

Roll No.

**FT - 804**

**B.E. VIII Semester**

Examination, June 2016

**Industrial Hygiene And Occupational Health**

*Time : Three Hours*

*Maximum Marks : 70*

**Note:** i) Answer five questions. In each question part A, B, C is compulsory and D part has internal choice.

ii) All parts of each question are to be attempted at one place.

iii) All questions carry equal marks, out of which part A and B (Max. 50 words) carry 2 marks, part C (Max. 100 words) carry 3 marks, part D (Max. 400 words) carry 7 marks.

iv) Except numericals, Derivation, Design and Drawing etc.

1. a) What is basic concept of Industrial Hygiene?
- b) Describe the physical and chemical factors of stresses.
- c) Describe the classification (Risk groups) of biohazards?
- d) Prepare Ms Ds. of Chlorine?

OR

Calculate the TLV of an air mixture having concentration of 600 ppm of acetone (TLV 500 ppm), 20 ppm of Ammonia (TLV 25 ppm) 100 ppm of carbon monoxide (TLV 25 ppm) and 2 ppm of chlorine (TLV 1 ppm)?

2. a) Describe hazardous states of dusts and gases?
- b) Write short notes on fumes and fibres?
- c) Calculate combined sound pressure level in dB of five sound sources having individual pressure level of 80, 82, 84, 86 and 88 dB at a particular location?
- d) What are the various instruments used for measurement of ionizing radiation. Describe them in brief?

OR

Describe the working principle of sound level meter with a neat sketch?

3. a) What is importance of evaluation of hazards in Work atmosphere?
- b) What are advantages and disadvantages of direct reading instruments?
- c) Describe in brief about the instrument and procedure used for dust sampling?
- d) Describe the procedure of asbestos fibres sampling and analysis? <http://www.rgpvonline.com>

OR

Describe the complete procedure of dust sampling for work area monitoring? Also develop the sampling sheet and procedure for analysis of dust concentration?

4. a) What do you understand by methods of control?
- b) Write down short note and administrative control?
- c) Describe various personal protective equipments?
- d) Explain various types of ventilation systems used in industries?

OR

What is local exhaust ventilation system? Describe various components of local exhaust ventilation.

5. a) What is concept of Occupational Health?
- b) What do you understand about occupational diseases?
- c) Write short note on Biological monitoring?
- d) Discuss about occupational disease "Silicosis" it's causes and control measures?

OR

Explain the structure of skin? Also describe occupational diseases of skin in details and their control measures?

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