

Faculty of Science Master of Science (M.Sc.)

(W. E. F.: 2023-24)

Document ID: SUTEFSCM-01

| Name of Faculty | : | Faculty of Science |
|----------------------|---|---------------------------------------|
| Name of Program | : | Master of Science |
| Course Code | : | 1MSF03 |
| Course Title | : | Fire Protection Equipments Appliances |
| Type of Course | : | Professional Core |
| Year of Introduction | : | 2023-24 |

| Prerequisite | : | Fire-fighting equipment includes fire hoses, fire extinguisher, Fire-Resistant protective clothing, fire-resistant protective Clothing, fire-resistant gloves, respirators, and communication equipment. |
|------------------|-----|--|
| Course Objective | : | To Prevent and Suppress Unwanted Fires by Rendering Prompt And efficient Services So as to keep the Loss of Life and Property to the Minimum. |
| Course Outcomes | : | At the end of this course, students will be able to: |
| | CO1 | Understanding Types of Fire |
| | CO2 | Remembering and Know the Use of Valves |
| | CO3 | Analysis of how to use fire equipment and Heavy vehicles. |
| | CO4 | Application of how to use small equipment in fire-fighting. |

Teaching and Examination Scheme

| Teachin | ng Scheme | (Contact | Credits | Examination Marks | | | | |
|---------|-----------|----------|---------|--------------------------|-------|-----------|---------|-------|
| | Hours) | | | Theory | Marks | Practical | l Marks | Total |
| L | T | P | С | SEE | CIA | SEE | CIA | Marks |
| 5 | 0 | 0 | 5 | 70 | 30 | - | - | 100 |

Legends: L-Lecture; T-Tutorial/Teacher Guided Theory Practice; P - Practical, C - Credit, SEE - Semester End Examination, CIA - Continuous Internal Assessment (It consists of Assignments/Seminars/Presentations/MCQ Tests, etc.)

Course Content

| Unit No. | Topics | Teaching Hours | Weightage | Mapping With COs |
|-------------|---|-------------------|-----------|---------------------|
| 1 | Properties of hazardous chemicals & handling procedure, fixed fire fighting installation. | 15 | 25% | CO1 |
| 2 | Fire Hose and Hose Fittings, Hydrants And Water Supply. | 15 | 25% | CO2 |



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| 3 | Fire protection hydraulics, pumps, abstracts from factories act,1948, fire protection law etc. | 15 | 25% | CO3 |
|---|---|----|-----|-----|
| 4 | A) Hazards in special area and fire protection, turn table ladder, fire investigation and plan reading. | | | |
| | B) Small gears, special appliance, transportation and storage of hazardous goods. | 15 | 25% | CO4 |

| Suggested Distribution of Theory Marks Using Bloom's Taxonomy | | | | | | |
|---|-------------|---------------|-------------|---------|----------|--------|
| Level | Remembrance | Understanding | Application | Analyse | Evaluate | Create |
| Weightage | 25 | 25 | 25 | 25 | - | - |

NOTE: This specification table shall be treated as a general guideline for the students and the teachers. The actual distribution of marks in the question paper may vary slightly from above table.

Suggested Learning Websites

| Sr. No. | Name of Website |
|---------|--|
| 1 | https://archive.nptel.ac.in/courses/105/102/105102176/ |

Reference Books

| Sr. No. | Name of Reference Books |
|---------|--|
| 1 | Carl Goodson, "Essentials of fire fighting" Fire protection publications; 5th edition |
| 2 | 2. Pann Well, "Fire engineering's skill drills for Fire Fighter", Pann Well; 1st & 2nd edition |