Total No. of Questions : 8] *[Total No. of Printed Pages : 2*

Roll No .....

FT-8001 (CBGS)

B.E. VIII Semester

Examination, May 2019

Choice Based Grading System (CBGS)

Industrial Hygiene and Occupational Health

Time : Three Hours *Maximum Marks : 70*

Note: i) Attempt any five questions.
ii) All questions carry equal marks.

1. Explaining basic concept of Industrial Hygiene, describe various factors of stresses in details? 14

2. a) A worker is exposed to CO concentration of 100 ppm for first and last two hours of eight hour shift and for remaining period of shift he is exposed to 10 ppm of CO (carbon monoxide). Calculate TWA and explain whether TWA is exceed and to what percentage? The TLV of CO is 25 ppm. 7
   b) In a work place there is concentration of 20 ppm of Ammonia (TLV = 25 ppm) and 25 ppm of carbon monoxide (TLV = 25 ppm). Calculate the TLV of this mixture of gases? 7

3. Prepare MSDS (Material Safety Data Sheet) for chlorine? 14

4. Write short notes on:
   a) Local exhaust ventilation 7
   b) Personal monitoring 7

5. a) 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? 7
   b) Calculate daily noise dose in percentage if an employee is exposed for the following noise levels. 7
      i) 80 dB for two hours
      ii) 95 dB for 1.5 hours
      iii) 100 dB for one hour
      iv) 105 dB for 3.5 hours

6. Write short notes on:
   a) Ergonomics and it's application in safety and health management? 7
   b) Heat disorders. 7

7. a) Describe common occupational diseases like silicosis and asbestosis? 7
   b) Write short note on Lead Poisoning? 7

8. a) Explain importance of personal protective equipments and details of equipments used for protecting various parts of our body? 7
   b) Write short note on maintenance of personal protective equipments? 7

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