

## HEI-003-1191003 Seat No. \_\_\_\_\_

## M. Sc. (Microbiology) (Sem. I) (CBCS) Examination

November / December - 2017

Micro - 103: Biodiversity & Biosystematics

Faculty Code: 003

Subject Code: 1191003

Time: 2 Hours] [Total Marks: 70

**Instructions**: (1) All questions are compulsory.

- Support your answers with suitable illustrations (2)where required.
- 1 Answer any **seven** : (2 marks each)

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- What is biodiversity? (a)
- Why biodiversity is important to us? (b)
- What is the correlation between the biodiversity and (c) biotechnology?
- How climate change and biodiversity are related? (d)
- What are the invasive species.? (e)
- Comment on akaryotes. (f)
- Enlist general features of fungi. (g)
- What are lichens? (h)
- Comment on the green protists. (i)
- What are the characteristics of mammals?
- 2 Answer any two of the following:

7x2=14

- Discuss basic concept of the biodiversity and highlight (a) its significance.
- (b) Discuss various factors which adversely affect the biodiversity.
- What are the principle and methods of the classification of plants? Discuss.

- 3 Answer the following: (7 marks each) 14
  - (a) Discuss Convention on Biological Diversity with respect to its function and significance.
  - (b) What are the principle and methods of microbial classification? Discuss.

## OR

- Write comments on: (7 marks each)
  - (a) Describe cyanobacteria with respect to their diversity and function.
  - (b) Write comments on ecotourism and biodiversity.
- 4 Answer the following: (7 marks each) 14
  - (a) What are the basic features of the fungi? Briefly describe different groups of the fungi.
  - (b) What is sustainable development? How does it relate to the conservation of biodiversity?
- 5 Write comments on any two of the followings: 14 (7 marks each)
  - (a) National Action Plan on Biodiversity
  - (b) Mycorrhizae
  - (c) Classification of Protists
  - (d) Characteristic features of amphibians, reptiles and birds.

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