P. P. SAVANI UNIVERSITY

First Semester of B.Sc. Examination

Feb.-March-2020

SSFS1050–Fundamental of Fire

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 are the four elements of the fire triangle?

A Oxygen, heat, fuel, chemical reaction
B Water, fuel, ice, chemical reaction
C Nitrogen, fuel, chemical reaction, heat
D None of the above

1.1b Wet chemical fire extinguisher where designed to tackle what class of fire

A Electrical fire
B Class B fires
C Class D fires
D Class F fires

1.1c Fire extinguishers which contain foam will display a bond of what color?

A Blue
B Cream
C Red
D Black

1.1d Which of blow are not ordinary combustible?

A Wood
B Cloth
C Paper
D Gasoline

1.1e Water fire extinguisher should only be used of fires fully by :

A Wood paper, textile and solid material
B Flammable gases (propane, butane etc.)
C Flammable liquid (gasoline, kerosene etc.)
D Live electrical equipment

1.1f The following class of fire occur in electrical equipment

A Class A fires
B Class B fires
C Class C fires
D All of the above's

1.1g Class A fire consist of fire due to

A Wood
B Oil
C Transformer
D Chemical

1.1h Class A fires fueled by what type of materials?

A Live electrical equipment
B Flammable liquids (gasoline, kerosene etc.)
C Wood, papers, plastic and other solid materials
D Cooking oil

1.1i What is the first thing you should do if you discover a fire onsite?

A Grab all your tools and belonged and leave the area
B Tackle the fire yourself
C Run away from the fire and go home
D Activated the fire alarm

1.1j Fire extinguishers which contain water will display a band of what color?

A Red
B Yellow
C Black
D Blue

1.2 **Five Questions (Definitions-1 mark each)**

1.2a Unsafe act
1.2b Unsafe condition
1.2c Injury
1.2d Health
1.2e Risk

Q.2 **Short Notes (attempt any two- 3 marks each)** 06

A Classification of fire
B Method of extinguishment
C Role of oxygen in combustion

Q.3 **Explain in detail (attempt any two-7 marks each)** 14

A Briefly explain the difference between private and public fire protection
B Explain the types of flame and spread the flame
C Explain grading of occupancies based on fire load

Section-B

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

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

1.1a After using a Co2 fire extinguisher the nozzle tends to get
- A Warm
- B Very hot
- C Slightly warm
- D Very cold

1.1b You should not store loose batteries in a tool bag because;
- A It will make the bag heavier
- B It could start a fire
- C It will reduce the battery fire
- D It will damage the battery

1.1c Fire extinguisher with contain carbon dioxide will display a band of what color?
- A Blue
- B Cream
- C Red
- D Black

1.1d Which of these fire-extinguisher should not be used on electric fires
- A Dry powder
- B Carbon dioxide
- C Carbon dioxide and Dry powder
- D Water and foam

1.1e Which of the following is not a Class A material
- A Paper
- B Plastic
- C Propane
- D Wood

1.1f Which categories does titanium and aluminum materials fall under?
- A Categories A
- B Categories C
- C Categories D
- D Categories F

1.1g Prohibition signs are identified by which color?
- A Red
- B Green
- C Blue
- D Yellow

1.1h Mandatory signs are identified by which color?
- A Red
- B Green
- C Blue
- D Yellow

1.1i Hazard signs are identified by which color?

A Red
B Green
C Blue
D Yellow

1.1j Safe condition signs are identified by which color?

A Red
B Green
C Blue
D Yellow

1.2 **Five Questions (Definitions-1 mark each)** 05

1.2a Mistake
1.2b Error
1.2c Incident
1.2d Near miss
1.2e Accident

Q.2 **Short Notes (attempt any two- 3 marks each)** 06

A Explain in detail ventilation system
B Benefit to do ventilation in fire fighting
C Discuss about NBC

Q.3 **Explain in detail (attempt any two-7 marks each)** 14

A Briefly explain the types of detector and its used
B Explain the horizontal and vertical ventilation
C Basic theory on construction of detector and alarm system

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