**Week III: Question Bank**

**Course: M.Sc. Microbiology Semester IV**

**Subject: Environmental Microbiology**

**Course Code: MICR-641**

**Subject Teacher (s): Dr. Nidhi S. Belwal/Dr. Sana Iram/Dr. S. Dheeman**

**Unit- V: Biodegradation of petroleum/ Dr. Nidhi S. Belwal**

**Q1. List the factors that hasten biodegradation of petroleum.**

Q2. Explain the mechanism involved in petroleum biodegradation.

Q3. Differentiate between bioremediation and biodegradation.

Q4. What are the sources of petroleum pollution in the environment? Give their hazardous effect.

Q5. List the enzymes involved in petroleum biodegradation

**Topic: Global warming and Ozone layer depletion Dr. S. Iram**

Q1 Multtiple-choice question:

i) How many percent of carbon dioxide increased in the atmosphere since pre-industrial times?

A) About 10%

B) About 20%

C) About 30%

D) About 40%

ii) Which one of the following cause global warming?

A) Radiative forcing

B) Earth gravitation force

C) Oxygen

D) Centripetal force

iii) Which one of the following land use causes global warming?

A) Increase in the fertility of soil

B) Surface reflectance

C) Forestation

d) Adopting organic farming

iv)The Ozone hole is a much larger springtime decrease in \_\_\_ ozone around Erath’s polar regions.

(A) exospheric

(B) stratospheric

(C) thermospheric

(D) mesospheric

v) Following bans the production of ozone-depleting chemicals.

(A) Montreal Protocol

(B) Kyoto Protocol

(C) Geneva Protocol

(D) None of the above

vi) The total amount of ozone in the atmosphere above a point on the earth’s surface is measured in

(A) astronomical unit

(B) dobson unit

(C) angstrom unit

(D) none of the above

Q2. What is ozone depletion, and how does it occur?

Q3. Is there general agreement among scientists on the science of ozone depletion?

Q4. What are the reactive halogen gases that destroy stratospheric ozone?

Q5. Briefly summarize the evidence linking human activity to global warming. What are its potential consequences?

Q6. How do we know global warming is real?

Q7.How does agriculture affect climate change?

**Topic: Upwelling and Downwelling | Eutrophication Dr. S. Dheeman**

Q.1 Write a short note on Ekman spiral

Q.2 Draw figure of surface ocean current.

Q.3 Why ‘coriolis effect’ form in oceans.

Q.4 What is upwelling? Describe

Q.5 What is downwelling? Describe

Q.6 Define Eutrophication

Q.7 Describe role of phosphorus in eutrophication

Q.8 Differentiate between natural and cultural eutrophication

Q.9 What are challenge and solution of eutrophication?

Q.10 Describe the source of eutrophication.