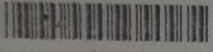


I B.Sc I SEMESTER BOTANY QUESTION PAPER



SN - 219

I Semester B.Sc. Examination, Nov./Dec. 2010
(Semester Scheme)
BOTANY (Paper - I)

Introduction to Microbiology, Viruses, Immunology, Bacteria,
Cyanobacteria and Phycology

Time : 3 Hours

Max. Marks : 60

- Instructions :* 1) Answer all Parts.
2) Write diagram wherever necessary.
3) Answer either in Kannada or English.

A. ಯಾವುದಾದರೂ ಆರು ಪ್ರಶ್ನೆಗಳಿಗೆ ಉತ್ತರಿಸಿ:

(6×2=12)

- 1) ವೈರಾಯಿಡ್‌ಗಳನ್ನು ವ್ಯಾಖ್ಯಾನಿಸಿ.
- 2) ಸಾರಜನಕ ಸ್ಥಿರೀಕರಣಗೊಳಿಸುವ ಎರಡು ಬ್ಯಾಕ್ಟೀರಿಯಾಗಳನ್ನು ಹೆಸರಿಸಿ.
- 3) ಎಕ್ಸಿನೇಟ್‌ಗಳೆಂದರೇನು ?
- 4) ಪ್ಲಾಕಿಯ ಘಟ್ಟ ಎಂದರೇನು ?
- 5) ನಾನಾಂಡ್ರಿಯನ್ ಸಸ್ಯ ಎಂದರೇನು ?
- 6) ಪ್ರತಿಜನ್ಯಗಳೆಂದರೇನು ?
- 7) ಪ್ಲಾಸ್ಮಿಡ್‌ಗಳೆಂದರೇನು ?
- 8) ವಾಟರ್ ಬ್ಲೂಮ್ಸ್ ಎಂದರೇನು ?

A. Answer any six of the following :

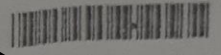
(6×2=12)

- 1) Define viroids.
- 2) Name any two Nitrogen fixing Bacteria.
- 3) What are Akinetes ?
- 4) What is Plaque stage ?
- 5) What is Nanandrian plant ?
- 6) What are Antigens ?
- 7) What are plasmids ?
- 8) Define water blooms.

P.T.O.

I B.Sc I SEMESTER BOTANY QUESTION PAPER

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B. ಯಾವುದಾದರೂ ಆರಕ್ಕೆ ಟಿಪ್ಪಣಿ ಬರೆಯಿರಿ :

(6×4=24)

- 1) ಇಮ್ಯುನೋಗ್ಲೂಬುಲಿನ್.
- 2) ಜೈವಿಕ ಗೊಬ್ಬರಗಳು.
- 3) ಆಹಾರವಾಗಿ ಶೈವಲ್ಯಗಳು.
- 4) ಪ್ಲೂರಿಲಾಕ್ಯುಲರ್ ಸ್ಪೋರಾಂಜಿಯ.
- 5) ವೈರಸ್‌ಗಳ ಸಜೀವಿ ಮತ್ತು ನಿರ್ಜೀವಿ ಲಕ್ಷಣಗಳನ್ನು ತಿಳಿಸಿ.
- 6) ಸಿಸ್ಟೋಕಾರ್ಪ್
- 7) ಸೀನೊಬಿಯಂ
- 8) ಸಯನೊಬ್ಯಾಕ್ಟೀರಿಯಾಗಳಲ್ಲಿ ಜೀವಕೋಶ ರಚನೆ.

B. Write notes on any six of the following :

(6×4=24)

- 1) Immunoglobulin. ●
- 2) Biofertilizers.
- 3) Algae as food.
- 4) Plurilocular sporangia.
- 5) Mention the living and nonliving characters of viruses.
- 6) Cystocarp.
- 7) Coenobium.
- 8) Cell structure of cyanobacteria.

C. ಯಾವುದಾದರೂ ಮೂರಕ್ಕೆ ಸವಾಲ್‌ಗಳಾಗಿ ಉತ್ತರಿಸಿ :

(8×3=24)

- 1) ಗಂಧದ ಸ್ಪೈಕ್ ರೋಗ.
- 2) ಬ್ಯಾಕ್ಟೀರಿಯಾಗಳ ಆರ್ಥಿಕ ಮಹತ್ವ.
- 3) ಕ್ಯಾರಾದಲ್ಲಿನ ಲೈಂಗಿಕಾಂಗಗಳು.
- 4) ಹೆಚ್.ಐ.ವಿ. ಯು ಆತೀ ಸೂಕ್ಷ್ಮ ರಚನೆ.
- 5) ಕ್ಲಾಮಿಡೋಮೋನಾಸ್‌ನಲ್ಲಿ ಲೈಂಗಿಕ ರೀತಿಯ ವಂಶಾಭಿವೃದ್ಧಿ.

