

(4)

- (b) Explain the methods of pollution control and cleaner technologies in paper industries.
6. (a) Write an account on the use of biotech tools for biodiversity conservation.
- (b) Explain the Renewable sources of energy and fuel using microorganisms.
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Total Pages—4

M.Sc. —L.Sc.-IVS(743)

2019

Time : 2 hours

Full Marks : 40

Answer any four questions from any one Group as per your specialisation

The questions are of equal value

Candidates are required to answer in their own words as far as practicable

GROUP — A

(ENVIRONMENTAL BIOLOGY)

1. (a) Describe the concepts of stress and their significance.
- (b) Write an account on Bioassays, synergism and antagonism.
2. (a) Explain acclimation and acclimatisation.

- (b) Write an account on pollution in Indian Rivers.
3. (a) Describe the primary production and methods of measurements of primary production.
- (b) Explain the ecological efficiencies and production in different regions of the world.
4. (a) Write an account on wildlife conservation.
- (b) Enumerate afforestations and forest management.
5. (a) Describe the environmental management and monitoring.
- (b) Describe the environment protection laws.
6. (a) Write an account on the Biological control of pests.
- (b) Describe the methods of treatment of effluents of disilleries and paper industries.

GROUP – B

(BIOTECHNOLOGY)

1. (a) Describe the Restriction enzymes for cloning.
- (b) Write an account on the outline concepts of enzymology.
2. (a) Describe the blotting techniques and their applications.
- (b) Write an account on the principles and applications of PCRs.
3. (a) Describe the preparation and constituents of animal cell culture media.
- (b) Explain the methods of transfer of genes in animals.
4. (a) Write an account on the somaclonal variation and production of haploids.
- (b) Describe the process of protoplasts and anther culture.
5. (a) Describe the methods of isolation and culture of microorganisms.