

D 71424

(Pages : 2)

Name.....

108

Reg. No.....

**THIRD SEMESTER M.Sc. DEGREE EXAMINATION, DECEMBER 2014**

(CUCSS)

Environmental Science

ES 3C 10—ENVIRONMENTAL BIOLOGY—III

Time : Three Hours

Maximum : 36 Weightage

I. Answer *all* questions. Each question carries 1 weightage :

- 1 What is denitrification process ?
- 2 What are methanogens ?
- 3 Define mineralization.
- 4 What is rhizosphere ?
- 5 Name two functions of Golgi complex.
- 6 What is reduction division ?
- 7 Define Polyploidy.
- 8 Give two examples of stem cells.
- 9 What is regeneration in animals ?
- 10 What is a poikilothermic animal ?
- 11 Name two hormones in stress response of animals.
- 12 What is cellular differentiation ?
- 13 What is the importance of Adenovirus ?
- 14 Define Symbiosis.

(14 × 1 = 14 weightage)

II. Answer any *seven* questions. Each question carries 2 weightage :

- 15 Write brief account of physiological functions of mitochondria.
- 16 What is Genetic code ? In what ways it is useful ?
- 17 Discuss briefly the effect of light on animals.
- 18 What are the impacts of pollutants on terrestrial organisms ?
- 19 Describe the process of sexual reproduction in fungi.
- 20 Give a brief account of bacteriophages and its significance.
- 21 Write briefly on the role of microbes in decomposition of organic matter.
- 22 Describe Photoperiodism with relevant examples.

Turn over

- 23 What are the growth regulation in plants ?  
24 Explain senescence and programmed cell death.

(7 × 2 = 14 weightage)

III. Answer any *two* questions. Each question carries 4 weightage :

- 25 Give an account of the distinguishing characteristics and morphology of fungi.  
26 Give an account of stress physiology of animals in response to temperature.  
27 Explain in detail the mechanism of protein synthesis.  
28 Write an account of genetic control of growth.

(2 × 4 = 8 weightage)