

Syllabi & Courses of Study
of
Vocational Subjects
for
Class-9th (Level-1)



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SCHEME OF EXAMINATION

Details of Assessment plan:

There will be three components of evaluation:

- a. Knowledge/ Theory Test
- b. Practical Test
- c. CCE

The marks allocated for each evaluation will be as under:

- a) Knowledge/theory test* – **30 marks

(Theory comprise of Term-I and Term-II i.e. 15+15=30)*

*** (Further divided by 2 to get marks out of 30 i.e. 15+15 at the time of adding up total marks annually)*

- b) Practical test – 50 marks
- c) CCE – 20 marks

S.NO.	Method Of Assessment	Maximum Marks	Minimum Pass Marks	Evaluating Agency
1	Theory/Written Test	30	11	JKBOSE
2	Practical Test (Term-I) & Oral Test/Viva	50	17	JKBOSE
3	Continuous & Comprehensive Evaluation (CCE)	20	This will be included only if the student qualifies separately in Theory & Practical	JKBOSE
TOTAL		100 Marks		

PRACTICAL ASSESSMENT

(Annual)

EXTERNAL ASSESSMENT:

Distribution	MARKS
Hands on Training	30
Viva Voce	10
Practical File / Student's portfolio	10
TOTAL	50

INTERNAL ASSESSMENT:

Distribution	MARKS
CBT (class based test)	10
Classroom Participation	05
Classroom Attendance	05
TOTAL	20

QUESTION DISTRIBUTION

Term-I & II

Class: 9th (Level-1)

Max. Marks: 30

Duration: 02:30Hrs

PATTERN	MARKS	QUESTIONS	TOTAL
Very Short Questions	01	01(5)	05 MARKS
Short Type-I Questions	02	05	10 MARKS
Short Type-II Questions	03	03	09 MARKS
Long Type Questions	06	01	06 MARKS
TOTAL		14	50 Marks

1.IT/ITeS

Job Role: Domestic Data Entry Operator

Level-1 (9th)

SCHEME OF ASSESMENT

This course is a planned sequence of instructions consisting of Units meant for developing employability and vocational competencies of students of Class 9th opting for vocational subject along with general education subjects.

The unit-wise distribution of hours and marks for Class 9th is as follows:

Class 9th				
Term	Module Part and Name	Unit Name	No. of Hours for Theory and Practical (200)	Max. Marks Theory and Practical (100)
Term-I	Part – A Employability Skills	Communication Skills-I	25	05
		Self-Management& Entrepreneur Skills-I	25	05
	Part – B Vocational Skills	Introduction to IT-ITeS Industry	10	05
		Data Entry and Keyboarding Skills	20	05
		Digital Documentation	20	10
	Total			90
Term-II	Part – A Employability Skills	Basic ICT and Green Skills-I	30	10
	Part – B Vocational Skills	Electronic Spreadsheet	30	10
		Digital Presentation	30	10
Total			90	30*(15)
	Part – C Practical Work	Practical Exam	06	20
		Written Test	01	10
		Viva Voce	03	10
Total			10	40
	Part-D Project / Field work	Practical File / Student Portfolio	02	10
		Viva Voce	03	10
Total			05	20
	Part-E	Continuous and Comprehensive Evaluation	05	10
Total			200	100

Term-I **“Part – A”**

***Employability Skills*----- (10 Marks)**

Unit-I Communication Skills-I (05 Marks)

Meaning and Introduction of communication and Communication Process, Elements of Communication Process (Cycle), Methods of Communication, Communication Skills, Importance of communication in (Teaching – Learning Process, day to day life and Business field).

Unit–II Self-Management & Entrepreneurial Skills-I (05 Marks)

Meaning and Concept of Self-Management, components of Self-Management, Self-management skills, (Positive Thinking, Self Confidence, Personal Hygiene and Grooming), Meaning and Concept of Entrepreneur, Entrepreneurship, Entrepreneurship development, Characteristics of Entrepreneurship, Role of Entrepreneurship in (Social Economic development, Standard of living and optimal use of resource).

“Part – B”

***Vocational Skills*----- (20 Marks)**

Unit–I Introduction to IT-ITeS Industry (06 Marks)

Introduction to Information technology, Information technology enabled services (ITeS), BPO Services, Applications of IT in different fields: Education, home, healthcare, banking, entertainment, marketing, science and engineering.

Unit–II Data Entry and Keyboarding Skills (05 Marks)

Introduction, Keyboarding skills, Types of keys, Pointing Device (Mouse:- i. Mouse Pointer ii. Mouse Operations), typing Ergonomics, Positioning of fingers on Keyboard, Successful Keyboarding tips, Typing Software (Introduction to Rapid Typing Tutor, Interpreting Result, Calculate Typing speed, Typing Accuracy, Overall Rating Calculation)

Unit–III Digital Documentation (09 Marks)

Introduction to digital documentation, Getting started with Word Processing software (Libre Office Writer Word Processor), Create, Save, delete & open an existing document, Formatting a document, Formatting text, Page style dialog, Paragraph style, Creating and Managing Tables, Checking Spelling and Grammar, Insert, delete, crop, resize and flip an image, Printing the document, Mail Merge.

Term-II

“Part – A”

Employability Skills----- (10 Marks)

Unit-III Basic ICT & Green Skills-I

(10 Marks)

Basic ICT Skills: Introduction to Information and Communication Technology, ICT tools (Smartphone’s and Tablets), Introduction to Computer, Parts of Computer (CPU, CU, ALU) and Peripherals, Basic Computer Operations, Performing Basic File Operations, Basics of Internet (Communication and Networking, Internet Browsing).

Green Skills: Introduction to Society and Environment, Natural Resources (Renewable and Non Renewable Resources), Pollution, Climate Change, Natural disaster, Conservation of natural resources (Soil, Water, Food, Forest), Green economy, Components of Green Economy, Skill development for Green Economy, Green Skills.

“Part – B”

Vocational Skills ----- (20 Marks)

Unit-IV Electronic Spread Sheet

(10 Marks)

Introduction to spread sheet, Getting started with LibreOffice Calc, Parts of LibreOffice Calc, Adding and Removing sheets, Entering Data, Mathematical Operators used in formulae, Formula with cell addresses and operators., Use of functions to do calculations (Basic Functions: sum, avg, min, max, count), Formatting the worksheet, Formatting a cell range as scientific, Formatting a cell range to display time, Formatting alignment of a cell range, Speeding up Data Entry, Referencing and its types, Creation of charts using Spreadsheets.

Unit-V Digital Presentation

(10 Marks)

Introduction to digital presentation, Characteristics of a good presentation, Getting started with LibreOffice Impress, Parts of LibreOffice Impress, Create, save and Close presentation, Inserting duplicate slide, Selecting Slide Layout, Coping and Moving Slides, Coping, Moving and Deleting content, View Presentation(Controlling size of view, Work Space View),Formatting Text, Tables(Inserting Tables, Editing Data in a Table, Table border and background) , Images(Inserting an Image , Formatting Images, Resizing Images, Rotating Images), Managing Graphic Objects(Drawing Tools, Grouping Objects and Ungrouping objects),Slide Master, Slide Transition.

Month	Bill Amount
January	
February	
March	
April	
May	
June	
July	
August	
September	
October	
November	
December	

(05 Marks)

7. Create a presentation which gives an overview of the science subject. This presentation should contain the following slides:
- (i) Title of the subject (use title slide layout only)
 - (ii) Index
 - (iii) Introduction of each chapter (Min one slide per chapter)

(05 Marks)

8. Perform the following operations on a presentation:
- (i) Rename each slide with a chapter name.
 - (ii) Change the font for the slide title.
 - (iii) Add a footer that contains the current date and your school name.
 - (iv) Apply at least one master page to your presentation.
 - (v) Hide slides of even chapters and see the effect.
 - (vi) Start the slide show after setting the option as Change slides manually.
- (05Marks)**

B. Viva Voce

(10 Marks)

C. Student Portfolio /Practical Notebook

(10 Marks)

2.RETAIL

Job Role: Cashier

Level-1 (9th)

SCHEME OF ASSEMENT

This course is a planned sequence of instructions consisting of Units meant for developing employability and vocational competencies of students of Class 9th opting for vocational subject along with general education subjects.

The unit-wise distribution of hours and marks for Class 9th is as follows:

Class 9 th				
Term	Module Part and Name	Unit Name	No. of Hours for Theory and Practical (200)	Max. Marks Theory and Practical (100)
Term-I	Part - A Employability Skills	Communication Skills	15	05
		Self-Management & Entrepreneurship	15	05
	Part – B Vocational Skills	Introduction of Retailing	30	10
		Service cash point (POS)	30	10
	Total			90
Term-II	Part - A Employability Skills	Basic ICT Skills	16	06
		Green Skills	15	04
	Part – B Vocational Skills	Customer Order for Goods	30	10
		Process of Payments & Customer Service	29	10
	Total			90
Part - C Practical Work	Practical Exam	06	10	
	Written Test	01	10	
	Viva Voce	03	05	
Total			10	25
Part-D Project / Field work	Practical File / Student Portfolio	07	10	
	Viva Voce	03	05	
Total			10	15
Total			200	100

Term-I
“Part – A”

***Employability Skills* -----(10 Marks)**

Unit–I Communication Skills

(05 Marks)

Introduction to communication, Verbal Communication, Non-Verbal Communication, Meaning of communication, Importance of communication skills, Elements of communication cycle. Perspectives in communication, Factors affecting perspectives in communication, Visual perception, Language, Past experience, Prejudices, Feelings, Writing Skills (Part of Speech and Sentence), Pronunciation Basics, Greetings and Introduction, talking about Self, Asking Questions.

