



AC-1367

M. Sc. (Sem. II) (Environmental Science) Examination

April / May – 2015

ENS - 202 : Biotechnology & Environmental
Health Safety

Time : 3 Hours]

[Total Marks : 70

Instructions :

(1)

नीचे दृष्टांतव \blackleftarrow निशान्नीवाणी विगतो क्तारवडी पर अवश्य लपवी.
Fillup strictly the details of \blackleftarrow signs on your answer book.

Name of the Examination :
M. SC. (SEM. II) (ENVIRONMENTAL SCIENCE)

Name of the Subject :
ENS - 202 : BIOTE. & ENVIR. HEALTH SAFETY

Subject Code No. : **1 3 6 7** Section No. (1, 2,.....): **Nil**

Seat No. :

Student's Signature

(2) The figures to the right indicate full mark of the question.

(3) Draw neat and labeled diagrams wherever necessary.

Q-1: Answer the following (Attempt Any Three). (18)

1. Describe the different types of biodiversity and its ecological significance.
2. Enlist and explain the various reasons of biodiversity loss in current era.
3. Discuss the role and function of IUCN and Red data book.
4. Define the PGPB. Discuss the role and importance of phosphate solubilizing bacteria.

Q-2: Answer the following (Attempt Any Three). (18)

- A. Define and discuss the various entomopathetic fungi with its limitation.
- B. Discuss the mechanisms of pesticide degradation
- C. Explain the degradation of lignin by fungi.
- D. What do you mean by bioleaching? How the process of bioleaching is carried out?

Q-3: Answer the following (Attempt Any Three). (18)

- A. Define and discuss the process of biodegradation, bioremediation and Co-metabolism.
- B. Describe the production and application of biosurfactant.
- C. Explain the microbial mediated deterioration of petroleum and leather.
- D. How the toxicants are eliminated from organisms?

Q-4: Write short notes (Attempt Any Two) (16)

- A. Describe the risk identification, allocation and mitigation strategies.
- B. How ISO 18000 is successful for occupational health and safety management systems?
- C. Write a note on factories act.
- D. Explain the correlation among safety, health and environment.