

Ist Year/ One Year Post Diploma in Industrial Safety**Branch: Industrial Safety****Subject: Safety Engineering-II****Time : 3 Hrs.****MM: 100****SECTION – A****Note: Multiple Choice questions. All questions are compulsory.****10x1=10**

- Q1. White finger is caused due to exposure of:
 a) Segmental/hand-arm vibration
 b) Whole body vibration
 c) Bleaching chemicals exposure
 d) Metals smelting
- Q2. Code of practice on occupational safety and health audit is:
 a) IS-14489
 b) IS-3696
 c) IS-3786
 d) All of the above
- Q3. A fall arrestor system _____ the fall and fall restraint system _____ the fall.
 a) Hold, limit
 b) Limit, prevent
 c) Allows, prevent
 d) Prevent, allows
- Q4. Electrical Protection Device used to prevent overloading in electrical circuit is
 a) MCCB
 b) ELCB
 c) RCCB
 d) None of the above
- Q5. Under which section of The Factories Act, 1948 the provision pertaining to Ventilation are given?
 a) Section 14
 b) Section 13
 c) Section 28
 d) Section 40B
- Q6. Probability of the event that might occur X Severity of the event if it occurs =
 a) Accident
 b) Hazard
 c) Risk
 d) None of the above
- Q7. A confined space is defined as:
 a) Having limited way out
 b) Not designed for continuous occupancy
 c) Open space
 d) Both a) & b)
- Q8. What will blue, circular signs with white pictograms typically indicate?



- a) That a certain action in the area is prohibited
 b) That wearing a certain type of PPE in the area is mandatory
 c) That certain types of machinery are subject to faults
 d) That you should be aware of nearby hazards

- Q9. Which of the following may be considered as Class "D" Fire ?
 a) Wood Fires
 b) Electrical Fires
 c) Reactive Metal Fires
 d) Gaseous Fires
- Q.10 The instrument used for measurement of wind velocity
 a) Anemometer
 b) Luxmeter
 c) Hygrometer
 d) Ammeter

Section-B

Note: Objective type questions. All questions are compulsory.

10x1=10

- Q.11 What do you mean by HIRA ?
 Q.12 Enlist typical hazards associated with poor housekeeping at Workplace.
 Q.13 Explain the various color signage and their significance in ensuring safety at workplace.
 Q.14 Explain the body temperature regulation mechanism in humans.
 Q.15 Give full form of BLEVE.
 Q.16 What is meant by Flame Proof Electrical Equipments ?
 Q.17 Draw a sketch along with labeling to explain "Fire Tetrahedron"
 Q.18 Define Stroboscopic effect.
 Q.19 Specify the importance of lightening arrestors in ensuring safety at work pace.
 Q.20 Write a note on ill-effect of excessive vibration on worker.

Section -C

Note: Short answer type Questions. Attempt any twelve questions out of fifteen questions.

12x5=60

- Q.21 Explain Administrative Control and its applications in controlling physical hazards like illumination, noise, and heat stress.
 Q.22 Elaborate the concept of good housekeeping to ensure safety at workplace.
 Q.23 What is Glare? Explain the undesirable effect of glare and its control measures.
 Q.24 Write a note describing the essential provisions of an Emergency Response Plan.
 Q.25 List the differences between RCCB and ELCB.
 Q.26 Explain the various control measures which may be used in high noise area
 Q.27 Write a short note on hearing conservation program to avoid undesirable effect of high noise on workers.
 Q.28 Explain the various factors affecting thermal comfort.
 Q.29 Write a note on passive fire protection measures.
 Q.30 Explain the working of a "Electro-Static Precipitator" and its applications.
 Q.31 Give the classification of Fire and explain each type with suitable examples.
 Q.32 Explain static electricity and its control measures.
 Q.33 Write a short note explaining Heat Stroke and its preventive measures.
 Q.34 Explain the various types of lighting with suitable examples and sketches.
 Q.35 Define the following:
 a) Loss Time Injury
 b) Dangerous Occurrence
 c) Fumes
 d) Vapour
 e) Gas

Section-D

Note: Long answer questions. Attempt any two questions out of three questions.

2x10=20

- Q.36 Enlist the important factors to be considered during Plant Layout as per the relevant IS code of safe practice to ensure Industrial Safety.
 Q.37 Write a note explaining the working and application of various electrical safety devices used in electrical circuits to ensure electrical safety.
 Q.38 Write a note on " Use of Colour as an aid for good housekeeping to ensure safety at workplace"