BSc. Botany (H) Semester-II Paper- CC-03

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Question Bank

Multiple choice Questions

- 1. All fungi are
 - (a) symbionts (b) Parasite (c) Saprophytes (d) Heterotrophs
- 2. Penicillin was discovered by
 - (a) Alexander Flemming (b) A.F. Blakeslee (c) Elie Metchnikoff (d) Felix Dujardin
- 3. Green mould is the common name for
 - (a) Neurospora (b) Mucor (c) Penicillin (d) Saccharomyces
- 4. Litmus is a natural dye obtained from
 - a) Algae (b) Fungi (c) Lichen (d) Bacteria
- 5. The science of study of fungi is
 - (a) Phycology (b) Mycology (c) Plant pathology (d) Morphology
- 6. The group of fungi where sexual reproduction is absent, is known as
 - (a) Ascomycetes (b) Basidiomycetes (c) Deuteromycetes (d) Oomycetes
- 7. The common stored food in fungi is
 - (a) Fat (b) Starch (c) Glycogen (d) Protein
- 8. Bread mold is the common name of
 - (a) Rhizopus stolonifer (b) Mucor mucedo (c) Pilobolus (d) Ulharomyces
- 9. Late blight of potato is caused by
 - (a) Pythium debarynum (b) Albugo candida (c) Phytothora (d) Allomyces
- 10. The Cell wall of fungi is made up of
 - (a) Cellulose (b) pectin (c) glycogen (d) fungal cellulose
- 11. White rust of Crucifers is caused by
 - (a) Pythium (b) Albugo candida (c) phytothora infestene (d) Alternaria
- 12. The Acocarps are the characteristic features of
 - (a) Phycomycetes (b) Ascomycetes (c) Deuteromycetes (d) Basidomycetes
- 13. Liver cancer in human and poultry is caused by
 - (a) Aspergillus niger (b) Aspergillus flavus (c) Aspergillus terrus (d) Aspergillus oryzae
- 14. Apothecium of peziza is
 - (a) Underground and persistent (b) Aerial and short lived (c) Aerial and persistent
 - (d) Underground and short lived

15. The number of basidiospores produced on each basidium is (a) 4 (b) 8 (c) 6 (d) 2 16. The number of ascospores produced on each ascus is (a) 4 (b) 8 (c) 6 (d) 2 17. The fungus which is important for its use in genetic studies is (a) Penicillium (b) Neurospora (c) Rhizopus (d) Aspergillus 18. The fruit body in Agaricus is made up of (a) Secondary mycelium (b) Primary mycellium (c) Diploid mycellium (d) Tertiary mycelium 19. Lichen is the association of an alga and a (a) Fungus (b) Bacteria (c) Virus (d) Bryophyte 20. The mode of life in Lichen thallus (a) Saprophytic (b) Parasitic (c) Symbiotic (d) Epiphytic 21. The ______ are necrotic lesions in the cortical tissues of stems, leaves and fruits which often develop corky growths. (a) Blast (b) Blight (c) Cankers (d) Scald 22. Black or stem rust of wheat is caused by_ (a) Puccinia graminis tritici (b) Phytophthera infestans (c) Ustilogo tritici (d) None of these 23. Edible fungi are known as (a) Mushrooms (b) toad stools (c) Fungi (d) Smut 24. When a fungus need only one host to complete its life cycle the fungus is known as (a) Autoecious (b) Homothallic (c) Heteroecious (d) Heterothallic 25. Basipetal arrangement have sporangia (a) Older at tip, younger at base (b) Older at base, younger at tip (c) Both a and b (d) None of these 26. Father of Indian Mycology is (a) Sir J. Butler (b) J. Sen Gupta (c) De-Barry (d) Alexandar Flemming **Answer keys-**1.(d) 2.(a) 3.(c) 4.(c) 5.(b) 6.(c) 7.(c) 8.(a) 9.(c) 10.(d) 11.(b) 12.(b) 13.(a) 14.(b) 15.(a) 16.(b) 17.(b) 18.(a) 19.(a) 20.(c) 21.(c) 22.(a) 23.(a) 24.(a) 25.(a) 26.(a) **Short Answer Questions**

(a) Nutrition in fungi. (b) Symbiosis (c) Sclerotium (d) Rhizomorps (e) Ascus (f) Obligate parasite (g) Uredinial stage of Puccinia (h) Telial stage of Puccinia (i) T.M.V. (j) Citrus canker (k) Early blight of potato (l) Necrosis (m) Smuts (n) Pathogen (o) Infection (p) Immunity (q) Sclerotium (r) Basidium (s) Gills of mushroom (t) Coridium (u) Hanstorium (v) Vegetative structure of Rhizopus (w) Asexual reproduction of Rhizopus (x) Cleistothesium (y) Asexual reproduction of Neurospora (z) L.S. Peziza apothecium (1) Structure of Pileus Agaricus (2) Reproduction of Agaricus (3) Fruiting body of Agaricus

Long Questions

- 1. Briefly describe the important characteristic of fungi.
- 2. Give an illustrated account of the life cycle of Synchitrium.
- 3. Write an essay on the economic importance of fungi.
- 4. Discuss the role played by fungi in agriculture, industry and medicine.
- 5. Describe the role of fungi in maintaining the soil fertility.
- 6. What are the harmful effect of fungi/ give a brief account.
- 7. Describe the role of fungi in biological control.
- 8. Describe the structure of mycelium and asexual reproduction in phytophthora infestans.
- 9. Give an illustrated account of life-history of phytophthora.
- 10. Describe the structure of mycelium and asexual reproduction of Albugo.
- 11. With the help of suitable diagrams, describe the sexual reproduction of Albugo.
- 12. With diagram, describe the life history of Rhizopus.
- 13. Briefly describe the important characteristic features of Ascomycotina.
- 14. Describe the methods of asexual reproduction in Aspergillus.
- 15. Describe the habit, habitat and economic importance of Neurospora.
- 16. Describe the method of reproduction and propagation of Neurospora.
- 17. Define the term Ascus. Describe the process of Ascospores formation in any fungus you have studied.
- 18. Give the systematic position, habit and habitat of Peziza. Describe the apothecium in details with the help of diagrams.
- 19. Give a graphic representation of life cycle of Peziza.
- 20. Draw a well labelled diagram of V.S. of Ascocarp of Peziza.
- 21. Give an illustrated account of the structure, reproduction and economic importance of Agaricus.
- 22. Describe sexual reproduction and development of fructification in Agaricus.
- 23. Give an account of life-cycle of Puccinia on wheat plants.
- 24. Discuss the annual recurrence of wheat rust in India. Also suggest its control measures.
- 25. Describe the symptoms, disease cycle and control measures of stem rust of wheat.
- 26. Describe the symptoms, disease cycle and control measures of early blight of potato.
- 27. What are the imperfect fungi? Describe the conidiophores and conidia of Alterneria.
- 28. Give an account of the habit, habitat and external morphological features of lichens.
- 29. Give an account of ecological and economic importance of lichens.
- 30. Give an account of sexual reproduction and development of fructification in the lichens.