

# P. P. SAVANI UNIVERSITY

Sixth Semester of B.Sc. fire and safety Examination January -2023  
SSFS3130-Health, safety & environment

11.01.2023, Wednesday Time: 09:00 a.m. to 11:30 a.m. Maximum Marks: 60

## Instructions:

1. The question paper comprises of two sections.
2. Section I and II must be attempted in separate answer sheets.
3. Make suitable assumptions and draw neat figures wherever required.
4. Use of scientific calculator is allowed.

## Section-I (Total Marks - 30)

### Q.1 Short Questions

[10]

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

[05]

1.1a Which one is the personal safety?

- A Clean the machine
- B Keep your concentration to the work
- C Floor clean
- D Keep the tool at tool box

1.1b Which is the immediate lifesaving procedure?

- A First aid
- B Call doctor
- C Hospital care
- D Medical treatment

1.1c Which come under mechanical hazard?

- A Noise
- B Toxic
- C Unskilled
- D Unguarded machinery

1.1d How to stop bleeding of injured person?

- A Tie bandage
- B Apply ointment
- C Apply antiseptic on wound
- D Apply palm of hand pressure over wound

1.1e What is the period referred as golden hours?

- A First 30 min after incident
- B First 40 min after incident
- C First 50 min after incident
- D None of this

1.1f What is the first step to avoid accident in workplace?



- A Wear PPE
- B Alone work
- C Observe unsafe act and unsafe condition
- D None of this

1.1g In ABC of first aid, "A" denotes

- A Airway
- B attention
- C arresting
- D atmosphere

1.1h Which of the following injury is common in gas welding?

- A Electric shock
- B burns
- C bleeding
- D None of this

1.1i Example of physical hazards

- A Toxic
- B vibration
- C virus
- D None of this

1.1j Which is the less expensive disposal method?

- A recycling
- B Land fills
- C Composting
- D Burning waste

1.2 Answer the Following: (Definition-1 mark each )

[05]

1.2a Safety

1.2b Accident

1.2c Hazard

1.2d Risk

1.2e Harm

Q.2 Short Notes (Attempt any two-3 mark each)

[06]

A Explain health and safety culture

B Explain key element of health and safety system

C Write down factor influencing health and safety management

Q.3 Explain in detail (Attempt any two-7 mark each)

[14]

A Explain health and safety policy.

B Write down importance, aim and objective of health and safety policy.

C Explain need of safety philosophy





Section-II (Total Marks - 30)

- Q.1 Short Questions [10]
- 1.1 Objectives(10MCQ Compulsory-0.5 mark each) [05]
- 1.1a Which of the following is NOT the cause of electric fire?
- A Open doors
  - B Electric shock circuit
  - C Loose connection
  - D None of this
- 1.1b Benefits of maintenance
- A Improve productivity
  - B Reduce scrape
  - C both
  - D None of this
- 1.1c Purpose of lockout tag out
- A Improve productivity
  - B Isolate energy
  - C Stop work
  - D None of this
- 1.1d Purpose of CPR
- A Recover & Maintain body oxygen & blood circulation
  - B Stabilized body temperature
  - C Both
  - D None of this
- 1.1e Common sign of heart attack
- A Chest pain
  - B Spine pain
  - C Stomach pain
  - D None of this
- 1.1f Heat stroke indicate
- A Hot and dry skin
  - B vomiting
  - C Stomach pain
  - D None of this
- 1.1g Electric shock on human body depends upon
- A Line voltage
  - B Line current
  - C Current flowing through the body
  - D None of this



- 1.1h Which of the following Ladder safest of electrical work?  
A wooden  
B fiber  
C both  
D None of this
- 1.1i Which of the following gloves is used better grip & protection from heat  
A fabric  
B rubber  
C leather  
D aluminum
- 1.1j LOTO stands for  
A Lock out tag out  
B Lock out and throw out  
C Both  
D None of this

**1.2 Answer the Following: (Definition-1 mark each) [05]**

- 1.2a** Safety culture  
**1.2b** Safety philosophy  
**1.2c** Safety psychology  
**1.2d** Noise pollution  
**1.2e** Safety policy

**Q.2 Short Notes (Attempt any two-3 mark each) [06]**

- A** Explain solid waste management.  
**B** Explain characteristics and classification of solid waste.  
**C** Explain environment impact.

**Q.3 Explain in detail (Attempt any two-7 mark each) [14]**

- A** Explain noise pollution.  
**B** Explain noise control.  
**C** Explain the concept of radiation.