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## NORTHWEST ACCREDITATION COMMISSION, USA HIGH SCHOOL DIPLOMA (Secondary/10th) 2018-2019

Subject- ENVIRONMENTAL STUDIES

Question Paper No. : 

E	S	2	6
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Subject Code : ES1002

Question Paper Code: 

E	V	6	1
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Total Time: 03.00 Hours.

Total Marks: 100

### GENERAL INSTRUCTIONS

#### **1. OPENING AND CHECKING OF THE QUESTION-BOOKLET**

Break open the seal of the Question-Booklet only when the announcement is made by the Invigilator. After breaking the seal and before attempting the questions, student should immediately check for:

- a) The number of the printed page in the Question-Booklet is the same as mentioned on the cover page of the Booklet and
- b) Any printing error in the Booklet pages, if any.

Any discrepancy or error should be brought to the notice of the Invigilator who will then replace the Booklet. No additional time will be given for this.

2. No student, without the permission of the Superintendent or the Invigilator concerned, is to leave his/her seat or the Examination Room.

#### **3. FILLING UP THE REQUIRED INFORMATION ON QUESTION-BOOKLET AND ANSWER SHEET**

After breaking open the seal and checking the Booklet, student should:

- a) Fill up the **Question Paper No.** and **Question Paper Code** (mentioned on the cover of Question-Booklet) in the space provided on the First Answer Sheet.
- b) Fill up his/her Roll Number on the First Answer Sheet and on each Supplementary Answer Sheet, if taken.
- c) Student should mention the total number of **Supplementary Answer Sheet**, if taken, in the space provided on the First Answer Sheet and also fill up the Serial Number mentioned on each **Supplementary Answer Sheet** along with his/her Roll Number in the register maintained by the Invigilator. Student must tie all the Answer Sheets with the thread provided by the Invigilator.

#### **4. INSTRUCTIONS ABOUT QUESTION PAPER**

This Question Paper is divided into three Sections – A, B and C. All Sections are compulsory. Attempt all Sections as per instructions.

- a) Section A contains 8 questions which are very short carrying 3 marks each in approximately 30-40 words.
  - b) Section B contains 10 questions which are short carrying 4 marks each in approximately 80-100 words.
  - c) Section C contains 6 questions which are long carrying 6 marks each in approximately 140-150 words.
5. Student found in possession of Cellular Phone / Mobile Phone / Pager or any other Communication Device and/or any Book/Note whether using or not, will be liable to be debarred for taking examination(s) either permanently or for specified period or/and dealt with as per law or/and ordinance of the School/SERI according to the nature of offence, or/and he/she may be proceeded against and shall be liable for prosecution under the relevant provision of the Statutory Law.

**THE ANSWER SHEET IS TO BE RETURNED ON COMPLETION OF THE TEST**

## SECTION A

Total number of questions: 8

Marks allocated to each question: 3

Total marks: 24

- Question 1.** What is 10% law?
- Question 2.** What are omnivores? Give one example.
- Question 3.** Define an ecosystem.
- Question 4.** How non-biodegradable substances would effect the environment.
- Question 5.** Which food chains are advantageous in terms of energy? Support your answer giving one example.
- Question 6.** How biodegradable substances would affect the environment.
- Question 7.** Explain the term land reform.
- Question 8.** Write the full name of DDT.

## SECTION B

Total number of questions: 10

Marks allocated to each question: 4

Total marks: 40

- Question 9.** Describe how ozone layer is formed?
- Question 10.** What are the major components of environment?
- Question 11.** Why are some substances biodegradable and some non-biodegradable?

**OR**

What is a food chain? Write the food chain operating in a pond. State the food habit of each trophic level in this food chain.

- Question 12.** What is the role of decomposers in the ecosystem?
- Question 13.** Energy transfer is said to be unidirectional whereas biochemical transfer is said to be cyclic. Why?
- Question 14.** Give difference between producers and consumers.
- Question 15.** There are no predators for tiger or lion. Why?

- Question 16.** DDT that was sprayed in minute amount on food plants was detected in high concentration in man? How did it happen? Explain.
- Question 17.** State four ways as to how the use of pesticides impacts the ecology.
- Question 18.** (a) Mention two economic policy measures to control pollution.  
(b) State two reasons for the rapid extinction of species in the ocean.

## SECTION C

Total number of questions: 6

Marks allocated to each question: 6

Total marks: 36

- Question 19.** A non-biodegradable toxic chemical has entered into the food chain. Which type of food habit will you suggest to a man, vegetarian or non-vegetarian? Explain with the help of a food chain. The food chain which you would suggest, is advantageous in another aspect. How?

**OR**

What is garbage? What does garbage consists of? How would you dispose the following wastes?

- (a) Domestic wastes like vegetable peels
- (b) Industrial wastes like metallic cans
- (c) Plastic material.

- Question 20.** (a) What are 'Ecological Pyramids'? Draw an ecological pyramid having four trophic levels with snake as one of its components.  
(b) The number of malaria patients in a village increased tremendously when large number of frogs were exported from the village. What could be the cause for it?

Explain with the help of a food chain.

**OR**

How can land use management help conserve soil?

- Question 21.** What is energy plantation? State *three* characteristic of plants that can be grown for this purpose.

**OR**

What are Gene Banks? State *three* objectives to maintain a Gene Bank.

**Question 22.** What is conservation tillage? State *two* advantages and two disadvantages of conservation tillage.

**OR**

Secondary cities can play an important role to counter the problem of Migration. Justify the statement giving reasons.

**Question 23.** Enumerate the effects of an increasing population on the environment.

**OR**

Explain the role of Biotechnology in achieving global food security.

**Question 24.** With the help of an example, explain how alternate technology can create a self sustaining society.

**OR**

Explain the meaning of integrated nutrient supply programme. State its objectives.

**END OF THE QUESTION PAPER**