PG Even Semester (CBCS) Exam., May—2017

MICROBIOLOGY

(4th Semester)

Course No. : MIBCC–401

(Soil and Environmental Microbiology)

Full Marks : 70
Pass Marks : 28

Time : 3 hours

The figures in the margin indicate full marks for the questions

Answer **five** questions, taking **one** from each Unit

UNIT—I

1. What are the major airborne diseases? Describe the role of aerosol in spread of infectious diseases. 14

2. Write notes on the following : 7+7=14

(a) Phyllasphere

(b) Impingement methods for assessment of air quality

UNIT—II

3. Explain the process of nodulation and nitrogen fixation in legume-rhizobia symbiosis. 14

4. Write a detailed note on different types of microbial interactions with the help of suitable examples. 14

UNIT—III

5. What are the benefits of using biopesticides over chemical pesticides? Describe different types of biopesticide. 14

6. Explain the process of mass production and methods of application of rhizobial inoculants. 14

UNIT—IV

7. Describe the diversity and functions of different microorganisms in marine ecosystems. 14

8. Write short notes on the following : 3½×4=14

(a) Eutrophication

(b) Food chain

(c) Biofilms

(d) Indicator organism

UNIT—V

9. Explain in detail the mechanism of litter decomposition by microorganisms. 14

10. Describe the role of microorganisms in decomposition of hydrocarbons and other xenobiotic compounds. 14

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