)**(June-2023)**

1. Classification of protozoa
2. Economic importance of nematodes

Q55. Give an outline of the classification of algae as proposed by Fritsch and also give some important characters of each class. (CO3) **(June-2023)**

Q56. Write an essay on alteration of generation in algae with suitable examples. (CO3)**(June-2023)**

Q57. Write notes on the following: (CO2) **(June-2023)**

1. *Puccinia*
2. *Albugo*

Q58. Give detailed account on the economic importance of fungi or algae. (CO2 and CO3) **(June-2023)**

Q59. Write notes on the following: (CO1 and CO3) **(June-2023)**

1. Sexual reproduction in fungi
2. Asexual reproduction in algae

Q60. Explain the following in brief: (i) Obligate parasite; (ii) Alternate host; (iii) Cleistothecium; (iv) Zoosporangium (CO1) **(June-2024)**

Q61. Explain about red rust disease of mango. (CO2) **(June-2024)**

Q61. Write short notes on the following: (a) Lichens; (ii) Mycorrhizae (CO2 and CO3) **(June-2024)**

Q62. Describe the general characteristics of nematodes with the help of suitable diagram.(CO5)**(June-2024)**

Q63. Write the classification of fungi according to Alexopolous. (CO2) **(June-2024)**

Q64. Describe the life cycle of *Phytophthora* with suitable examples. (CO2) **(June-2024)**

Q65. Write the economic importance of protozoa with suitable examples. (CO2) **(June-2024)**

