

M.Sc. Examination, 2016

Semester – I

Environmental Science

Course – MEC-11

(Fundamentals of Environmental Science)

Time: 3 Hours

Full Marks: 40

Questions are of value as indicated in the margin.

Answer question no. 1 and any four from the rest

1. Write short note on **any four** of the following : 4×2=8
 - a) Electromotive force
 - b) Lithophile
 - c) Plasmid
 - d) Atmospheric temperature stratification
 - e) Basic concept on Earth System Science
 - f) Life support system

 2.
 - a) ‘Environmental Science is a multidisciplinary subject’.– Discuss. 4+4=8
 - b) What is the different scope of Environmental Science?

 3.
 - a) Briefly describe the biochemical properties of bacterial cell-wall. 4+4=8
 - b) Differentiate between ‘Gram positive’ and ‘Gram negative’ bacteria.

 4. Write short notes on following (**any two**) : 2×4=8
 - a) Bacterial growth
 - b) Lytic cycle of bacteriophage
 - c) Flagella

 5.
 - a) Write a brief note on the origin of earth. 3+5=8
 - b) Give a detail account on “internal structure of earth”.

 6.
 - a) Write a brief note on Pre-Cambrian life . 3+5=8
 - b) Describe in brief the evolution of vertebrate animals.

 7.
 - a) What do you mean by diprotic acid system? 2+6=8
 - b) Explain the dissolution of CO₂ and acid-base equilibria involving carbonate.
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