Unit–II Self-Management & Entrepreneurship Skills

(05 Marks)

Introduction to Self-management, Positive results of self-management, Self-management skills, Factors that help in building self-confidence – social, cultural, and physical factors, Strength and Weakness Analysis, Self-confidence, Positive Thinking, Personal Hygiene, Grooming. Role of Entrepreneurship, Qualities of a Successful Entrepreneur, Distinguishing Characteristics of Entrepreneurship and Wage Employment.

“Part – B”

***Vocational Skills* -----(20 Marks)**

Unit-I Introduction to Retailing

(10 Marks)

Basics of Retailing, Functions of retailer, Retail services to the customers, Meaning and differentiation between Organized and UN organized retailing, Meaning and Classification of Store and Non-Store Retailing, Meaning of Cashier, Duties and Responsibilities of a Cashier.

Unit-II Service Cash Points or POS

(10 Marks)

Meaning of cash point (POS), Skills required to become a retail cashier, Modes of Payment, Procedures & Precautions to be taken while handling cash, Authorization of Cheque, Refunds and Credit Card payments, Problems at service cash point (Hardware issues, Software issues, Connectivity issues and user errors).

Term-II
“Part – A”

Employability Skills -----(10 Marks)

Unit–III Basic ICT Skills (06 Marks)

Introduction to ICT, ICT Tools: Smartphone’s and Tablets — I, ICT Tools: Smartphone’s and Tablets — II, Parts of Computer and Peripherals, Basic Computer Operations, Performing Basic File Operations, Communication and Networking — Basics of Internet, Communication and Networking — Internet Browsing, Communication and Networking — Introduction to e-mail, Communication and Networking — Creating an e-mail Account, Communication and Networking — Writing an e-mail, Communication and Networking — Receiving and Replying to e-mails.

Unit–IV Green Skills (04 Marks)

Introduction, Society and Environment, Natural resources, Renewable and Non Renewable resources, Exhausted and non-Exhaustible Resources, Conserving Natural Resources, Natural Disasters, Water conservation, Energy conservation, Food conservation, Forest conservation, Sustainable Development and Green economy, Sustainable Development Goals, Components of Green Economy, Skill development for Green Economy, Green Skills, Green Projects.

Vocational Skills -----(20 Marks)

Unit-III Customer Order for Goods (10 Marks)

Processing Customer Orders for Goods, Customer Information, Steps involving in customer orders, Customer data management system, Sources of information and customer confidentiality, Meaning types and contents of an Invoice.

Unit-IV Process of Payment & Customer Service (10 Marks)

Effective Process of Payment, Pricing and kinds of pricing, Problems in Payment Process, Components of Payment System in Retail, Meaning and importance of E – Commerce .Concept and role of Customer Service in retail, Distinction between customer and consumer, Basic needs of customer, Elements of customer services, Advantages of Customer Service, Organizational behavior – Standards of appearance in retail, behavior with colleagues and superiors, Meaning of Customer Expectation.

3.HEALTH CARE

Job Role: Home Health Aide Trainee

Level-1 (9th)

SCHEME OF ASSEMENT

This course is a planned sequence of instructions consisting of Units meant for developing employability and vocational Competencies of students of Class 9th opting for vocational subject along with general education subjects.

The unit-wise distribution of hours and marks for Class 9th is as follows:

Class 9th				
Term	Module Part and Name	Unit Name	No. of Hours for Theory and Practical (200)	Max. Marks Theory and Practical (100)
Term-I	Part - A Employability Skills	Communication Skills	15	05
		Self-Management & Entrepreneurship	15	05
	Part – B Vocational Skills	Human Body Structure and Function	30	10
		Healthcare Delivery Systems	30	10
Total			90	30* (15)
Term-II	Part – A Employability Skills	Basic ICT Skills	15	06
		Green Skills	15	04
	Part – B Vocational Skills	Role of Home Health Aid	25	07
		Personal Hygiene and First aid	20	07
		Primary Healthcare & Emergency Medical Response	15	06
Total			90	30*(15)
	Part - C Practical Work	Practical Exam	06	20
		Written Test	01	10
		Viva Voce	03	10
Total			10	40
	Part-D Project / Field work	Practical File / Student Portfolio	02	10
		Viva Voce	03	10
	Total			05
	Part- E (CCE)	Continues and Comprehensive Evaluation (CCE)	05	10
Grand Total			200	100

Term-I
“Part – A”

Employability Skills -----(10 Marks)

Unit–I Communication Skills, Self - Management Skills & Entrepreneurship Development (10 Marks)

Communication, Importance of Communication, Elements of Communication, Factors Affecting Perspectives in Communication, Relevant Knowledge about Self-Management, Types of Verbal Communication and Non Verbal Communication, Advantages and Disadvantages of Verbal Communication, Importance of Non Verbal Communication, Punctuation, Basic Parts of Speech, Supporting Parts of Speech, Parts of Sentence, Types of Objects and Sentences, Qualities of Self Confident People, Building Self Confidence, Positive Thinking and its Importance. Definition of Entrepreneurship, Economic Development, Social Development, Improved Standards of living, Qualities of successful Entrepreneur,

“Part– B”

Vocational Skills -----(20 Marks)

Unit–I Human Body Structure and Function (10 Marks)

Anatomy, Physiology, Composition of Body, Cell, Tissues, Cardiovascular System, Heart, Respiratory System, Digestive System, Musculo-Skeletal System, Skeletal System, Muscular System, Brain and Spinal Cord, Urinary System, Integumentary System.

Unit–II Healthcare Delivery System (10 Marks)

Healthcare Systems, Role of Voluntary Health Sector, Meaning of Hospital, Hospital Set up, Functions/ Services Provided by the Hospital, Role and the functions of a clinic, Types of clinics, Preventive Care Provided at the Doctors Clinic, Chart For Basic Preventive Care , Services Provided at Various Rehabilitation and Convalescent Centers, Functions of a Rehabilitation Center, Role of Rehabilitation Facility in Patient Recover, Places where hospice care is provided, Support facilities extended by Hospice Care.

Term-II

“Part – A”

Employability Skills -----(10 Marks)

Unit–II Basic ICT & Green Skills-I (10 Marks)

Introduction, ICT at Work place, ICT at Home, Parts of Computer, Input and Output Devices, Computer Hardware and Software, Starting a Computer, Log in and Log out, Shutting down a computer, Using the keyboard and a Mouse, Natural Resources, Land Resources, Forest Resources, Water Resources, Renewable and Non Renewable resources, Deforestation and Pollution, Saving the Environment, Soil Conservation, Water Conservation, Energy Conservation, Food Conservation, Forest Conservation.

“Part– B”

Vocational Skills -----(20 Marks)

Unit–III Role of Home Health Aid (07 Marks)

Essential Duties and Responsibilities, Activities of Daily Living, Daily Care Plan of Patients, Transfer of Patient, Definition of Comfort, Causes of Discomfort, Elements of Patient Comfort, Components Required For Patient Comfort, Environment conducive to taking proper rest, Well-lighted rooms, Free from noise and extraneous activity, well ventilated rooms, Making environment familiar, Patient Environment and its Components, Rights of a Patient, Medical Ethics, Qualities of a Patient Care Assistant, List of Do’s and Don’ts for a Patient Care Assistant, Purposes of Specimen Collection, Types of Examination, Urine Specimen Collection, Sputum Specimen Collection, Stool Specimen Collection, Blood Specimen Collection .

Unit–IV Personal Hygiene and First Aid (07 marks)

Definition of Hygiene, Grooming Routines to be followed for Personal Hygiene and its Importance, Factors that Affect Health and Prevent Diseases, Why is hand hygiene important? Why is hand hygiene important in health care? Advice to healthcare staff and patients, Steps for Hand Washing, Meaning of First Aid, Purposes of First Aid, Principles of First Aid Rules of First Aid, Health Emergency, First Aid Room, First Aid Kit, Important Medications and materials, Drugs for Common Ailments, General Considerations and Rules, Cardiac Arrest, Unconsciousness, Fever, Taking Body Temperature, Heat Stroke, Back Pain, Asthma, Food Borne Illness, Cut, Types of Cuts, Bleeding, Burns, Classification of Burns, Insect Bite and stings, Dog Bite, Snake Bite and its Treatment.

Unit–V Primary Healthcare & Emergency Medical Response (06 marks)

Primary Health Care, Principles of Primary Health Care, Levels of Healthcare, Essential Components of Primary Healthcare, Elements of Primary Healthcare, Role of Nurse in Primary Healthcare, Indicators of Millennium Development Goals, Emergency Medical Response, Chain of Survival

Practical (External: 50 Marks)

A. Hand on Skill

(15 Marks)

1. Measure body temperature using various types of thermometers.
2. Measure Pulse Rate of a patient.
3. Measure Respiratory rate of a patient.
4. Measure B.P of patient.
5. Demonstrate the steps involved in making of open bed.
6. Demonstrate the steps involved in making of closed bed.
7. Identify Various positions of a patient.
8. Procedure(s) for changing the patient's position.
9. Demonstrate use of personal protective Equipment (i.e. Gowning, Gloving, wearing a mask etc.).
10. Identify different parts of body.
11. Carrying patient on a stretcher and wheel chair.
12. Identify equipment in a First aid box.
13. Demonstrate steps of Hand-washing.
14. Demonstrate various techniques and use of equipment for collecting the Specimen of Urine, Stool, Sputum and Blood.
15. Demonstration the Steps of Chain of Survival.

B. Written Test

(10 Marks)

C. Viva Voce

(15 Marks)

D. Student Portfolio/Practical Notebook

(10 Marks)

3. Tourism & Hospitality

Job Role: Food & Beverage Service Assistant

Level-1 (9th)

SCHEME OF ASSEMENT

This course is a planned sequence of instructions consisting of Units meant for developing employability and vocational competencies of students of Class 9th opting for vocational subject along with general education subjects.