C. Give detailed account of any three of the following :

(8×3=24)

- 1) Sandal spike disease.
- 2) Economic importance of Bacteria.
- 3) Sex organs of chara.
- 4) Ultrastructure of HIV.
- 5) Sexual reproduction in chlamydomonas.

I B.Sc I SEMESTER BOTANY QUESTION PAPER



NS - 321

I Semester B.Sc. Examination, Nov./Dec. 2016
(CBCS) (2014-15 and Onwards) (F+R)
BOTANY (Paper - I)

Introduction to Microbiology, Viruses, Bacteria, Cyanobacteria and
Phycology

Time : 3 Hours

Max. Marks : 70

Instructions : 1) Answer all questions.
2) Draw diagrams and write examples wherever necessary.

PART - A

A. Define/explain any ten of the following in two or three sentences : (10×2=20)

- 1) Mention the postulates of Robert Koch
- 2) Define hybridoma technology.
- 3) What are cap cells ?
- 4) Name the sex organs of chara. *Nostoc - female sex organ
Gyrodium - male sex organ*
- 5) What are the predominant pigments of cyanobacteria ?
- 6) Draw a neat labelled diagram of chlamydomonas cell.
- 7) What are heterocysts and mention its significance ?
- 8) Name any two antibiotics derived from bacteria.
- 9) What are antigens ?
- 10) Give the importance of Ti plasmid.
- 11) Mention the significances of Environmental microbiology.
- 12) Define conjugation.

PART - B

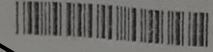
B. Write critical notes on any four of the following : (4×5=20)

- 13) Biopesticides.
- 14) Watermel. - *hydrodictyon*
- 15) Yellow mosaic of beans.
- 16) Endospore.
- 17) Sexual reproduction in algae.
- 18) Branching in scytonema.

P.T.O.

I B.Sc I SEMESTER BOTANY QUESTION PAPER

NS - 321



PART - C

- C. Give a comprehensive account of **any three** of the following: (3×10=30)
- 19) Macrandrous type of reproduction in oedogonium.
 - 20) Give an account of serial dilution techniques for isolation of bacteria.
 - 21) Explain cystocarp and add a note on tetrasporophyte in polysiphonia.
 - 22) Give the economic importance of cyanobacteria.
 - 23) Write the general characters of Mycoplasmas and explain the disease it causes.

RANJITH KUMAR H T

I B.Sc I SEMESTER BOTANY QUESTION PAPER

61128

First Semester B.Sc. Degree Examination, December 2018

(CBCS Scheme – Freshers and Repeaters – 2014-15 and onwards)

Botany

**Paper I – INTRODUCTION TO MICROBIOLOGY, VIRUSES, BACTERIA,
CYANOBACTERIA AND PHYCOLOGY**

Time : 3 Hours]

[Max. Marks : 70

Instructions to Candidates :

- 1) *Answer all Parts.*
- 2) *Draw diagrams and write examples wherever necessary.*

PART – A

- I. Define/Explain any **TEN** of the following in two or three sentences : **(10 × 2 = 20)**
1. Mention the contributions of Robert Koch.
 2. What are Prions?
 3. Write any two control measures of viral diseases.
 4. What are Mesosomes?
 5. Differentiate between Autotrophs and Chemotrophs.
 6. What is Binary Fission?
 7. Define SCP.
 8. Name any two pigments in Cyanophyceae.
 9. What is Heterocyst?
 10. What are Algal blooms?
 11. Differentiate between Isogamy and Anisogamy.
 12. Draw a neat labelled diagram of Chlamydomonas.

I B.Sc I SEMESTER BOTANY QUESTION PAPER

61128

PART - B

II. Write critical notes of any **FOUR** of the following : (4 × 5 = 20)

13. Yellow Bean Mosaic
14. Biofertilizers
15. General characters of Mycoplasma
16. Transduction in Bacteria
17. Structure of Anabaena.
18. Male and Female conceptacles of Sargassum

PART - C

III. Give a comprehensive account of any **THREE** of the following : (3 × 10 = 30)

19. Explain culture media and serial dilution technique.
20. Give the economic importance of Bacteria
21. Write the thallus structure and branching in Scytonema.
22. Explain in detail the Macrandrous type of sexual reproduction in Oedogonium.
23. Give an account on sex organs of Chara.