

## FACULTY OF SECURITY AND SURVEILLANCE

**NSQF LEVEL SCHEME** 

**SECTOR : FIRE AND SAFETY** 

B. VOC. IN FIRE TECHNOLOGY AND INDUSTRIAL SAFETY MANAGEMENT

REGULATION

**NSFQ LEVEL 7** 

REGULATION

SEMESTER 6<sup>TH</sup>

4

Semester Wise-Syllabus

**Skill Components** (Theory & Practical)

B. Voc in Fire Technology & Industrial Safety Management

	Course N	ame : B. Voc. In	Fire Tec	chnology	and Industrial Safe	ty Man	ager	nent	
				Semester	·VI				
			Ski	ill Compo	onent				
	Credits Eose (Hrs.)								
Code	Subject Type	Subject	Theory	Practical	Self/Industry/Project	Total Credit		Т	Р
Skill Comp	onent (Loca	tion : Institute)					•	•	ľ
	SC	Controlling Pollution	2	1	-	3	3	1	-
	SC	Disaster Management	2	1	-	3	3	2	-
	SC	Energy Conservation	2	1	-	3	3	3	-
	SC	Industrial Psychology , Ergonomics and Accidents	2	1	-	3	3	1	-
(OJT)/Qua	lification Pa	cks) Location: Indus	try Partne	r)					
Internship/OJT/ Drill Practical		0	0	6	6	0	0	0	
	TOTA	AL	6	6	6	18	0	0	0

		Skill Subjects					
Skill subject I: Controlling Pollution							
Component	Unit (Module)	Subunit (Session)	Learning objective	Duration in hour	Credit		
Theory	Environmental Regulations	roduction, Survival of the Environment, Conflict between North and South, Environmental Control Regulations, Impact Assessment, Prevention and Control of Pollution, Central Pollution Control Board	Understanding the existence of the environment. Know about environmental control regulations, impact assessment, pollution prevention and control measures. Central Pollution Control Board information.	05			
Theory	Environmental Management Systmem	proaches to environmental Regulation, Concept of Industrial Ecology, Environmental Management System and Standard, Compliance to Legislations, ISO 14000, International Environmental guiding Principles	Understanding the concept of industrial ecology. Environmental management systems and standards, compliance with laws and international environmental guidelines, etc.	10	3		
Theory	Waste Management	vironment Management, Integrated approach in managing Safety and environment, Development process towards sustainability, Hazardous Waste Management	Integrated approach in managing the environment and understanding the development process towards sustainability. Understanding the hazardous waste management process.	10			

## Skill Subjects

Skill subject II: Disaster Management							
Component	Unit (Module)	Subunit (Session)	Learning objective	Duration in hour	Credit		
Theory	Disaster Impact	roduction, Disaster Management Plan, Disaster Zoning for natural calamities, Important consideration in Disaster Management, Structure, Constitution, Needs and resources to tackle disaster	What is a disaster management plan? Disaster zoning for natural calamities and important discussions in disaster management.	15			
Theory	DISASTER PREPAREDNESS	e-Disaster preparedness, Post disaster response and recovery, Control of emergencies, Organization consideration, Concept of communication	Understanding the concepts of pre- disaster preparedness, post- disaster response and recovery and emergency control and communication.	15	3		
Theory	DISASTER MANAGEMENT	aster Management Plan, Disaster management Cycle, Fire : Disaster	Preparation of disaster management plan and understanding the cycle of disaster management.	10			
Theory	NATURAL DISASTER	pes of Natural Disaster, Flood, Earthquake, Landslide, Desertification, Cyclone, Drought	To know the types of Natural disasters and understand their control measures.	05			
Theory	ARTIFICIAL DISASTER	finition, Types of Artificial Disaster, Management of Artificial Disaster	To know the types of Artificial disasters and understand their control measures.	05			

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Skill subject III: Energy Conservation								
Compone nt	Unit (Module)	Subunit (Session)	Learning objective	Duration in hour	Cr di			
Theory	Energy Conservation	ergy Conservation Act, Bureau of Energy Efficiency, Energy Management, Energy Audit, Indian Renewable Energy Development Agency(IREDA), Sustainable Energy Development	Know about Energy Conservation Act. Understanding about Energy Management, Energy Audit, Indian Renewable Energy Development Agency (IREDA).	10				
Theory	Goals of Sustainable development	roduction to sustainable development, Issue of achieving sustainable development, ptimal resource utilization, Sustainable Cities, Sustainable Transportation System	To understand the issues of achieving sustainable development and to know about the sustainable transport system.	15	Δ			
Theory	Atmospheric Protection	ergy Conservation, Sustainable mining Technology, Efficient energy Management, Bio- Methanation and Filtration, Protection of atmosphere.	Adopting the rules of environmental protection and energy conservation.	15	-			

Ref. Books:-

B. Voc in Fire Technology & Industrial Safety Management

Component	Unit (Module)	Subunit (Session)	Learning objective	Durati	Credit
-				on in hour	
Theory	Industrial Psychology	Introduction, Industrial Psychology & its Scope, Concepts and Principles of Industrial Psychology, Application of Industrial Psychology, Industrial Accidents, Accident proneness	To know about industrial psychology and its scope. And to understand the concepts and principles of industrial psychology.	10	
Theory	Injury	Relationship between perception and muscular responses and Injuries, Relationship between Intelligence and Injury Experience, Hearing, Emotional Instability, Fatigue, Illumination, Noise	Knowing the relationship between muscle responses and injuries. Knowing the causes of different types of injuries and their control measures.	15	
Theory	Stress From Workplace	Atmospheric Condition, Job stress and its effects, Capping with Stress, Bio Mechanism and Ergonomics, Industrial Ergonomics and Measurements	Understanding the different types of hazards and work stress at the workplace. Know the ergonomics and measurement of different working conditions.	15	2

Objective:- To Train an individual in handling Fire Safety Equipment and Enable him/her to function as a Fire Technician.

Industrial safety health & Environment Management System	-	Mr. R.K Jain
Industrial safety management and Health	-	Mr. M. K. Tarafdar
Industrial Safety	-	Mr. Misti