The unit-wise distribution of hours and marks for Class 9th is as follows:

Class 9 th				
Term	Module Part and Name	Unit Name	No. of hours for Theory and Practical	Max. Marks
Term-1	Part-A Employability Skills	Communication skills	15	05
		Self-Management& Entrepreneurship	15	05
	Part-B Vocational Skills	Introduction to Tourism & Hospitality Industry	24	08
		Preparation for Food & Beverage Service Operations	18	06
		Classification of catering Industry	18	06
Total			90	30 (15)
Term-2	Part-A Employability Skills	ICT Skills	15	05
		Green Skills	15	05
	Part—B Vocational Skills	Food & Beverage Service Operations	24	08
		After Dining Activities	18	06
		Communication with Colleagues & Customers	18	06
Total			90	30(15)
	Part-C	Practical Exam	06	20
		Written Test	01	10
		Viva Voce	03	10
Total			10	40
	Part-D	Practical File/ Student Portfolio	02	10
		Viva Voce	03	10
	Total		05	20
	Part-E	Continuous & Comprehensive Evaluation	05	10
	TOTAL		200	100

Term-I
“Part – A”

***Employability Skills*----- (10 Marks)**

Unit–I Communication Skills (05 Marks)

Meaning and Introduction of communication and Communication Process, Elements of Communication Process (Cycle), Methods of Communication, Communication Skills, Importance of communication in (Teaching – Learning Process, day to day life and Business field).

Unit–II Self-Management & Entrepreneurship Skills (05 Marks)

Meaning and Concept of Self-Management, components of Self-Management, Self-management skills, (Positive Thinking, Self Confidence, Personal Hygiene and Grooming), Meaning and Concept of Entrepreneur, Entrepreneurship, Entrepreneurship development, Characteristics of Entrepreneurship, Role of Entrepreneurship in (Social Economic development, Standard of living and optimal use of resource).

“Part – B”

***Vocational Skills*----- (20 Marks)**

Unit-I Introduction to Tourism & Hospitality Industry

Concept of Tourism, Tourist and Tourist destination. Main components of Tourism Industry, Different types and forms of Tourism, Introduction of Hotel and Hospitality sector, Importance of the Hospitality sector, Different Departments of Hotel Industry.

Unit-II Classification of Catering Industry

Introduction to Catering Industry, Importance and Need of Catering Industry, Classification of Catering Industry – Commercial, Welfare, Transport, Industries, Institutional, Various Types of F&B Outlets, Scope of Catering Industry.

Unit-III Preparation for Food & Beverage Service Operations

Organizational Structure of F&B Department, Characteristics of F&B service operations, Attributes of Waiter, Personal Grooming & Hygiene, Arrangement at the Sideboard, Types of service, Types of crockery & cutlery.

Term-II “ Part – A”

Employability Skills----- (10 Marks)

Unit-III Basic ICT & Green Skills I

(10 Marks)

Basic ICT Skills: Introduction to Information and Communication Technology, ICT tools (Smartphone’s and Tablets), Introduction to Computer, Parts of Computer (CPU, CU, ALU) and Peripherals, Basic Computer Operations, Performing Basic File Operations, Basics of Internet (Communication and Networking, Internet Browsing).

Green Skill: Introduction to Society and Environment, Natural Resources (Renewable and Non Renewable Resources), Pollution, Climate Change, Natural disaster, Conservation of natural resources (Soil, Water, Food, Forest), Green economy, Components of Green Economy, Skill development for Green Economy, Green Skills.

“ Part – B”

Vocational Skills----- (20 Marks)

Unit-IV Food & Beverage Service Operations

Receiving, Greeting & Seating the Guest, Taking Guest Reservations, Procedure of Serving Water or Welcome drink to the guests, Introduction to Menu, Presenting the Menu, Procedure of taking F&B orders from guests, Service of F&B orders

Unit-V After Dining Activities

Preparation and Presentation of Bills, Collection of Cash/card, Bidding Farewell to guests, Collection of Solid Dishes, Crumbing, Cleaning the Table, Cleaning the work area after Dining.

Unit-VI Communication with Customer and Colleagues

Types of Communication-Formal communication: - Downward, Upward, Horizontal and Diagonal, Informal Communication, Instruction & Job Orders, Benefits of Effective Communication, Barriers to Effective Communication.

Practical (External: 50 Marks)

A. Hand on Skill (30 Marks)

- Prepare an organizational chart of large hotel.
- Draw a labeled diagram of a restaurant
- Demonstrate formal & informal table setup.
- Demonstrate wiping, cleaning and handling procedures of glassware, crockery and cutlery
- Demonstrate various styles of napkin folding
- Demonstrate Greeting and seating the guest
- Demonstrate Making of bill
- Demonstrate replenishing the table accessories after cleaning

B. Viva Voce (10 Marks)

C. Practical Notebook/Portfolio (10 Marks)

4. Tourism & Hospitality

Job Role: Housekeeping Trainee

Level-1 (9th)

SCHEME OF ASSEMENT

This course has been designed to impart in terms of employability and vocational competencies to the students of class 9th having taken vocational subject in addition to the general subjects.

The unit-wise distribution of hours and marks for Class 9th is as follows:

Class 9 th				
Term	Module Part and Name	Unit Name	No. of Hours for Theory and Practical (200)	Max. Marks Theory and Practical (100)
Term-I	Part A Employability Skills	Communication Skills	15	5
		Self-Management & Entrepreneurship	15	5
	Part B Vocational Skills	Introduction to Tourism and Hospitality Industry	18	6
		Classification of Various Areas in Hospitality Industry	20	7
		Prepare for manual housekeeping	22s	7
Total			90	30(15)
Term-II	Part-A Employability Skills	Basic ICT Skills	15	5
		Green Skills	15	5
	Part B Vocational Skills	Manual Cleaning of Floors , Wash and Restrooms	18	7
		Manual Cleaning of Furniture Surfaces	15	5
		Maintain Area Neat and Tidy	15	4
		Collection and Disposal of waste	12	4
Total			90	30 (15)
Part C Practical Work	Practical Exam	06	20	
	Written Test	01	10	
	Viva Voce	03	10	
Total			10	40
Part D Project/Fieldwork	Practical File/Student Portfolio	02	10	
	Viva Voce	03	10	
	Total			05
Part-E	Continues and Comprehensive Evaluation(CCE)	05	10	
Grand Total			200	100

Term – I

“Part–A”

Employability Skills----- (10 Marks)

Unit–I Communication Skills-I (05 Marks)

Meaning and Introduction of communication and Communication Process, Elements of Communication Process (Cycle), Methods of Communication, Communication Skills, Importance of communication in (Teaching –Learning Process, day to day life and Business field).

Unit–II Self-Management & Entrepreneurship Skills (05 Marks)

Meaning and Concept of Self Management, components of Self Management, Self-management skills, (Positive Thinking, Self Confidence, Personal Hygiene and Grooming), Meaning and Concept of Entrepreneur, Entrepreneurship, Entrepreneurship development, Characteristics of Entrepreneurship, Role of Entrepreneurship in (Social Economic development, Standard of living and optimal use of resource).

“Part–B”

Vocational Skills----- (20 Marks)

Unit–I Introduction to Tourism and Hospitality Industry (06 Marks)

Appreciate the importance of tourism industry- Definition of tourism industry, tourist and tourist destination. Main constituents of tourism industry. Different types and forms of tourism. History and importance of hospitality sector-Definition of Hotel and Hospitality. Importance of Hospitality sector. Identification of basic departments of hospitality sector-importance of the basic departments of hotel industry.

Unit-II Classification of Various Areas of Hospitality Industry (07 Marks)

Definition of hotel industry and hospitality industry. Significance of hotel industry and role of hospitality in it. Identification of major/main departments of industry and their functions. Definition of public and guest areas in hotel industries. Definition and role of housekeeping department. Identification of various public and guest areas in hospitality industry. Need for regular cleaning and maintenance of public and guest area.

Unit-III Prepare for Manual Housekeeping

(07 Marks)

Definition of the term Briefing and Debriefing. Importance of duty roster & occupancy chart. Types of surfaces. Types of equipments and other consumables. Housekeeping chemicals. Importance of personal hygiene. Importance of equipment hygiene. Handling of waste material.

Term-II

“Part-A”

Employability Skills------(10 Marks)

Unit-III Basic ICT Skills

(06 Marks)

Introduction to Information and Communication Technology, ICT tools (Smartphone's and Tablets), Introduction to Computer, Parts of Computer(CPU,CU,ALU) and Peripherals, Basic Computer Operations, Performing Basic File Operations, Basics of Internet(Communication and Networking, Internet Browsing).

Unit-IV Green Skills

(04 Marks)

Introduction to Society and Environment, Natural Resources (Renewable and Non Renewable Resources), Pollution, Climate Change, Natural disaster, Conservation of natural resources (Soil, Water, Food, Forest),Green economy, Components of Green Economy, Skill development for Green Economy, Green Skills.

“Part – B”

Vocational Skills----- (20 Marks)

Unit-IV Manual Cleaning of Floors Wash and Restrooms

(07 Marks)

Types of floors. Equipments required for floor cleaning. Chemicals required for floor cleaning. Methods of removing the dust and debris from the floors. Methods of removing Ground in soil without damaging the surface. Methods of cleaning spoilage from the floors. Methods of removing loose dust and debris from the floor. Methods of removing difficult stains from the floors. Layout of public area bathrooms. Parts of public area bathrooms. Equipments required for cleaning bathrooms. S.O.P. for cleaning the restrooms & cloakrooms.

