Roll No: -----



UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

End Semester Examination, December 2017

Program: M.Plan Semester : III

Subject (Course): Environment and Development

Course Code: MEEG 844

Max. Marks: 100

Duration: 3 Hrs

No. of page/s:3

Section A: $(5 \times 4 = 20 \text{ Marks})$

Note: Attempt all questions from section "A". Each question carry equal marks.

Q.1 .Choose the correct answers

 $(1 \times 4 = 4 \text{ Marks})$

- 1. Which of the commissions report recognized the human resource development?
- a) Election Commission Report
- b) Brutland Commission Report
- c) National Statistical Commission Report d) None of these
- 2. The study of interaction between the living species and the environment is called
- a) Biology b) Antology c) Ecology d) Zoology
- 3. United Nations Conference on Environment and Development held at Rio de Janerio in
 - a) 1994
- b) 1993
- c) 1992
- d) 1990
- 4. Who leads the Chipko Movement in Teri Bachao Andolan?
 - a) Sudesha Devi

b) Govind Singh Rawat

c) Sunder Lal Bahuguna

d) Chandi Prasad Bhatt

Q.2 State T and F $(1 \times 4 = 4 \text{ Marks})$

- i) Life Cycle Assessment can improve in justifying the investments as a short term benefit.
- ii) In silent spring Rachel Carson exposed the perils of indiscriminate use of pesticides, particularly DDT (dichlodiphenyltrichloroethane).
- iii) EO Wilson is an Entomologist envisioned that biological diversity was a key to human survival on earth.
- iv) In Martix method experts (scientist, engineers and manager) review and identify the different project events and assess their possible effects on existing environmental condition.

Q. 3. Fill in the blanks:

 $(1 \times 4 = 4 \text{ Marks})$

- i) The International Organization for Standardisation (ISO) is a world wide federation of national standards bodies established in-----
- ii) -----Prime Minister of India was an instrumental in introducing the concept of environmental protection in the Constitution of India as a fundamental duty.
- iii) ------Earthen or masonry rainwater harvesting structure, for providing water for domestic use to the communities.
- iv) -----is an indigenous construction designed to harvest surface runoff water for agricultural in Jaisalmer, Rajesthan.

Q.4. Define the following:

 $(2 \times 2 = 4 \text{ Marks})$

a) Lithosphere

b) Ecological Foot Print

Q.5. What is the process of formation and depletion of ozone layer. (2 + 2 = 4 Marks)

Section "B" $(5 \times 12 = 60 \text{ Marks})$

Note: This section is divided into two parts B1 and B2. All questions carry equal marks Student are required to attempt all questions from Part B1 and however choice is given in part B2, student may attempt any one question from part B2 is that either Q.10 or Q.11

Part B1

- Q.6. What is an environmental movement? Explain any four National Environmental Movements and four International Movements which occurred in the past for conserving and protecting environment. (2 + 5 + 5 = 12 Marks)
- Q.7. What is Environmental Audit? What are the various objective of Environmental Audit? Explain work plan for conducting three phases (pre audit phase, onsite phase and post audit phase) of Environmental Audit. (2+2+8=12 Marks)
- Q.8. What is Brutland commission? Explain principle and concept of sustainable development. Explain three pillar or dimension of sustainable development with schematic diagram.

$$(2 + 4 + 6 = 12 \text{ Marks})$$

Q.9. What is life cycle assessment? Explain four methods which are used for conducting LCA with schematic diagram. (2 + 10 = 12 Marks)

Part B2 (Attempt any one questions)

Q.10. According to the UN prognosis, 2.8 billion people in 48 countries will suffer from the shortage of freshwater by 2025,40 of these countries are in western Asia, northern Africa and the Sahel zone in Africa. Describe water conservation methods and indigenous rain water harvesting practices that have been used in different part of India. (12 Marks)

Or

Q.11. What do you mean by integrated watershed management? Explain all characteristics/ parameters of watershed management which are monitored during Watershed Management Programme. (3 + 9 = 12 Marks)

Part C (Attempt any one question i.e Q.12. or Q.13)

Q.12. According to EIA notification 1994 under the environmental protection act 1986, the EIA process is mandatory for various development project for sustainable development. Explain the various types of EIA and component of EIA. Discuss in details the EIA process for category A and Category B project for river valley project supporting it with a block diagram.

(2 + 8 + 10 = 20 Marks)

or

Q.13. What is the aim and mission of ISO? Explain PDCA Cycle. Describe any ten elements of EMS clauses which are used for taking ISO 14001 : 2015 certification in the industries or organization. (2+3+5+10=20 Marks)



Roll No: -----



UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

End Semester Examination, December 2017

Program: M.Plan Semester : III

Subject (Course): Environment and Development

Course Code: MPLE801

Max. Marks: 100

Duration: 3 Hrs

No. of page/s:

Section A: $(5 \times 4 = 20 \text{ Marks})$

Note: Attempt all questions from section "A". Each question carry equal marks.

