

P-500

Total Pages : 3

Roll No.

EVS-506

Environmental Physics and Chemistry

M.Sc. Environmental Science (MSCES)

2nd Semester Examination, 2023 (June)

Time : 2 Hours]

Max. Marks : 70

Note : This paper is of Seventy (70) marks divided into two (02) Sections A and B. Attempt the questions contained in these sections according to the detailed instructions given therein.

SECTION–A

(Long Answer Type Questions)

Note : Section 'A' contains Five (05) long answer type questions of Nineteen (19) marks each. Learners are required to answer any Two (02) questions only.

(2×19=38)

1. (a) What is atmospheric humidity? How humidity affect the growth and development of vegetation of a place? Discuss the role of evaporation and transpiration in atmospheric humidity. 19

2. (a) What is wind pressure? Elaborate by giving a suitable diagram for the formation of low and high wind pressure zones? Discuss different types of cyclones in details. 10
- (b) Explain the effect of wind on environment. 9
3. (a) What is fire? Explain the effect of fires on soil biota and the environment. 9
- (b) Define solar radiation. Discuss the effect of temperature on plants and microbes. 10
4. (a) What are food additives? Elaborate international standards for the safe use of food additives. 10
- (b) How physical environment plays a crucial role in the determination of natural colours and flavours in plants. 9
5. (a) What are emulsifiers? Discuss various techniques and processes used to control food preservatives. 10
- (b) Explain the influence of soil minerals on soil properties. 9

SECTION-B
(Short Answer Type Questions)

Note : Section 'B' contains Eight (08) short answer type questions of Eight (08) marks each. Learners are required to answer any Four (04) questions only. (4×8=32)

1. What is landform? Describe briefly various types of landforms found on the planet earth.

2. Differentiate between ;
 - (a) Land breeze and sea breeze.
 - (b) Bio-augmentation and bio-concentration.
 3. What is air composition? Explain different methods of treatment of particulate matter in air.
 4. How artificial sweeteners exert adverse effect on health of the people?
 5. Elaborate the role of latitude and longitude on ecosystem development and management.
 6. What are environmental toxicants? How you will mitigate the adversities of drugs and antioxidants ?
 7. Comment on use and abuse of chemicals in foods and beverages.
 8. Explain with suitable examples plant response to photoperiod.
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