Unit-V Manual Cleaning of Furniture and Surfaces

(05 Marks)

What is cleaning? Need of cleaning in an organization. Different types of surfaces. Requirements for cleaning task. What is dust?. Origin of dust. What is dirt and how it accumulates. Places of accumulation.

What are stains?--Their classification, causes and removal techniques. Carpets and their utility.

Types of carpets. Methods of carpet cleaning. What is an office? What is workstation? Cleaning procedure requires at office.

Unit-VI Maintain Area Neat and Tidy

(Marks 04)

Importance of assigning duties. Ensuring the area neat and clean. Furniture in public area. Layout of furniture in public area. Identify Lost and Found articles. Lost and found procedure

Unit -VII Collection and Disposal of Waste

(Marks 04)

Preparation of handling waste. S.O.P for removing waste. S.O.P for segregation of waste. Garbage heaping area of collected waste. Problems associated with handling and storage of waste. Legal and regulatory authorities concerned with handling and storage of waste.

Practical (External):50 Marks

A. Hand on Skill

(30 Marks)

B. Viva Voce

(10 Marks)

C. Student Portfolio/Practical Notebook

(10 Marks)

5. SECURITY

Job Role: Security Guard

Level-1 (9th)

SCHEME OF ASSESSMENT

This course is a planned sequence of instructions consisting of units meant for developing employability and vocational competencies of students of Class 9th opting for vocational subject along with general education subjects.

The unit-wise distribution of hours and marks for Class 9th is as follows:

Class 9 th				
Term	Module Part and Name	Unit Name	No. of Hours for Theory and Practical (200)	Max. Marks Theory and Practical (100)
Term-I	Part - A Employability Skills	Communication Skills-I	25	05
		Self-Management & Entrepreneur Skills-I	25	05
	Part - B Vocational Skills	Introduction to Security Services	24	11
		Private Security Regulations and Equipment	16	09
	Total			90
Term-II	Part - A Employability Skills	Basic ICT and Green Skills-I	30	10
		Part - B Vocational Skills	Introduction to Arms and IED	32
	Access Control		28	09
	Total			90
	Part - C Practical Work	Practical Exam	06	20
		Written Test	01	10
		Viva Voce	03	10
Total			10	40
	Part-D Project / Field work	Practical File / Student Portfolio	05	10
		Viva Voce	03	10
Total			10	20
	Part -E	Continues and Comprehensive Evaluation(CCE)	02	10
Grand Total			200	100

Term-I
“Part – A”

Employability Skills ----- (10 Marks)

Unit-I Communication Skills-I (05 Marks)

Introduction to communication, Importance of communication skills, Elements of communication cycle, Perspectives in Communication, Verbal and Non-verbal Communication, Effective Communication.

Unit-II Self-Management & Entrepreneurial Skills-I (05 Marks)

Introduction to Self-management and its components, Strength and Weakness Analysis, Self-confidence, Positive Thinking, Personal Hygiene, Grooming.

Concept of Entrepreneurship and Enterprise, Role of Entrepreneurship, Qualities of a Successful Entrepreneur, Distinguishing Characteristics of Entrepreneurship and Wage Employment.

“Part – B”

Vocational Skills----- (20 Marks)

Unit–I Introduction To Security Services (11 Marks)

Roles and functions of public and private security personnel, General roles & responsibilities of an Security Guard, Official procedures and instructions, Assets and risks Threats, Observing and reporting, suspicious package and weapon threat, Using a fire extinguisher Risk management, Types of emergency and Risks associated with assault.

Unit–II Private Security - Regulations and Equipment (09 Marks)

Private Security guard vs police officer, Regulation and equipment Arrest & Rule to be followed by security staff, during arrest or detention, Main features of civil law & Criminal Law, First information Report (FIR) & Evidence, Securing a crime scene (division), Testifying in courts, Private Security Agency (Regulation) Act (PSARA), 2005.

Term-II

“Part – A”

Employability Skills ----- (10 Marks)

Unit-III Basic ICT & Green Skills-I (10 Marks)

Basic ICT Skills: Introduction to ICT, ICT Tools, Parts of a computer and peripherals, RAM, ROM, Basic computer operations, Performing basic file operations, Introduction to Internet and Email.

Green Skills: Environment, Resources and types, Pollution, Climate Change, Natural Disaster, Conservation of natural resources, Sustainable Development Sustainable Development Goals (SDGs). Green economy, Green jobs & Projects.

“Part – B”

Vocational Skills----- (20Marks)

Unit–III Introduction to Arms and Improvised Explosive Device (11 Marks)

Identification of Arms, Arms (introduction) ,Improvised Explosive Device Parts of an IED, Action to be taken on locating an IED , Recognizing packaged IED &Types of IED , Security Equipment for Unarmed ,Security Guard , Uniform and equipment Electronic security, Access control systems, Benefits of security lighting& Fire detection, Safety and emergency system.

Unit–IV Access Control (09 Marks)

Search and Seizure, Patrolling &Study the post orders & Talk to colleagues, Check the Vehicle & your equipment, Security searches: People and baggage use electronic Eqpt., Processes & Manual search of persons and baggage, Reporting risk, threat and hazard during search, Structures and Techniques , for Access Control Organizational rules & Levels of access control, Building perimeter and entrance, Access control in the absence of equipment, Electronic access control system, Alarm System & Vehicle search and access control, Queues and access control Procedure followed for body search in the absence of equipment

Practical (External) Security 50 Marks

A. Hand on Skill

(30 Marks)

1. Initializations and handling with electronic security equipment, add new device (using security equipment and devices) Enter your ID address and the name of your Eqpt. Save this setting with name on Security equipment display board. **(15 Marks)**
2. Using both your hands type:
Shift, Ctrl, Alt and function keys for scanning and control security equipment **(05 Marks)**
3. Create a table showing results of randomly selected 5 students of standard 9 as shown in the Following table: **(05 Marks)**

S.No.	Roll No	Urdu	English	Maths	Science	SSt
1	1	25	20	21	21	22
2	4	20	23	25	25	21
3	6	21	24	20	24	20

4. Collect the One way radio communication sets of your site place for each month from January to December (12 months). Create a worksheet with the data of Name of the Month and quantity received mention as Table. Conclude your result that which type of chart will be more appropriate for such type of data. **(05 Marks)**

Month	Received Working Sets	Received Damage Sets	Remarks
January, February			
March ,April			
May, June, July			
August			
September			
October			
November			
December			

B. Viva Voce

(10 Marks)

C. Student Portfolio /Practical- Notebook

(10 Marks)

6. AGRICULTURE

Job Role: Paddy farmer

Level-1(9th)

SCHEME OF ASSESSMENT

This course is a planned sequence of instructions consisting of Units meant for developing employability and vocational competencies of students of Class 9th opting for vocational subject along with general education subjects.

The unit-wise distribution of hours and marks for Class 9th is as follows:

Class 9 th				
Term	Module Part and Name	Unit Name	No. of Hours for Theory and Practical (200)	Max. Marks Theory and Practical (100)
Term-I	Part - A Employability Skills	Communication Skills	15	05
		Self-Management & Entrepreneurship	15	05
	Part – B Vocational Skills	Introduction to Paddy Cultivation	15	05
		Land Preparation and Planting	15	05
		Nursery preparation and Transportation	15	05
		Growth Stages of paddy plant	15	05
	Total			90
Term-II	Part - A Employability Skills	Basic ICT Skills	16	06
		Green Skills	12	04
	Part – B Vocational Skills	Intercultural operations in paddy	16	05
		Seed Production	16	05
		Water management	12	04
	Integrated Nutrient Management	18	06	
Total			90	30* (15)
	Part - C Practical Work	Practical Exam	06	20
		Written Test	01	10
		Viva Voce	03	10
Total			10	40
	Part-D Project / Field work	Practical File / Student Portfolio	05	10
		Viva Voce	03	10
Total			10	20
	Part -E	Continues and Comprehensive Evaluation(CCE)	02	10
Total			200	100

Term-I **“Part – A”**

Employability Skills ----- (10 Marks)

Unit-I Communication Skills-I (05 Marks)

Meaning and Introduction of communication and Communication Process, Elements of Communication Process (Cycle), Methods of Communication, Communication Skills, Importance of communication in (Teaching – Learning Process, day to day life and Business field).

Unit-II Self-Management & Entrepreneurship Skills (05 Marks)

Meaning and Concept of Self-Management, components of Self-Management, Self-management skills, (Positive Thinking, Self Confidence, Personal Hygiene and Grooming), Meaning and Concept of Entrepreneur, Entrepreneurship, Entrepreneurship development, Characteristics of Entrepreneurship, Role of Entrepreneurship in (Social Economic development, Standard of living and optimal use of resource).

“Part – B”

Vocational Skills ----- (20 Marks)

Unit-I Introduction to Paddy Cultivation (06 Marks)

Define paddy, Difference between paddy and rice, Importance of paddy, discuss various sub species of paddy, Varieties of rice, Nutritive value of rice, Climate and soil for paddy cultivation, Different cropping seasons for rice cultivation.

Unit-II Land Preparation and Planting (04 Marks)

Define Tillage (Ploughing , Harrowing and Leveling), Advantages of Ploughing, Types of Ploughs, Implements Used For Seed Sowing and Transplanting, Define weed, Importance of weeding, Different implements used for weeding in Paddy like Conoweeder, Rotary weeder, Different methods of sowing, Advantages of Line sowing, Dibbling, Transplanting and its methods.

Unit-III Nursery preparation and Transportation (05 Marks)

Define Nursery and Criteria for Site selection, Types of nursery, Define seed germination, Different types of weeds in paddy nursery, Define pest and enlist various insect pests in paddy, Common Diseases found in paddy, Selection of seedlings for transplanting.

