



**University of Petroleum & Energy Studies**  
**School of Business, Dehradun**  
**MBA-OIL & GAS**  
**END SEM EXAM-MAY 2020**  
**HSE FOR PETROLEUM SECTOR**  
**OGOG8002**  
**Sem-IV**

**TIME: 3 HRS**

**MAX MARKS; 100**

**SECTION-A-ATTEMPT ALL QUESTIONS**

**(35x 2=70 Marks)**

1. The Central Pollution Control Board (CPCB) functions under MoEF  
a. TRUE    b. FALSE
2. Who has the authority to issue License for any new establishment within respective State:  
a. Chief minister    b. State Pollution Control Board  
b. Chief Controller of Factories    d. No need to obtain license
3. Which organization look after the manufacturing, storage, transport and use of explosives and petroleum products.  
a. Oil industry safety directorate    b. MoEFc  
b. OSHA    d. Petroleum & Explosives Safety Organization (PESO),
4. The Petroleum Act was established in the Year.  
a. 1948    b.1976    c. 1934    d. 1984
5. Petroleum "Class B" means petroleum having a flash point of 23 Centigrade and above but below 65 degrees Centigrade.  
a. TRUE    b. FALSE
6. OISD stands for Oil Industry Safety Directorate:  
a. TRUE    b. FLASE
7. An emergency that could arise and cause a risk to H&S could include  
a. fire    b. explosion    c. chemical spill    d. all of the this
8. The HSE policy should be signed by \_\_\_\_\_ of the organization.  
a. HSE officer    b. Safety Head    c. Manager    d. Head (OCCUPIER)
9. In IMS which three system we have integrated?  
a. ISO 9002, 14001 & 45001    b. ISO -14002, 9001& 45001.  
C. ISO 9001, 14001 & 45001.    D. none of the above
10. Chief Controller” means the Chief Controller of Explosives, Government of India :

a. TRUE    b. FALSE

**11.** The Water (Prevention and Control of Pollution) Act was enacted in the year:

a.1975    b. 1994    c.1986    d.1974

**12.** There are 14 Elements of Process Safety Management:

a. TRUE    b. FALSE

**13.** Who must sign the work permit to close it?

a. Competent person    b. Gas tester    c. issuer & receiver    d. Designated representative

**14.** One hazard while performing hot work.

A. Vapor pressure    b. Ignition source    c. flash point    d. none of the above

**15.** What must be included in a company emergency plan?

a. The substances and processes on the site that can cause emergency situation

b. The phases of coping with emergencies.

c. The phases of coping with emergencies.

d. d none of the above

**16.** A reportable accident is one, which leads to disablement of over 48 hours:    A. TRUE    b. FALSE

**17.** In case of fatality within the premise, it should be reported within \_\_\_\_\_ hours?    a. 48    b. 24    c. 36    d.12

**18.** In order to achieve an efficient HSE management system, the OHS policy should be updated regularly and follow a PDCA cycle.

a. TRUE    b FALSE

**19.** What are the two main causes of incidents in the workplace?

a. Unsafe acts and unsafe conditions    b. Unsafe conditions and unsafe machines    c. Unsafe people and unsafe machines

e. Unsafe acts and unsafe people

**20.** Approach to risk reduction in the industrial industry called:

a. Risk Analysis    b. Risk Assessment    c. Risk control    d. Both A and B

**21.** ALARP stands for:

a. As low as reasonably practicable    b. As least as reasonable practice    c. As large as reasonably practicable    d. None of the above

**22.** Risk = Frequency × severity

a. TRUE    b. FALSE

**23.** Risk to the people in the industrial hazards may be in the form of Injuries:

a. Exposure to harmful releases    c. both A and B    d. None of these

**24.** Risk are generally expressed as:

a. Individual risk    b. Societal risk    c. Mass risk    d. both A and B

**25.** MCA stands for:

a. Maximum Credible Accident    b. Maximum Credit Accident

- c. Minimum Credit Accident      d. None of the above
- 26.** Tool used to find the maximum potential damage of an accident:  
a. MCA      b. RCA      c. PRA      d. SCA
- 27.** The extent of consequences arising from the hazardous substances will not depend on:  
a. quantity released      b. location  
c. wind condition and velocity      d. Rainfall
- 28.** BLEVE stands for Boiling Liquid Expanding Vapor explosion:  
a. TRUE      b. FALSE
- 29.** Sudden loss of containment of a pressure vessel containing superheated liquid or liquefied gas called  
a. BLEVE      b. UVCE      c. Pool fires      d. Jet Fires
- 30.** UVCE stands for Unconfined Vapour cloud expansion:  
a. TRUE      b. FALSE
- 31.** HAZOP stands for Hazard and Operability:  
a. TRUE      b. FALSE
- 32.** PHA stands for:  
a. Preliminary Health Analysis      b. Preliminary Hazard Analysis  
c. Preview Hazard Analysis      d. Preliminary Hazard Accreditation
- 33.** What is a hazard ?  
a. Anything with the potential to cause harm      b. Where an accident is likely to cause harm  
c. The likelihood of something going wrong  
d. An accident waiting to happen
- 34.** Chronic poisoning is characterized by:  
a. repeated exposure over months or years      b. repeated exposure over months or years  
c. always has a sudden effect      d. is usually fatal
- 35.** Who has responsibility for health and safety at your place of work?  
a. The Client and main contractor only      b. Self-employed contractors only and employees  
c. Employers, employees and sub-contractors      d. Everyone at your place of work no matter who employs them

**SECTION-B, ATTEMPT ALL QUESTIONS**

**(3x5= 15 Marks)**

**Q.36.** Write Short Notes on:

- Climate change
- Safety culture

( CO3)

**Q.37** What are the limitations of regulatory agencies? How can you make safety issues effective in your mill?

**Q.38** Briefly, discuss water pollution and methods to reduce water pollution problem?

**Q.39** Number of accidents are happening in modern industries, which is clear indication that they are not conducting safety audit properly. Describe different types of safety audit conducted for oil & gas industry.

**Q.40** List out various components of Process Safety Management.

**SECTION -C, ATTEMPT ANY TWO QUESTIONS**

**(7.5x2= 15 Marks)**

**Q.41** Number of diseases is increasing in areas where hazardous industries are operating without using suitable air pollution control equipment. Describe different air pollution control equipment used in industrial operations.

**Q.42** Disaster like Bhopal can be avoided, if disaster management plan is properly framed and rehearsed. What is disaster management plan? Describe categories of emergency with elements of a major emergency management plan.

**Q.43** Risk assessment at various stages of plant life can help in reduction of major accidents. Discuss objectives of risk assessment and components of risk assessment.