

P. P. SAVANI UNIVERSITY

Third Semester of B.Sc. Examination

Feb.-March-2020

SSFS2050-Safety in various industries

28.02.2020, Friday

Time: 12:30 p.m. to 03:00 p.m.

Maximum Marks: 60

Section-A

Q.1 Very Short Questions (Attempt all questions) (10)

1.1 Objectives (10MCQ Compulsory-0.5 mark each) 05

1.1a What needs to be done before you start to excavate?

- A Evaluate soil condition
- B Construct protective systems
- C Provide safe access
- D All of the above

1.1b The start of height as per OSHA

- A 1.5 m
- B 1.8 m
- C 1.6 m
- D 2.5 m

1.1c Probability of the event that might occur * severity of the event if it occurs=

- A Accident
- B Hazard
- C Risk
- D None of the above

1.1d The following physical hazard

- A Fall
- B Electricity
- C Inhalation
- D All of the above

1.1e Hydrocarbons are organic compound with element

- A Hydrogen
- B Oxygen
- C Carbon
- D Both hydrogen and carbon

1.1f Industrial safety management is that branch of management which is concerned with _____ hazards from the industries

- A Reducing
- B Controlling
- C Eliminating
- D All of the above

1.1g The following is physical hazard agent

- A Fall
- B Electricity
- C Inhalation
- D All of the above

1.1h What is the primary component of crude oil?

- A Sulfur
- B Carbon
- C Hydrogen
- D Nitrogen

1.1i OHSA was created to _____

- A Data analysis
- B To reduce hazard
- C Ecological development
- D EIA analysis

1.1j In the case of fatal accident when should be a report filed for nearest OHSA office ?

- A Within 24 hours
- B Within 48 hours
- C Within 8 hours
- D Within 4 hours

1.2 Five Questions (Definitions-1 mark each)

05

- 1.2a Unsafe action
- 1.2b Unsafe condition
- 1.2c Dust
- 1.2d Incident
- 1.2e Accident

Q.2 Short Notes (attempt any two- 3 marks each)

06

- A Hazard in construction industry
- B Explain the scaffolding system
- C Discuss the hazard in construction industry

Q.3 Explain in detail (attempt any two-7 marks each)

14

- A Explain about safety precaution in transportation of chemical, petroleum, toxic or radio-active substance.
- B Explain in detail construction equipment
- C Why need of safety in engineering industries

Section-B

Q.1 Very Short Questions (attempt all questions) (10)

1.1 Objectives (10 MCQ Compulsory-0.5 mark each) 05

- 1.1a** Which of the following is a disadvantage of steel?
A High strength per unit mass
B High durability
C Fire and corrosion resistance
D Reusable
- 1.1b** Hydrocarbon are organic compound with element
A Hydrogen
B Oxygen
C Carbon
D Both hydrogen and carbon
- 1.1c** A confined space is deemed ready for employee entry when
A A company safety inspector has certified it
B The unit operation foreman declares it ready
C An engineer has completed the necessary calculations
D Your supervisor assigns you to the job
- 1.1d** The physical data term on a material safety data sheet that indicate if the vapor formed by the material is lighter or heavier than air is called
A Vapor pressure
B Vapor density
C Vapor gravity
D Vapor level
- 1.1e** The purpose of a lock-out/tag-out procedure is to;
A Improve productivity on the job
B Secure harmful energy source to prevent injury
C Save money
D All of the above
- 1.1f** The equipment used for short haul distance of 100m is
A bulldozer
B Scraper
C Power shovel
D Hoe
- 1.1g** What need to be done before you start to excavation?
A Evaluate soil condition
B Construct protective systems
C Provide safe access
D All of the above
- 1.1h** For house hold wiring and small units, the following should be used for safety measure
A ACB
B OCB
C MCB
D MCCB

- 1.1i Decibel (db) is a unit used to measure
A Light
B Sound
C Frequency
D None of the above
- 1.1j What is the main objective of risk assessment?
A To evaluate hazard and minimize the risks
B Remediation of contaminated sites
C hazard management
D to know source of pollutants
- 1.2 **Five Questions (Definitions-1 mark each)** 05
- 1.2a Noise
1.2b Hazard
1.2c Risk
1.2d Vibration
1.2e Health
- Q.2 **Short Notes (attempt any two- 3 marks each)** 06
- A Explain MAH
B Explain the on-site emergency plane
C Safety aspect of blasting in quarry
- Q.3 **Explain in detail (attempt any two-7 marks each)** 14
- A Explain in detail MSDS
B Explain in detail on-site and off-site emergency plane
C What is the hazard associated with excavation work on construction site and the control measure in place to reduce the risk of injury
