

P. P. SAVANI UNIVERSITY

Fourth Semester of B.Sc. fire & safety Examination
December -2022

SSFS2080-Safety equipment and documentation

12.12.2022, Monday 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 Safety indications represent

- A It is combustible
- B Not flammable
- C Both
- D None of this

1.1b What should you do determine the best personal safety for the job?

- A Conduct hazard analysis
- B Find out what they wearing
- C Use good common sense
- D None of this

1.1c Which respirator requires more availability breathable air ?

- A Supplied air
- B Mask-loose fitting
- C Powered air supply
- D Mechanical air supply

1.1d Which respirator provide positive air supply over longer period?

- A air purifying respirator
- B Compressed air breathing apparatus
- C Supplied air
- D Non-powered air purifying respirator

1.1e Standard proof tested to 20000volts for helmet.

- A Class a
- B Class b
- C Class c
- D Class d

- 1.1f PPE helmet required to be worn when there is a ____
- A Potential fall risk present
 - B Electrical hazard
 - C Danger being caught
 - D Possibility of crush

- 1.1g Welding protective shields protect from eye burn injury
- A True
 - B False
 - C May be possible
 - D None of this

- 1.1h PPE consist of
- A Respiratory protection equipment
 - B Helmet
 - C Shoes
 - D All above

- 1.1i Which material used to make the cloth of fire fighters?
- A wool
 - B cotton
 - C Aramid
 - D All above

- 1.1j Breathing tube shall be
- A Flexible
 - B rigid
 - C Brittle
 - D All above

1.2 Answer the Following: (Definition-1 marks)

1.2a Hazards

[05]

1.2b Equipment

1.2c Maintenance

1.2d Accident

1.2e Machine hazard

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

[06]

A Write down type of the lifting equipment.

B Explain maintenance associated risk during maintenance operation

C Write down maintenance preventive measure.

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

[14]

A Write down the preventive measure for the use of hand tools.

B Write down the preventive measures for the use of power tools

C Explain mechanical and electrical hazards.

Section-II (Total Marks - 30)

- Q.1 Short Questions [10]
- 1.1 Objectives(10MCQ Compulsory-0.5 mark each) [05]
- 1.1a Company are required to
- A Provide all types of PPES
 - B PPE training
 - C Both
 - D None of this
- 1.1b Eye protection should be
- A Durable
 - B Good fitting
 - C Lite weight
 - D All above
- 1.1c Issuer must stop the work
- A If job site found unsafe
 - B Issuer loose the copy
 - C Both
 - D None of this
- 1.1d If work permit is not issued during emergency
- A All safety precautions must be taken
 - B Wear PPES
 - C Do site inspection
 - D All above
- 1.1e The receiver must stop the work
- A If the worksite become unsafe
 - B Issuer leave the site
 - C Both
 - D None of this
- 1.1f Which of the following is not a restricted area
- A Dump site
 - B Oil storage area
 - C Gas storage area
 - D All of the above

- 1.1g Purpose of work permit system
- A To authorized the specific work to be done at site
 - B Make document only
 - C To start the work quickly
 - D All of the above

- 1.1h What do you call an area where work permit required
- A Restricted area
 - B Sensitive area
 - C Controlled area
 - D Dangerous area

- 1.1i We use work permit in hazardous area to identify
- A Hazards and precautions
 - B Expired permit
 - C Both
 - D All of the above

- 1.1j Work permit authorized for
- A Specific work at specific location
 - B Specific tools at general
 - C Both
 - D None of this

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

1.2a Mechanical hazard

[05]

1.2b Machinery hazard

1.2c Hand tools

1.2d Personal protective equipment

1.2e Cost of accident

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

[06]

A Explain personal protective equipment.

B Write down maintenance and care of personal protective equipment.

C Define anemometer and its types.

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

[14]

A Explain inspection and write various types of inspection methods.

B Explain various types of work permit

C Prepare accident reporting form and investigation form