



**UNIVERSITY OF PETROLEUM & ENERGY STUDIES**

**End-Semester Examination -December 2017**

**Program. B.Tech FSE -V**

**Duration: 3 hours**

**Course Title: Occupational Health & hygiene ManagementHSFS:3004**

**Max. Marks: 100**

**SECTION-A**

**Q.1 Write in brief:**

**(2x10=20 Marks)**

- I. Prohibition color is
- II. COSHH
- III. LITE
- IV. URTI
- V. OSHA
- VI. Indoor Air quality
- VII. Mutagenic
- VIII. Thresh hold shift
- IX. RPE
- X. STEL

**SECTION-B- ATTEMPT ALL QUESTIONS**

**(4x10=40 Marks)**

- Q.2.** Chromium is widely used in industries. Discuss briefly health effects of chromium and various treatment options available.  
**(10Marks)**
- Q.3.** Importance of personnel protective equipment cannot be ignored for safe industrial operations. Describe various PPE used in any manufacturing industry.  
**(10Marks)**
- Q.4** Write in brief properties and toxic effects of Chlorine & Hydrogen sulphide.  
**(10Marks)**

- Q.5** The operator works for 6 hours 10 minutes on a process in which he is exposed to a substance hazardous to health. The average exposure during that period is measured as 1.12 mg.m-3. Then he was working on cleaning activities of his workplace average exposure during that period is measured as 0.66 mg.m-3, calculate TWA for 8 hrs. exposure.

**Or**

Occupational Safety videos can play important role in avoiding of occupational diseases/ accidents. Give your opinion.

**(10Marks)**

**SECTION -B- ATTEMPT ANY TWO QUESTIONS**

**(3x20=60 Marks)**

- Q.6.** Medical Surveillance system in industries is an important activity and that can play a crucial role in some complicated medical cases. What are different steps of a Medical Surveillance program adopted for any hazardous industry?

**(20Marks)**

- Q.7.** Importance of personnel protective equipment cannot be ignored for safe industrial operations. Describe various PPE used in any manufacturing industry.

**(20Marks)**

- Q.8.** Asbestos is quite useful in many industrial/household activities but because of its carcinogenic nature it is banned now worldwide. Still during demolition of old buildings exposure to this dangerous substance to workers cannot avoided. Demonstrate your knowledge on Asbestos and its harmful effects.

**(20Marks)**