

# P. P. SAVANI UNIVERSITY

First Semester of Diploma Fire & Safety Examination December -2022

SSDFS1020-Construction safety

06.12.2022, Tuesday

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 What is the leading cause of death on construction site?

- A Stuck by object
- B Fall
- C Caught-in
- D Electric shock

1.1c Which come under mechanical hazard?

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

1.1d Stop bleeding

- 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** How should ladder being inspected?

- A In Every use
- B Once in a week
- C Once in a month
- D Every six month

**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** What are the hazards in construction site?

- A Fall
- B Slip-trip
- C Electric shock
- D All above

**1.2 Answer the Following: (Define-1 mark each )**

**[05]**

**1.2a** Construction

**1.2b** Scaffold

**1.2c** Coupling

**1.2d** Full body safety harness

**1.2e** Housekeeping

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

**[06]**

**A** What are the Type of building and Classification of building according to NBC?

**B** What are the Types of scaffolding ?

**C** Write down brief about Scaffold Construction & dismantling in construction site?

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

**[14]**

**A** Write down Safety in excavation and describe Trenching & shoring

**B** Write down the Purpose of road safety.

**C** How you Investigate a scaffold accident?





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 Importance of safety

1.2b Housekeeping

1.2c excavation

1.2d Sloping in excavation

1.2e Benching in excavation

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

[06]

A Write down the Purpose of excavation in construction site.

B What is Ladder and types of ladder used in industries.

C Explain the Use of safety nets and fall protection system at height work.

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

[14]

A Explain ropes and lines and its purpose.

B Describe the types and function of knots.

C Explain 5'S of housekeeping and Importance of safety.