Unit-IV Growth Stages of paddy plant (05 Marks)

Discuss major parts of paddy plant (Root system, shoot system), Growth phases of paddy (Vegetative phase, reproductive phase and ripening phase), and Photo-period sensitivity.

Term-II **“Part – A”**

Employability Skills ----- **(10 Marks)**

Unit–III Basic ICT Skills **(06 Marks)**

Introduction to Information and Communication Technology, ICT tools (Smartphone’s and Tablets), Introduction to Computer, Parts of Computer (CPU, CU, ALU) and Peripherals, Basic Computer Operations, Performing Basic File Operations, Basics of Internet (Communication and Networking, Internet Browsing).

Unit–IV Green Skills **(04 Marks)**

Introduction to Society and Environment, Natural Resources (Renewable and Non Renewable Resources), Pollution, Climate Change, Natural disaster, Conservation of natural resources (Soil, Water, Food, Forest), Green economy, Components of Green Economy, Skill development for Green Economy, Green Skills.

“Part – B”

Vocational Skills----- **(20 Marks)**

Unit–V Intercultural operations in paddy **(05 Marks)**

Define Direct seeded rice (DSR), Intercultural operation for transplanted rice (manual weeding, mechanical weeding).

Unit–VI Seed Production **(05 Marks)**

Define seed and discuss the importance of seed production, Define rouging, improved varieties of rice, Aromatic rice, hybrid rice, Discuss about a biotic and biotic stresses, Red rice varieties in India.

Unit–VII Water management **(04 Marks)**

Irrigation definition, Water requirement of Paddy, Critical growth stages for irrigation, Methods of irrigation.

Unit–VIII Integrated Nutrient Management **(06 Marks)**

Define INM, Define Soil testing, soil sampling and soil analysis, Classification of Essential Nutrients, Sources of nutrients (Organic manure, green manure, bio-fertilizer), Methods of fertilizer application (Broadcasting, Placement, Foliar application and Fustigation).

Practical (External): 50 Marks

- | | |
|--|-------------------|
| A. Hand on Skill | (30 Marks) |
| B. Viva Voce | (10 Marks) |
| C. Student Portfolio / Practical Notebook | (10 Marks) |

6.AGRICULTURE

Job Role: Dairy Worker

Level-1 (9th)

SCHEME OF ASSESSMENT

This course is a planned sequence of instructions consisting of Units meant for developing employability and vocational competencies of students of Class 9th opting for vocational subject along with general education subjects.

The unit-wise distribution of hours and marks for Class 9th is as follows:

Class 9 th				
Term	Module Part and Name	Unit Name	No. of Hours for Theory and Practical (200)	Max. Marks Theory and Practical (100)
Term-I	Part – A Employability Skills	Communication Skills	15	05
		Self-Management & Entrepreneurship	15	05
	Part – B Vocational Skills	Overview of dairy farming in India	15	05
		Breeds of Dairy Animals	15	05
		Livestock housing system I	15	05
		Livestock housing system II	15	05
	Total			90
Term-II	Part – A Employability Skills	Basic ICT Skills	16	06
		Green Skills	12	04
	Part – B Vocational Skills	Transferring dairy animals to another locations	16	10
		feeding and watering for livestock	16	10
Total			90	30* (15)
	Part – C Practical Work	Practical Exam	06	20
		Written Test	01	10
		Viva Voce	03	10
Total			10	40
	Part-D Project / Field work	Practical File / Student Portfolio	05	10
		Viva Voce	03	10
Total			10	20
	Part -E	Continues and Comprehensive Evaluation(CCE)	02	10
Grand Total			200	100

Term-I

“Part – A”

***Employability Skills*----- (10 Marks)**

Unit–I Communication Skills-I

(05 Marks)

Meaning and Introduction of communication and Communication Process, Elements of Communication Process (Cycle), Methods of Communication, Communication Skills, Importance of communication in (Teaching – Learning Process, day to day life and Business field).

Unit–II Self-Management & Entrepreneurship Skills

(05 Marks)

Meaning and Concept of Self-Management, components of Self-Management, Self-management skills, (Positive Thinking, Self Confidence, Personal Hygiene and Grooming), Meaning and Concept of Entrepreneur, Entrepreneurship, Entrepreneurship development, Characteristics of Entrepreneurship, Role of Entrepreneurship in (Social Economic development, Standard of living and optimal use of resource).

“Part – B”

***Vocational Skills*----- (20 Marks)**

Unit–I Overview of dairy farming in India

(06 Marks)

Define Dairy farming, Importance of dairy farming in India. Milk production in India, Government Initiative and private participation in dairy farming, Employment potential in dairying, employment opportunities in dairy sector

Unit–II Breeds of Dairy Animals

(04 Marks)

Define breed. Indigenous breeds of cow and exotic breeds of cow, breeds of buffalo and body parts of cow and buffalo.

Unit–III Livestock housing system-I

(05 Marks)

Define housing system, basic necessities needed in animal housing, Types of livestock housing, Equipments and machinery used in dairy farming. Essential provisions needed in dairy farming. Describe routine activities of dairy farm.

Unit–IV Livestock housing system II

(05 Marks)

Layout of animal housing, Important sections of large dairy farm.

Term-II
“Part – A”

Employability Skills----- (10 Marks)

Unit–III Basic ICT Skills (06 Marks)

Introduction to Information and Communication Technology, ICT tools (Smartphone’s and Tablets), Introduction to Computer, Parts of Computer (CPU, CU, ALU) and Peripherals, Basic Computer Operations, Performing Basic File Operations, Basics of Internet (Communication and Networking, Internet Browsing).

Unit–IV Green Skills (04 Marks)

Introduction to Society and Environment, Natural Resources (Renewable and Non Renewable Resources), Pollution, Climate Change, Natural disaster, Conservation of natural resources (Soil, Water, Food, Forest), Green economy, Components of Green Economy, Skill development for Green Economy, Green Skills.

“Part – B”

Vocational Skills----- (20 Marks)

Unit–V Transferring dairy animals to another locations (10 Marks)

Purpose of livestock transfer. Modes of animal transportation, Difficulties faced by livestock during transfer.

Unit–VI feeding and watering for livestock (10 Marks)

Define feed and types of animal feed. Composition of feed and its quality. Feed requirement of dairy animal. Storage of animal feed, structures used for storage of animal feed. Water requirement and supply for dairy animals. Factors affecting water needs of dairy animals.

Practical (External): 50 Marks

A. Hand on Skill (30 Marks)

B. Viva Voce (10 Marks)

C. Student Portfolio / Practical Notebook (10 Marks)

7. TELECOMMUNICATION

Job Role: *Optical Fiber Splicer*

Level-1 (9th)

SCHEME OF ASSESSMENT

This course is a planned sequence of instructions consisting of Units meant for developing employability and vocational competencies of students of Class 9th opting for vocational subject along with general education subjects.

The unit-wise distribution of hours and marks for Class 9th is as follows:

Class 9 th				
Term	Module Part and Name	Unit Name	No. of Hours for Theory and Practical (200)	Max. Marks Theory and Practical (100)
Term-I	Part – A Employability Skills	Communication Skills	15	05
		Self-Management & Entrepreneurship Skills	15	05
	Part – B Vocational Skills	Optical Communication Technology	30	10
		Splicing Operations	30	10
Total			90	30*(15)
Term-II	Part – A Employability Skills	Basic ICT Skills	15	06
		Green Skills	15	04
	Part – B Vocational Skills	Splicing Tools and Equipment	25	08
		Optical Fiber Testing	20	07
		Maintain Health and Safety	15	05
Total			90	30*(15)
	Part – C Practical Work	Practical Exam	06	20
		Written Test	01	10
		Viva Voce	03	10
Total			10	40
	Part-D Project / Field work	Practical File / Student Portfolio	05	10
		Viva Voce	03	10
Total			08	20
	Part - E	Continuous and Comprehensive Evaluation(CCE)	02	10
Grand Total			200	100

Term-I “Part-A”

Employability Skills----- (10 Marks)

Unit-I Communication Skills (05 Marks)

Meaning and Importance of communication, Elements of communication cycle, Perspectives in communication, Factors affecting perspectives in communication; writing skills related to the following–Sentence & its Parts, Kinds of sentences, Use of articles.

Unit-II Self-Management & Entrepreneurship Skills (05 Marks)

Meaning of self-management, Self-management skills; Stress Management, Time Management, Self Confidence; Meaning of entrepreneurship development, Role and rewards of entrepreneurship, Meaning & Concepts of Business Service, Types of businesses–Service, Manufacturing, Hybrid.

“Part-B”

Vocational Skills ----- (20 Marks)

Unit-I Optical Communication Technology (10 Marks)

The communication process, Modes of communication; Concept of data communication–Characteristics of data, Components of data communication; Transmission media and its types; Broadband technology–Broadband market–global and Indian Telecommunication; Light Theory; Optical fiber technology–Basics of optics and its evolution, Optical fiber in broadband industry, Basics of fiber optic communication; Structure of fiber, Classification of optical fiber, Light sources of optical fiber, Losses in optical fiber.

Unit-II Splicing Operations (10 Marks)

Concept of splicing, Need of splicing, Splicing process, Materials required for splicing; Optical fiber splicing – Fusion and mechanical splicing process; Classification and principle of splicing; Testing parameters of splicing.

Term II “Part A”

Employability skills ----- (10 Marks)

Unit-III Basic ICT Skills (06 Marks)

Introduction to ICT, Role and importance of ICT in personal life and at work place, Primary operations on a computer system – input, process, storage, output, networking, etc, Components of computer system and their functions, Input, Output & Storage Devices, Hardware of a computer system. ICT tools –Mobile, tab, radio, TV, email, etc.

