

Student Name :Student ID.....

Mid-Term Exam-2, CE – 261

Examiner : Mohammed Imran

Environmental Microbiology

Date: 28/11/2019, Time : 1 Hour

Instructions: Answer all questions

Total Marks-15

Qn. No.1 (a) Read the statement below and writes down the TRUE/FALSE in the space.

Each question carries equal mark- (2.5 Marks)

- (i) The plants make their own food are known as producers in an ecosystem.
(TRUE)
- (ii) The organism which can eat only other animals are known as omnivores.
(Fales)
- (iii) Lignin has a **slowest biodegradation** rate.
(TRUE)
- (iv) Nitrogen fixation is performed under anaerobic conditions by symbiotic and free-living nitrogen fixing bacteria. **(TRUE)**

Qn. No.1 (b) Multiple Choice Questions (MCQ). Each question carries equal mark- (2.5 Marks)

(i) In an ecosystem for example in a forest, the plants are eat by grasshopper, grasshopper eats by frog and then frog eaten by snake and snake can be eaten by hawk and so on. So this is known as-

- a. Food web
- b. Food chain
- c. Both (a) and (b)**
- d. None of the above

(ii) The Sun is one of the important component, which of the following function of the sun is correct for an ecosystem -

- a. Primary source of energy**
- b. Nutrient exchange
- c. Home land for living organism
- d. Medium for the roots for many plants

Student Name :.....Student ID.....

(iii) The Soil is one of the important components, which of the following function of the soil is correct for an ecosystem-

- a. Provides gases
- b. Provides nutrients**
- c. Help in photosynthesis
- d. Source of energy

(iv) Biotransformation are-

- a. preliminary steps of biodegradation**
- b. intermediate steps of biodegradation
- c. Both a and b is correct**
- d. None of the above

(v) Which of the following is the foulants-

- a. Colloidal matter
- b. Biological matter
- c. Organic matter
- d. All of the above**

Qn. No. 2 (a) Fill in the blank- Each question carries equal marks- (Total- 2.5 Marks)

- (i)** The function of soil in an ecosystem is Providing **living Organism with nutrients**
- (ii)** Mineralization is the complete **Biodegradation** of organic compounds to CO₂.
- (iii)** Biotransformation are preliminary and **intermediate** steps of biodegradation.
- (iv)** The function of water in an ecosystem is a **medium for nutrient**
- (v)** **Reverse osmosis** removes cations and anions, as well as organics from water.

Student Name :.....Student ID.....

Qn. No. 2 (b) Match the following-Each question carries equal marks- (Total- 2.5 Marks)

Question	Write correct number here ↓	Answer
Ecosystem	V	(i) Primary energy source
Fermentation	IV	(ii) Fastest biodegradation rate
Storage polysaccharides	II	(iii) Bacterial and Fungi
Sun	I	(iv) Anaerobic process
Decomposers	III	(v) Dynamic entities

Student Name :.....Student ID.....

Qn. No.3 (a) Write down the different sources of water pollution. (2.5)

- **Agriculture**
- ***Entertainment***
- ***Farms***
- ***Wild life***
- ***Life***
- ***Domestic wastewater***
- ***Industrial effluent***
- ***Solid wastes***
- ***Air***

• الزراعة

• وسائل الترفيه

• المزارع

• الحياة البرية

• مياه الصرف الصناعي

• النفايات الصلبة

• الهواء

Student Name :Student ID.....

Qn. No.3 (b) Draw a food chain in an ecosystem. (2.5)

