

POSSESSION OF MOBILE IN EXAMINATION IS A UFM PRACTICE

Name of Student ----- Enrolment No. -----

Department -----

BENNETT UNIVERSITY, GREATER NOIDA

Mid Term Examination, FALL SEMESTER 2018-19

COURSE CODE: ESEA 301 L

MAX. DURATION: **ONE HOUR**

COURSE NAME: Environment & Sustainability

COURSE CREDIT: 3

MAX. MARKS: 25

Note

- Answers of the multiple-choice questions should be written on the answer sheet.
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1. World Environment Day is celebrated on: (1)

- (a). 1st March.
- (b). 5th June.
- (c). 16th October.
- (d). 26th November.

2. What is the maximum percentage of energy transferred from one trophic level to the next?

- (1)
- (a). 5%.
 - (b). 10 %.
 - (c). 25 %.
 - (d). 50%.

3. Two main physical factors determine the nature of the community that develops in an area. These factors are:

- (1)
- (a). Temperature and pressure.
 - (b). Temperature and sunlight.
 - (c). Temperature and rainfall.
 - (d). Temperature and oxygen level.

4. More than one carbon sinks are listed below. Select all the carbon sinks from the following options:

- (1)
- (a). Burning of fossil fuels.
 - (b). All living and non-living organisms.
 - (c). Limestone.
 - (d). Plastic.



5. Select the correct statement from the following options: (1)

- (a). Only around 1% of Earth's water is freshwater
- (b). Only around 3% of Earth's water is freshwater.
- (c). Only around 10% of Earth's water is freshwater.
- (d). Only around 30% of Earth's water is freshwater.

6. Which of the following factors is responsible for rapid consumption of natural resources? (1)

- a) Advancement of technological development
- b) Rural to urban migration
- c) Global warming
- d) None of the above

7. Identify if the following statement is true or false regarding consumption of natural resources (1)

Statement: Rich countries use relatively less percentage of natural resources thanks to more efficient use of technology that are less resource-intensive

- a) True
- b) False

8. Forests are considered a class of natural resource, which are threatened by rapid deforestation thanks to population explosion. Please identify which of the following models has been used in India to develop a sustainable forest management model. (1)

- a) Removal of people from lands adjacent to forests and re-forestation to create buffer zones
- b) Joint forest development for with the help of tribals who are given rights to forest products in exchange of forest protection
- c) Political efforts to convince people living next to forestlands to reduce deforestation
- d) None of the above

9. As you might know, global food production is inadequate to provide enough grains for growing population across the world. If you are a policymaker, which of the following is/are a sustainable agriculture solutions to increase yield in food production? [2]

- a) Use of chemical pesticides to kill off pests
- b) Use of chemical fertilizers to increase NPK content in soil
- c) Use of crop rotation
- d) Use of enhanced farming techniques such as aqua and aeroponics
- e) All of the above

10. Among the renewable energy resources, which one is most efficient?

- a) Solar
- b) Wind
- c) Hydroelectric
- d) Geothermal

11. 12% of the world population consumes fish. However, fish farming is environmentally unsustainable since use of synthetic foods, antibiotics, pesticides creates pollution. Propose a sustainable fish farming solution. (2)

12. a) Among the conventional energy sources, which one is the most energy efficient? Write its efficiency. (2)

c) What are the positive and negative environmental consequences of hydroelectric power? (3)

13. Write the chemical equation for photosynthesis. What is the importance of photosynthesis? (1+1 = 2)

14. What are the five major steps of the nitrogen cycle? Write the importance of nitrogen cycle. (2.5+2.5 = 5)