

- Q.24 CO poisoning  
 Q.25 Ionizing radiation-hazards and control measures  
 Q.26 Heat stress and its control  
 Q.27 Role and function of factory medical officer in industry  
 Q.28 Heat exhaustion  
 Q.29 Routes of entry of chemicals  
 Q.30 Importance of ergonomics  
 Q.31 Carpal tunnel syndrome  
 Q.32 Dermatitis

#### **SECTION-D**

- Note:** Long answer type questions. Attempt any three questions out of four questions. (3x10=30)
- Q.33 Explain Classification of respiratory personal protective devices.  
 Q.34 Explain the effect the noise on man, measurement and evaluation of noise, vibration damping, noise isolation, noise absorption?  
 Q.35 What is medical surveillance? What is the significance of pre and post medical examination in industry.  
 Q.36 Describe Air Sampling, Personal Monitoring, Risk Management at work places, and the concept of Threshold Limits.

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RLI-095406

#### **1st Year / One Year Post Diploma in Industrial Safety Subject:- Industrial Hygiene Occupational Health**

Time : 3Hrs. M.M. : 100

#### **SECTION-A**

**Note:** Multiple choice questions. All questions are compulsory (10x1=10)

- Q.1 What part of the body is most sensitive to the effects of ionizing radiation?  
 a) Nerve                      b) Blood  
 c) Bone                      d) All of the above
- Q.2 Industrial hygienist used following terms to describe degree of exposure except  
 a) ppm (parts per millions)  
 b) mppcf (millions of particles of a particulate per cubic foot of air)  
 c) mg/m<sup>3</sup> (Milligrams of a substance per cubic meter of air)  
 d) pa (pascal)
- Q.3 Which strategy may be necessary when it is not feasible to render the working environment completely safe?  
 a) Inspection and audits  
 b) Engineering controls  
 c) Administrative controls  
 d) Personal Protective Equipment

- Q.4 Gravimetric analysis, the principle of \_\_\_\_\_ and \_\_\_\_\_ of a particulate on the filter is followed  
a) Filtration and deposition  
b) Deposition and collection  
c) Segregation and filtration  
d) Coagulation and deposition
- Q.5 What is the science that studies the poisonous, or toxic, properties of substances?  
a) Virology              b) Toxicology  
c) Epidemiology        d) Pharmacology
- Q.6 What is the criteria of selection of suitable personal protective equipment?  
a) Adequate protection against the hazards to which the worker is exposed  
b) Maximum comfort and minimum weight compatible  
c) No restriction for the essential movements  
d) All the above
- Q.7 What are the circumstances which necessitate the use of personal protective equipment?  
a) There might be a breakdown in the plant  
b) When isolation of process is not possible  
c) Ventilation controls fails.  
d) All the above circumstances
- Q.8 The calculated dose of a substance that is expected to kill 50 percent of a defined experimental animal population when exposure occurs through any route other than inhalation is called the:

(2)

RLI-095406

- a) KR50              b) LD50  
c) Lethal Dose ratio    d) Lethal Dose Limit
- Q.9 TLVs and PELs are published by which of the following agencies?  
a) NIOSH and OSHA    b) ACGIH and MSHA  
c) ACGIH and OSHA    d) OSHA and MSHA
- Q.10 What is the basic principle of operating a passive air-sampling device?  
a) Dispersion            b) Diffusion  
c) Oxidation            d) All of the above

### SECTION-B

**Note:** Very short answer type questions. Attempt any ten questions out of twelve questions. (10x2=20)

- Q.11 Aerosols  
Q.12 Dry bulb temperature  
Q.13 Asbestosis  
Q.14 Toxicity  
Q.15 Personal monitoring  
Q.16 Asphyxiants  
Q.17 Lethal Concentration (LC)  
Q.18 Teratogen  
Q.19 Electrochemical reactions  
Q.20 Chemical permeation  
Q.21 Heat stress  
Q.22 Dermal exposure

### SECTION-C

**Note:** Short answer type questions. Attempt any eight questions out of ten questions. (8x5=40)

- Q.23 Heat stress and its control

(3)

RLI-095406