

PGIS-N-1030 B-18
M.Sc. I Semester Degree Examination
BOTANY
Algae, Fungi Bacteria and Viruses
Paper - HCT 1.1
(New)

Time : 3 Hours

Maximum Marks : 80

Instructions to Candidates:

- 1) Answer any **five** questions.
 - 2) **Question No. 1** is compulsory.
1. Answer in one or two sentences. (10×2=20)
- a) M.O.P. Iyengar.
 - b) Akinets.
 - c) Fucoxanthin.
 - d) P.A. Micheli.
 - e) Perithecium.
 - f) Coelomycetes.
 - g) Sexduction.
 - h) Xanthomonas campestris.
 - i) David Baltimore.
 - j) Virion.
2. Write an account on types of algal pigments and their utility in algal classification. (15)
3. Discuss the classification of the subdivision Ascomycotina with salient features. (15)
4. Explain the role of soil bacteria in increasing the agriculture soil fertility. (15)
5. Discuss in detail the structure and multiplication of bacteriophage (15)
6. Answer any **three** of the following. (3×5=15)
- a) Fritschiella.
 - b) Plasmodiophora brassicae.
 - c) Citrus canker.
 - d) ICTV.

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PGIS-N-1031 B-18
M.Sc. I Semester Degree Examination
BOTANY
Bryophytes Pteridophytes and Gymnosperms
Paper - HCT 1.2
(New)

Time : 3 Hours

Maximum Marks : 80

Instructions to Candidates:

- 1) *Answer any five questions.*
- 2) *Question No. 1 is compulsory.*

1. Answer in one or two sentences.

(10×2=20)

- a) Elaterophore.
- b) Annulus.
- c) Apophysis.
- d) Rhizophore.
- e) Ligule.
- f) Rhynia.
- g) Telome.
- h) Haplostele.
- i) Winged pollen.
- j) Transfusion tissue.

2. Compare the structure and development of the sporophyte of Sphagnum and Polytrichum. (15)

3. Write a detailed account on psilophytales and calamitales. (15)

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4. Give a detailed account on the reproductive structures of Salvinia and Marsilea. (15)
5. Compare the morphology and anatomical features of Cycas and Zamia. (15)
6. Write short notes on any three of the following: (3×5=15)
- Pentoxylales.
 - Endangered and endemic taxa of gymnosperms.
 - Economic importance of Bryophytes.
 - Heterospory.
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PGIS-O-1032 B-18
M.Sc. I - Semester Degree Examination
BOTANY
Plant Systematics and Phytogeography
Paper - HCT 1.3
(Old)

Time : 3 Hours

Maximum Marks : 80

Instructions to Candidates:

1. Answer any **Five** questions.
2. **Q.No. 1** is compulsory.

1. Answer in **one or two** sentences :

- a) Herbarium
- b) Cronquist
- c) ICBN
- d) Laurasia
- e) Interpetiolar stipules
- f) Pollinia
- g) Isotype
- h) Thyrsus
- i) Arctic
- j) Endangered Species

(10×2=20)

2. Discuss thorne system of classification. Add a note on its Merits and Demerits. (15)
3. Write an account on the floristic study of India (15)
4. Salient features of Magnoliaceae & Rubiaceae (15)
5. Write an account on the phytogeographical regions of the world. (15)
6. Write any **three** of the following : (3×5=15)
 - a) Gondwanaland
 - b) Barriers for plant Migration
 - c) Priority of publication
 - d) B.S.I.

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PGIS-O-1033 B-18
M.Sc. I Semester Degree Examination
BOTANY
Biodiversity and Conservation
Paper - SCT 1.4.1
(Old)

Time : 3 Hours

Maximum Marks : 80

Instructions to Candidates:

1. *Answer any Five questions*
2. *Q.No. 1 is compulsory.*

1. Answer in one or two sentences :

- a) Ecosystem diversity. (10×2=20)
- b) Sustainable development
- c) Sacred groves
- d) IVCN
- e) National biodiversity Authority
- f) Agenda 21
- g) National parks
- h) Sundarbans
- i) Red Data book
- j) Endangered species.

2. Explain varilev's centers of origin of crop plants. (15)

3. Explain Ex-situ conservation Strategies. (15)

4. Discuss legal aspects of biodiversity conservation in India. (15)

5. Discuss the importance of Environmental Impact assessment for sustainable development. (15)

6. Write short notes on any three of the following : (3×5=15)

- a) Herbal gardens
- b) Habitat loss and Fragmentation
- c) Biosphere reserves in India
- d) Biodiversity Hotspots of India.

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M.Sc. I Semester Degree Examination
BOTANY
Biodiversity and Conservation
Paper - SCT 1.4.1
(New)

Time : 3 Hours

Maximum Marks : 80

Instructions to Candidates:

- 1) *Answer any five questions.*
- 2) *Question No. 1 is compulsory.*

1. Answer in one or two sentences. (10×2=20)
 - a) Genetic biodiversity.
 - b) Endangered plants.
 - c) Medicinal gardens.
 - d) Vavilov.
 - e) Germplasm.
 - f) Biodiversity Hot Spots.
 - g) Latitudinal gradient.
 - h) UNEP.
 - i) Co-extinction.
 - j) IUCN.
2. Write in detail legal aspects of biodiversity conservation and add a note on future strategies with emphasis to India (15)
3. Enumerate the importance of environmental impact assessment and sustainable development in relation to biodiversity. (15)
4. Write in detail the approaches for conservation methods with suitable examples. (15)
5. Explain in detail the concept and importance of Biodiversity. (15)
6. Write a short note on any **three** of the following. (3×5=15)
 - a) Biodiversity and Agenda 21
 - b) Wild life sanctuaries.
 - c) Habitat loss.
 - d) Red Data Book.