

Roll No: -----

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, April, 2017



Program/course: BALLB
Course Name: HSE Challenges in Energy Sector
Course Code : MBEF-932
No. of page/s: 02

Semester – X
Max. Marks: 100
Duration: 3 Hrs

Section A (05x04=20 Marks)
Compulsory

Q1. Expand the following terms

- a) CRZ
- b) EMP
- c) MCA
- d) EIS

Q2. Fill in the blanks

- a) Inmethod of EIA expert (scientist , engineers and managers) review and identify the different project events and assess their possible effect on environment condition in that particular locality.
- b) Name two disease caused due to heat isand.....
- c) The jet flames from pressure relief valves can cause adjacent vessels to overheat and burst, giving aexplosion.
- d) Bio-medical Waste (Management and Handling) Rules, 1998, classify bio-medical wastes intocategories.

Q3. True of False

- a) Insurance companies consider jet flame as the most severe case of property loss for the purpose of fixing premiums. (True/ False)
- b) The Water (Prevention and Control of Pollution) Act, 1974 enforced by SPCB /CPCB in Union territory. (True/ False)
- c) Frayed electrical cords is an example of physical hazard. (True/ False)
- d) Matrices in EIA are 1D checklists in which cause-effect relationship are established. (True/ False)

Q4. List the common cause of industrial injuries in workplace.

Q5. Briefly discuss the benefits of ergonomics to employer and employees.

Section B (04x10=40)

Attempt all questions

Q6. Name ten regulatory/statutory agencies which are responsible for regulation enforcement in oil and gas industry.

Q7. Discuss the different technologies available in oil and gas industry to control noise pollution

Q8. An organization whose management system incorporates an EMS has a framework to balance and integrate economic and environmental interests and can achieve significant competitive advantages. Discuss the benefits of EMS.

Q9. Briefly discuss the Ergonomic work place analysis and medical management element of an ergonomic programme.

Section C (02X20=40 marks)

Note: This section is divided into 2 sections C1 and C2. Question no 10 is compulsory however choice is given in section C2. Students are required to attempt any one question from C2 i.e. Question 11 (a) or Question 11(b)

Section C1

Q10. EIA is potentially one of the most valuable, interdisciplinary and objective decision making tool with respect to alternative route for development process technology and project site .Discuss the objectives of EIA and methodology for conducting EIA with the help of flow chart.

Section C2

Q11 (a).Discuss different elements of major Disaster management plan/ Emergency management plan

OR

Q11(b). Discuss the objectives and elements of disaster management.

Note: - Pl. start your question paper from next page

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Section A (05x04=20 Marks)
Compulsory

Q1. Expand the following terms

- a) MCA
- b) P& ID
- c) PSSR
- d) EIS

Q2. Fill in the blanks

- a) Risk = x.....
- b) Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 are enforced byalong with SPCB/ CPCB.
- c) There are about categories of projects (annexure-1) for which Environmental Clearance was made mandatory by the Environmental Impact Assessment (EIA).
- d) The Public Liability Insurance Act, 1991 empower the concernedto verify the accident and order relief.

Q3. True of False

- a) LPG storage vessels in petroleum installations can cause severe BLEVEs. (True/False)
- b) Rapid Environmental Impact Assessment studies is conducted at the initiation of the new activity. (True/False)
- c) The emergencies are termed" on-site“, when emergency extends beyond its premises. (True/False)
- d) An amendment to the EIA Notification is introduced in April 1997 has made public hearing mandatory for all the cases, where the environmental clearance is required. (True/False)

Q4. List any four general hazards in a work environment.

Q5. Briefly discuss the obligations of the industry under The Water (Prevention and Control of Pollution) Act, 1974

Section B (04x10=40)
Attempt all questions

Q6. Discuss the personal attributes and educational qualification criteria for lead auditors in the area of Environmental Management System

Q7 Discuss the salient features of The Motor Vehicle Act, 1988.

Q8.Explain with the help of well labeled diagram “condensation and adsorption methods” used to remove gaseous pollutants from flue gas emitting from chimneys.

Q9. Disasters are major accidents which cause wide spread disruption of human and commercial activities. Briefly discuss different categories of emergencies and activities that can reduce the risk of accidents.

Section C (02X20=40 marks)

Note: This section is divided into 2 sections C1 and C2. Question no 10 is compulsory however choice is given in section C2. Students are required to attempt any one question from C2 i.e. Question 11(a) or Question 11(b)

Section C1

Q10. Discuss different types of EIA and various method used in the EIA .

Section C2

Q11(a).Define Process Safety Management (PSM). Briefly discuss Contractor safety and Training and validation.

OR

Q11(b) If you are an ergonomist in a IT firm and an assignment is given to plan an ergonomically designed station, then discuss the different elements of ergonomic programme to eliminate ergonomic hazards from workplace.