Q.1 .Choose the correct answers

 $(1 \times 4 = 4 \text{ Marks})$

- i) The Global Action Plan adopted at Earth Summit held at Rio de Janeiro in June 1972 is also known as
 - a) Agenda 20 b) Agenda 21 c) Agenda 23 d) Agenda 222
 - ii) A sudden uncontrolled descent of a mass of earth under the force of gravity is called
 - a) Soil Erosion
- b) Mining
- c) Landslide
- d) Earthquake
- iii) The graphical representation of interrelation of producer and consumer in an Ecosystem is termed as
- a) Ecological niche b) Ecological pyramid c) Trophic level d) Food web
- iv) The interferences of the living organism among themselves and with the environment is called
- a) Ecology
- b) Ecosystem
- c) Biology
- d) Anthology

Q.2 State T and F (1 x4 = 4 Marks)

- i) Life Cycle Assessment can improve in justifying the investments as a short term benefit.
- ii) The united nation conference on Human and Environment was organized at Stockholm.
- iii) Ralph Emerson expressed that the Man's relationship with other species based on evolution. and the relationship between habitats and species.
- iv) In 1987, it was confirmed that the ozone shield over the Antarctic was thinning, and a "hole" had developed, and an unprecedented, international action followed for a world action plan.

Q.3. Fill in the Blanks

 $(1 \times 4 = 4 \text{ Marks})$

- i) The Brutland Commission was created by the United Nations in the year ----- to reflect about ways to save the human environment and natural resources and to prevent deterioration of economic and social development.
- ii) -----irrigation is an indigenous practices carried out in Western Himalaya.
- iii) -----is an indigenous construction designed to harvest surface runoff water for agricultural in Jaisalmer, Rajasthan.
- iv) The United Nations Framework Convention on Climate Change (UNFCCC or FCCC) is an international environmental treaty produced at the United Nation Conference on Environment and Development (UNCED), informally known as the ------held in Rio de Janerio from June 3 to 14, 1992.

Q.4. Define Followings

 $(2 \times 2 = 4 \text{ Marks})$

a) Johannesburg Summit (2002)

b) CEE and CSE

Q.5. What are green house gases? What are the effects of green house effect on environment?

(2 + 2 = 4 Marks)

Section "B" $(5 \times 12 = 60 \text{ Marks})$

Note: This section is divided into two parts i.e B1 and B2. All questions carry equal marks Student are required to attempt all questions from Part B1 and however choice is given in part B2, student may attempt any one question from part B2 is that either Q.10 or Q.11

Part B1

Q.6. Man lives in nature and depends on the resources of nature. The progress of mankind depends upon the exploitation of different natural resources. What are the various classification of natural resources. Identify and explain various causes which are responsible for degradation of natural resources. (4 + 8 =

12 Marks)

- Q.7.What are the benefits of environmental audit to an industry? Explain the procedure of conducting an environmental audit programme for an industrial plants. (4 + 8 = 12 Marks)
- Q.8. What are the different categories of disaster? What are the objective of emergency / disaster management plan? Explain the element of major emergency /disaster management plan.

(2 + 2 + 8 = 12 Marks)

Q.9. What are the principles and concepts of Sustainable development. Explain economic, social

and environmental dimension of sustainable development. Marks)

(3+3+6=12)

Q.10. The natural environment, harboring myriad life forms and ecosystems, is an outcome of

of years of evolution and mutation, however, due to our continuous indulgence in the exploitation of nature for immediate gains, we contribute to environmental degradation and depletion of natural resources Define environmental management. Identify and classify various approaches of environmental management to achieve sustainability? (2 + 10 = 12 Marks)

Q.11. What is life cycle assessment? Explain four steps of conducting LCA with schematic diagram. (2 + 10 = 12 Marks)

Part C (All questions are compulsory)

Part C2

- Q.12. Explain rapid EIA and comprehensive EIA. Explain various methodologies which are used to conduct EIA for a river valley project. (4 + 8 = 12 Marks)
- b) Describe environmental clearance process for Category A & Category B project for Thermal Power Plant Project with suitable flow diagram. (8 Marks)

Or

Q.13. International Standards covering environmental management are intended to provide organizations with the elements of an effective environmental management system which can be integrated with other management requirements, to assist organizations to achieve environmental and economic goals. Describe all the elements of EMS clauses which is used for taking ISO 14001: 2015 certification in the industries or organization. (20)Marks)