Unit-IV Green Skills**(04 Marks)**

Introduction of environment, Relationship between society and environment, Natural resource & their conservation, Environment protection and conservation, Definition of green economy, Importance of green economy.

“Part B”**Vocational skills----- (20 Marks)****Unit-III Splicing Tools and Equipment****(08 Marks)**

Basic hand tools – screw driver, scissors, cable cutting knife, pliers, cleaning swab, electrical tape, gloves; Splicing Tools – Splicer, cleaver, tissue paper, isopropyl alcohol, protection sleeves, round cutter, tube cutter, fiber cutter, fiber stripper, OTDR; Mechanical Splice connector.

Unit-IV Optical Fiber Testing**(07 Marks)**

Standard process of OTDR tests, Working and Elements of OTDR, Standard process of Power meter tests.

Unit-V Maintain Health and Safety**(05 Marks)**

Cut fibers, sleeves and cable pieces; Dispose of the cut fibers, sleeves and cable pieces; Personal Protection equipment's (PPE's)–helmets, safety boots, safety glasses.

Practical (External) : 50 Marks**A. Hand on Skill****(30 Marks)****B. Viva Voce****(10 Marks)****C. Student Portfolio/Practical Notebook****(10 Marks)**

8.Beauty and Wellness

Job Role: Assistant Beauty Therapist

Level-1(9th)

SCHEME OF ASSEMENT

This course is a planned sequence of instructions consisting of Units meant for developing employability and vocational competencies of students of Class 9th opting for vocational subject along with general education subjects.

The unit-wise distribution of hours and marks for Class 9th is as follows:

Class -9 th				
Term	Module Part and Name	Unit Name	No. of Hours for Theory and Practical (200)	Max. Marks Theory and Practical (100)
Term-I	Part – A Employability Skills	Communication Skills	20	05
		Self-Management & Entrepreneurship	10	05
	Part – B Vocational Skills	Introduction to Beauty & wellness industry & Beauty Therapy	30	10
		Health and safety in the work area	20	10
	Total			80
Term-II	Part–A Employability Skills	Basic ICT Skills	15	06
		Green Skills	15	04
	Part – B Vocational Skills	Manicure, Pedicure & Mehendi	30	10
		Hair Care	30	10
	Total			90
Part – C Practical Work	Practical Exam	06	20	
	Written Test	01	10	
	Viva Voce	03	10	
Total			10	40
Part-D Project/Fieldwork	Practical File/Student Port folio	10	10	
	Viva Voce	05	10	
	Total		15	15
Part -E	Continuous and Comprehensive Evaluation (CCE)	05	10	
Grand Total			200	200

Term-I **“Part-A”**

Employability skills -----(10 Marks)

Unit-I Communication Skills (05 Marks)

Meaning and Introduction of communication and communication Process, Elements of communication process (cycle), Methods of communication, communication skills, Importance of communication.

Unit-II Self-Management & Entrepreneurship Skills (05 Marks)

Meaning and concept of self-management, Components of Self management, Self-management skills,(Positive Thinking, Personal Hygiene, Grooming), Meaning and concept of entrepreneur, Entrepreneurship, Entrepreneurship development, Distinguishing Characteristics of Entrepreneurship .Role of Entrepreneurship

“Part-B”

Vocational skills----- (20 Marks)

Unit-III Introduction to Beauty & wellness industry & Beauty Therapy (10 Marks)

Major sub-segments of Beauty & wellness sector, Career path for Assistant Beauty Therapist, Services in Beauty therapy like pedicure, manicure, threading, waxing, bleaching etc. Maintenance of record cards, essentials of work area, sterilization and disinfection methods, responsibilities of Assistant Beauty Therapist.

Unit-IV Health and safety in the work area (10 Marks)

Hazards and risks at work place, fire safety, types of fires, fire extinguishers, electrical safety, chemical safety, parlor hygiene.

Term-II “Part–A”

Employability skills -----(10 Marks)

Unit–V Basic ICT Skills (06 Marks)

ICT tools- (Smart phones and Tablets), Introduction to Computer, Parts of Computer (CPU, CU, ALU) and peripherals, Basics of Internet (Communication and networking, Internet Browsing)

Unit–VI Green Skills (04 Marks)

Natural Resources (Renewable and Non Renewable Resources), Pollution, Climate change, Natural disaster. Conservation of natural resources (Soil, Water, Food, Forests), Green economy, Components of Green Economy, Green Skills.

“Part – B”

Vocational skills----- (20 Marks)

Unit–VII Manicure, Pedicure and Mehendi (10 Marks)

Nail growth & Structure, preparing the work area, manicure, equipments & materials used for manicure, contra-indications, identification of nail conditions, Pedicure, Pedicure procedure, Contraindications for pedicure, Nail shapes, After care advice Mehendi : Mehendi art on hands & legs, tools & materials required, preparation, procedure, mehendi.

Unit-VIII Hair care (10 Marks)

Basic of Hair care, Types of hair, Effects of environmental factors, uses of hair dryer, Anatomy of hair, Structure of hair, Aftercare advice, Common hairstyles, hair accessories, hair styling products, tools and equipments ,physical effects of styling on hair structure.

Practical (External):50Marks

A. Hand on Skill (30 Marks)

- (a) How to apply nail paint.
- (b) How to remove nail paint.
- (c) How to make mehendi cones.
- (d) How to make different mehendi design.
- (e) Use of hair dryer.
- (f) Various Hairdos
- (g) Basic hair care: shampooing & conditioning

B. Viva Voce (10 Marks)

C. Practical file/Students portfolio (10 Marks)

9. Physical Education and Sports

Job Role: Physical Education Assistant (Early Year)

Level-1 (9th)

SCHEME OF ASSEMENT

This course is a planned sequence of instructions consisting of Units meant for developing employability and vocational competencies of students of Class 9th opting for vocational subject along with general education subjects.

The unit-wise distribution of hours and marks for Class 9th is as follows:

Class 9 th				
Term	Module Part and Name	Unit Name	No. of Hours for Theory and Practical (200)	Max. Marks Theory and Practical (100)
Term-I	Part - A Employability Skills	Communication Skills	15	05
		Self-Management and Entrepreneurship	15	05
	Part – B Vocational Skills	Role of Physical Education in development of a child	30	10
		Age – Appropriate Physical Activities	30	10
Total			90	30* (15)
Term-II	Part - A Employability Skills	Basic ICT Skills	16	06
		Green Skills	15	04
	Part – B Vocational Skills	Organising Age Appropriate Physical Activities	30	10
		Children Health and Safety	29	10
Total			90	30* (15)
	Part - C Practical Work	Practical Exam	06	20
		Written Test	01	10
		Viva Voce	03	10
Total			10	40
	Part-D Project / Field work	Practical File / Student Portfolio	02	10
		Viva Voce	03	10
	Total			05
	Part- E	Continues and Comprehensive Evaluation (CCE)	05	10
Grand Total			200	100

Term-I **“Part – A”**

Employability skills -----(10 Marks)

Unit–I Communication Skills (05 Marks)

Introduction to communication, Verbal Communication, Non-Verbal Communication, Meaning of communication, Importance of communication skills, Elements of communication cycle. Perspectives in communication, Factors affecting perspectives in communication, Visual perception, Language, Past experience, Prejudices, Feelings, Writing Skills (Part of Speech and Sentence), Pronunciation Basics, Greetings and Introduction, talking about Self, Asking Questions I, Asking Questions II.

Unit–II Self-Management & Entrepreneurship Skills (05 Marks)

Introduction to Self-management, Positive results of self-management, Self-management skills, Factors that help in building self-confidence – social, cultural, and physical factors, Strength and Weakness Analysis, Self-confidence, Positive Thinking, Personal Hygiene, Grooming. Role of Entrepreneurship, Qualities of a Successful Entrepreneur, Distinguishing Characteristics of Entrepreneurship and Wage Employment.

“Part – B”

Vocational skills ----- (20 Marks)

Unit – I Role of Physical Education in Development of a Child (10 Marks)

Meaning and Concept of Physical Education, Definitions of Physical Education, Aims and objectives of physical education, Courses and carrier avenues in physical education, Importance of Physical Education, Role of Physical Education in the development of the child (Physical, Mental, Social, Emotional and Intellectual)

Unit – II Age-Appropriate Physical Activities (10 Marks)

Meaning , Concept and types of Physical Activities, Principles for selection of physical activities for different age groups, Benefits of physical activities, factors affecting Physical activities, essential requirement needed for conducting physical activities, need and importance of physical activities for different age groups, Meaning and concept of planning, principles and elements of good planning. Need and Importance of good planning in physical education and sports.

Term-II “Part – A”

Employability skills ----- (10 Marks)

Unit-III Basic ICT Skills (06 Marks)

Introduction to ICT, ICT Tools: Smartphone’s and Tablets — I, ICT Tools: Smartphone’s and Tablets — II, Parts of Computer and Peripherals, Basic Computer Operations, Performing Basic File Operations, Communication and Networking — Basics of Internet, Communication and Networking — Internet Browsing, Communication and Networking — Introduction to e-mail, Communication and Networking — Creating an e-mail Account, Communication and Networking — Writing an e-mail, Communication and Networking — Receiving and Replying to e-mails.

Unit –IV Green Skills (04 Marks)

Introduction, Society and Environment, Natural resources, Renewable and Non Renewable resources, Exhausted and non-Exhaustible Resources, Conserving Natural Resources, Natural Disasters, Water conservation, Energy conservation, Food conservation, Forest conservation, Sustainable Development and Green Economy, Sustainable Development Goals, Components of Green Economy, Skill development for Green Economy, Green Skills, Green Projects.

“Part – B”

Vocational skills----- (20 Marks)

Unit–III Organising Age Appropriate Physical Activities (10 Marks)

Meaning and Concept of organization, Types of organization, Principles of good organization, Qualities of a good organizer, Need and Importance of good organization, Need and Importance of organizing Games and Sports Events (Intramural/Extramural Activities, Sports day, Tournaments, Camping, Morning Assembly, Mass drill).

Unit-IV Children’s Health and Safety (10 Marks)

Meaning and concept of health, Health Hygiene, Health Education, Aims and objectives of health education, Importance of Health Education, Habits of good health hygiene, Factors Affecting personal hygiene, Benefits of good health hygiene, Balanced diet and its role in maintaining child’s health, First aid (its purposes and basic principles), Sports injuries (Safety Measures and treatment).

Practical (External) : 50 Marks

A. Hand on Skill (30 Marks)

B. Viva Voce (10 Marks)

C. Student Portfolio / Practical Notebook (10 Marks)

10. Automotive

Job Role: Four -Wheeler Service Assistant

Level-1 (9th)

SCHEME OF ASSESMENT

This course is a planned sequence of instructions consisting of Units meant for developing employability and vocational competencies of students of Class 9th opting for vocational subject along with general education subjects.

The unit-wise distribution of hours and marks for Class 9th is as follows:

Class 9 th				
Term	Module Part and Name	Unit Name	No. of Hours for Theory and Practical (200)	Max. Marks Theory and Practical (100)
Term-I	Part - A Employability Skills	Communication Skills	16	05
		Self-Management & Entrepreneurship skills	07	05
	Part – B Vocational Skills	History And Evolution Of Automobiles	10	04
		Various Types Of Automobiles	20	06
		Road Safety	10	04
		Health Hygiene And Environment	10	04
		Innovation And Development	10	02
Total			90	30* (15)
Term-II	Part - A Employability Skills	Basic ICT Skills	20	06
		Green Skills	10	04
	Part – B Vocational Skills	Major Systems And Components Of An Automobile	45	16
		Vehicle Maintenance And Servicing	15	04
Total			90	30* (15)
	Part - C Practical Work	Practical Exam	06	20
		Written Test	01	10
		Viva Voce	03	10
Total			10	40
	Part-D Project / Field work	Practical File / Student Portfolio	02	10
		Viva Voce	03	10
		Total	05	20
	Part- E	Continues and Comprehensive Evaluation (CCE)	05	10
Grand Total			200	100

Term-I
“Part – A”

Employability Skills----- (10 Marks)

Unit–I Communication Skills (05 Marks)

Introduction to communication, Verbal Communication, Non-Verbal Communication, Meaning of communication, Importance of communication skills, Elements of communication cycle. Perspectives in communication, Factors affecting perspectives in communication, Visual perception, Language, Past experience, Prejudices, Feelings, Writing Skills (Part of Speech and Sentence), Pronunciation Basics, Greetings and Introduction, talking about Self, Asking Questions I, Asking Questions II.

Unit–II Self-Management & Entrepreneurship skills (05 Marks)

Introduction to Self-management, Positive results of self-management, Self-management skills, Factors that help in building self-confidence – social, cultural, and physical factors, Strength and Weakness Analysis, Self-confidence, Positive Thinking, Personal Hygiene, Grooming. Role of Entrepreneurship, Qualities of a Successful Entrepreneur, Distinguishing Characteristics of Entrepreneurship and Wage Employment.

“Part – B”

Vocational Skills----- (20 Marks)

Unit-I History and Evolution of Automobiles (04 Marks)

Introduction to Wheel, Wheel Structure, Conception of wheel Cart and modifications, Invention of automobiles.

Unit-II various types of automobile (06 Marks)

Two and three wheeler, introduction to passenger and commercial vehicle, construction equipment vehicle (bulldozer, road roller, dumper, excavator).

Unit-III Road safety (04 Marks)

Importance of road safety ,safe and responsible driving, important road signs, driving rules and general introduction to revised motor vehicle Act, procedure for vehicle registration and driving license through Parivahan portal .

Unit-IV Health, Hygiene and Environment (02Marks)

Air pollution and its control, Emission norms Standards viz Euro/BS- I, II, III, IV, V,PUC certification and its importance.

Unit-V Innovation and development (04 Marks)

Electric cars and hybrid cars, new development- (G-Force control Technology, Pedestrian Safety).

Term-II
“Part – A”

Employability Skills ----- (10 Marks)

Unit–III Basic ICT Skills (06 Marks)

Introduction to ICT, ICT Tools: Smartphone’s and Tablets — I, ICT Tools: Smartphone’s and Tablets — II, Parts of Computer and Peripherals, Basic Computer Operations, Performing Basic File Operations, Communication and Networking — Basics of Internet, Communication and Networking — Internet Browsing, Communication and Networking — Introduction to e-mail, Communication and Networking — Creating an e-mail Account, Communication and Networking — Writing an e-mail, Communication and Networking — Receiving and Replying to e-mails.

Unit–IV Green Skills (04 Marks)

Introduction, Society and Environment, Natural resources, Renewable and Non Renewable resources, Exhausted and non-Exhaustible Resources, Conserving Natural Resources, Natural Disasters, Water conservation, Energy conservation, Food conservation, Forest conservation, Sustainable Development and Green Economy, Sustainable Development Goals, Components of Green Economy, Skill development for Green Economy, Green Skills, Green Projects.

“Part – B”

Vocational Skills----- (20 Marks)

Unit-VI Major System and components of Automobile (16 Marks)

Definition of chassis, Auto body or Superstructure, Engine and its types, Components of engine viz cylinder, cylinder head, piston crankshaft, connecting rod, camshaft, define lubrication and its objectives, cooling system and its importance, Introduction to fuel supply system, Introduction to transmission system, define clutch and gearbox, Introduction to Front and rear axle, Basics of steering and suspension system, define brakes and types of brakes.

Unit-VII Vehicle Maintenance and servicing (04 Marks)

General introduction to workshop, precautions during maintenance and servicing, common activities in the workshop, tips to extend the life of vehicle.

Practical (External) : 50 Marks

A. Hand on Skill

(30 Marks)

1. Identification of three wheelers. Make drawings of the same.
2. Identification of two wheelers. Make drawings of the same.
3. Identification of commercial vehicles. Make drawings of the same.
4. Draw engine and its components.
5. Identification of various hand tools. Also mention their applications.
6. Identification of various measuring tools. Also mention their applications.

B. Viva Voce

(10 Marks)

C. Student Portfolio / Practical Notebook

(10 Marks)

11.APPAREL, MADE UPS AND HOME FURNISHING

Job Role: SEWING MACHINE OPERATOR

Level-1 (9th)

SCHEME OF ASSEMENT

This course is a planned sequence of instructions consisting of Units meant for developing employability and vocational competencies of students of Class 9th opting for vocational subject along with general education subjects.

The unit-wise distribution of hours and marks for Class 9th is as follows:

Class 9 th				
Term	Module Part and Name	Unit Name	No. of Hours for Theory and Practical (200)	Max. Marks Theory and Practical (100)
Term-I	Part – A Employability Skills	Communication Skills	25	03
		Self-Management and Entrepreneurship Skills	25	02
	Part – B Vocational Skills	Introduction to Sewing Machine	20	05
		Sewing tools and sewing machine operations	20	05
	Total			90
Term-II	Part – A Employability Skills	Basic ICT Skills	16	03
		Green Skills	15	02
	Part – B Vocational Skills	Basics of Garment construction	20	04
		Care and maintenance of sewing machine	20	03
		Health and Safety measures for sewing machine operations	19	03
	Total			90
	Part – C Practical Work	Practical Exam	06	20
		Written Test	01	10
		Viva Voce	03	10
Total			10	40
	Part-D Project / Field work	Practical File / Student Portfolio	07	10
		Viva Voce	03	10
Total			10	20
	Part E:	Continuous and Comprehensive Evaluation (CCE)	05	10
Grand Total			200	100

TERM-I

“Part-A”

Unit-I Communication, Self-Management & Entrepreneurship Skills (10 Marks)

Communication Skills: Introduction. Importance, types, elements and prospective of communication, Effective communication, Public speaking, Basic parts of speech, parts and types of sentences, Pronunciation basics, Greetings and Introductions, Asking questions, Need & methods for asking questions.

Self Management Skills: Introduction to self management, Self-awareness Self-confidence, Self-motivation, Positive thinking, Self-control, Problem solving, Personal hygiene and grooming, Team work, Time management, Goal setting, Strength & Weakness Analysis.

Entrepreneurship skills: Concept and role of entrepreneurship, Economic and social development, Optimal use of resources, Qualities of a successful entrepreneur, Patience, Positive attitude, Distinguishing characteristics of entrepreneurship and wage employment, Types of business activities, Entrepreneurship development process.

“Part-B”

UNIT-I Introduction to Sewing Machine (10 Marks)

Classification of Industrial, Commercial and Domestic Sewing Machine. Sewing Terminology: Basting, Seams, Selvedge, Fabric Grain (Grain line), Bias, Hem, Notches etc. Describe functions of various parts of sewing machine, Describe attachments for sewing machine.

UNIT-II Sewing Machine, Tools and Equipment (10 Marks)

Different operations of Single needle Sewing Machine Different types of Special Purpose machines like: (i) Embroidery (ii) Button hole (iii) Pico (iv) Interlock (v) Over-lock (vi) Buttonhole Sewing machine etc. Process of threading the Single needle lock stitch sewing machine Different types of sewing needle and threads. Suitability of threads and needles according to fabrics Various measuring and marking tools, and their usage: L curve, hip curve, French curve, pattern master, chalk, carbon paper, and tracing wheel etc. Various cutting tools and explain their usage: scissors, electric cutters, and notcher etc. Various types of sewing aids Functions of various types of sewing aids

TERM II

“Part-A”

Unit-II Basic ICT & Green Skills-I (10 Marks)

Basic ICT Skills : Introduction to ICT, ICT Tools, Parts of a computer, peripherals, RAM, ROM, Basic computer operations, Software & Hardware, Performing Basic file operations, Knowledge of Internet, Types of connection, Email.

Green Skills: Environment, Resources and types, Pollution, Climate Change, Natural disaster, Conservation of natural resources, Sustainable Development Sustainable Development Goals (SDGs). Green economy, Green jobs & Projects.

“Part – B”

Unit-III Introduction to Seams (Basics of Garment Construction) (08 Marks)

Different types of Seams like (i) Plain Seam (ii) Flat and Fell Seam (iii) Bound Seam (iv) Lapped Seam (v) Counter Seam etc. Various types of edge finishes. Functions of different edge finishes Sewing Problems like: (i) Puckering (ii) Slipped/Missed Stitch (iii) Needle/Thread Breakage (iv) Thread Bunching (v) Bobbin/Looper Thread Breakage, etc. 2. Remedies of the sewing problem.

UNIT-IV Care and Maintenance of Sewing Machine (06 Marks)

Safe handling procedure of Sewing Machine Handle materials, machinery, equipment and tools safely and correctly proper oiling of sewing machine Selection of right kind of needle and thread for various fabrics 2. Selection of suitable stitch density (SPI) for various fabrics Checking of correct equipment (i) Correct tools (ii) Correct attachments (iii) Changing needle (iv) Changing threads (v) Changing awls (vi) Correct timing Description of defects 2. Steps of reporting to the relevant person.

UNIT-V Health and Safety Measures for Sewing Machine Operator (06 Marks)

Importance of safety measures Tools and equipment used for safety measure. Importance of health measures Tools and equipment used for health measures Risks and hazards in the industry Risk assessment factors.

Practical (External) : 50 Marks

A. Hand on Skill (30 Marks)

1. Make a chart of sewing terminology
2. Draw diagrams of various measuring and marking tools
3. Identify various cutting tools
4. Draw diagrams of various cutting tools
5. Prepare sample of different type of seams and paste in practical file
6. Practice oiling of sewing machine
7. Observation of sewing problems and their remedies
8. Draw various machine attachments
9. Make a table for different types of machine and hand needles suitable for different types of fabrics
10. Visit an industry and enlist the safety tools and equipment used while working with various machines

B. Viva Voce (10 Marks)

C. Student Portfolio / Practical Notebook (10 Marks)

12.ELECTRONICS & HARDWARE

Job Role: Junior Field Technician-Home Appliances

Level-1 (9th)

SCHEME OF ASSEMENT

This course is a planned sequence of instructions consisting of Units meant for developing employability and vocational competencies of students of Class 9th opting for vocational subject along with general education subjects.

The unit-wise distribution of hours and marks for Class 9th is as follows:

Class 9 th				
Term	Module Part and Name	Unit Name	No. of Hours for Theory and Practical (200)	Max. Marks Theory and Practical (100)
Term-I	Part - A Employability Skills	Communication Skills	25	02
		Self-Management & Entrepreneurship	25	03
	Part – B Vocational Skills	Fundamentals of Electrical and Electronics Engineering	40	10
Total			90	30* (15)
Term-II	Part - A Employability Skills	Basic ICT Skills	16	03
		Green Skills	15	02
	Part – B Vocational Skills	Installation and Repair and Maintenance of LED and other Lights	30	05
		Work Ethics, Quality, Substantiality and Safety	29	05
Total			90	30* (15)
	Part - C Practical Work	Practical Examination	06	20
		Written Test	01	10
		Viva Voce	03	10
Total			10	40
	Part-D Project / Field work	Practical file / Student Portfolio	10	10
		Viva Voce	05	10
		Total	15	20
	Part E	Continuous and Comprehensive Evaluation (CCE)	05	10
Total			200	100

Term-I
“Part – A”

Employability Skills -----(10 Marks)

Unit–I Communication Skills (05 Marks)

Introduction to communication, Verbal Communication, Non-Verbal Communication, Meaning of communication, Importance of communication skills, Elements of communication cycle. Perspectives in communication, Factors affecting perspectives in communication, Visual perception, Language, Past experience, Prejudices, Feelings, Writing Skills (Part of Speech and Sentence), Pronunciation Basics, Greetings and Introduction, talking about Self, Asking Questions I, Asking Questions II.

Unit – II Self-Management & Entrepreneurship Skills (05 Marks)

Introduction to Self-management, Positive results of self-management, Self-management skills, Factors that help in building self-confidence – social, cultural, and physical factors, Strength and Weakness Analysis, Self-confidence, Positive Thinking, Personal Hygiene, Grooming. Role of Entrepreneurship, Qualities of a Successful Entrepreneur, Distinguishing Characteristics of Entrepreneurship and Wage Employment.

“Part – B”

Vocational Skills----- (20 Marks)

UNIT-I Fundamentals of Electrical and Electronics Engineering (20 Marks)

Duties And Responsibilities Of JFTOH: scope of electronic industry and its sub-sectors, Role and responsibilities of Junior Field Technician Home Appliances.

Basic Electrical Engineering Concepts Electricity: Types of electricity – AC, DC Current, Voltage, Power, Resistance Measuring units of current, voltage and resistance, Potential and Potential difference, Electric Circuit, Open and Closed Circuit, Series and Parallel connections, Electrostatics, Laws of Electrostatics Switches, relay and fuse, Concept of magnetic field, Comparison between magnetic circuit and electric circuit, Domestic wiring Ohm’s law Kirchhoff’s law Faraday’s law of electromagnetic induction, Transformer, AC motors, DC motors Starter in motors.

Basic Electronics Engineering Concepts: Active and passive components, Color codes of resistors, Types of capacitors, Semiconductor, PN Junction diode, Forward and reverse bias characteristics of PN junction diode Transistor, Thermistor Integrated Circuits, Electrical and Electronics symbols.

Tools, Equipment And Measuring Instruments: Common hands tools – Cutter, Scissors, Screwdriver, Combination Pliers, Measuring instruments – Phase Tester, Earth Tester, Watt Meter, Energy Meter, Multi-meter, Clamp Meter Measurement of AC, DC voltage and current using multi-meter Safety practices to use Tools, Equipment and Measuring instruments.

Term-II
“Part – A”

***Employability Skills* -----(10 Marks)**

Unit-III Basic ICT & Green Skills-I (10 Marks)

Basic ICT Skills: Introduction to ICT, ICT Tools: Smartphone’s and Tablets — I, ICT Tools: Smartphone’s and Tablets — II, Parts of Computer and Peripherals, Basic Computer Operations, Performing Basic File Operations, Communication and Networking — Basics of Internet, Communication and Networking — Internet Browsing, Communication and Networking — Introduction to e-mail, Communication and Networking — Creating an e-mail Account, Communication and Networking — Writing an e-mail, Communication and Networking — Receiving and Replying to e-mails.

Green Skills: Introduction, Society and Environment, Natural resources, Renewable and Non Renewable resources, Exhausted and non-Exhaustible Resources, Conserving Natural Resources, Natural Disasters, Water conservation, Energy conservation, Food conservation, Forest conservation, Sustainable Development and Green Economy, Sustainable Development Goals, Components of Green Economy, Skill development for Green Economy, Green Skills, Green Projects.

“Part – B”

***Vocational Skills* ----- (20 Marks)**

Unit-II Installation and Repairing dysfunctional LED and Other Lights (10 Marks)

Install LED And Other Lights: Different types of light – LED, Lights, CFL, Incandescent bulb, Fluorescent light, Halogen light, Features and functioning of lights, Types of LED lights – LED strip, LED tube, LED dimmer switches, Color LED, Specifications of various types of lights, Energy ratings (BEE) and consumption of various lights, Functioning of dimmer, filament, Pre-installation preparation, Hazards and prevention/ safety precautions while handling the appliances, Installation and testing of light, Post installation activity – billing and documentation, Operational guidelines.

Diagnose Faults In Lights: Faults based on customer interaction, usage pattern and initial inspection, Basic tests – power supply, earth test power supply, internal check, Common issues and faults that may occur in an LED light, Faults due to electrical connections, Reasons for damage and disfunctioning of light, Reasons for flickering, sparking, Process of comparing actual voltage with the desired voltage to find out the damaged section of supply using multimeter.

Repair Faulty LED Lights: Importance of checking and replacing the damaged LED strips, Parameters to check and ensure functioning of the LED lights, Preventive Maintenance of LED lights, Maintenance tips of LED lights.

Unit-III Work Ethics, Quality, Substantiality and Safety (10 Marks)

Process Of Achieving Optimum Productivity And Quality: Importance of cleanliness, air and water quality in the workplace, Importance of time management to meet daily target, Importance of Quality in delivery of work, Organization’s policies and procedures and work ethics.

Importance Of Implementing Health And Safety Procedures: Organization safety and health policy, Appropriate Personal Protective Equipment (PPE) ESD precautions, Types of accident injury or hazard

Process Of Organizing Waste Management And Recycling: Recyclable/non-recyclable and hazardous wastes, Different waste categories – dry, wet, recyclable, non recyclable and single use plastic items, Different colors of dustbins to dispose waste, Waste management and waste disposal procedures, Methods of recycling as well as repairing and reusing electronic components, effect of greening of job.

Importance of conserving resources: Efficient utilization of material and water, Prevalent energy efficient devices, Common electrical problems, Cleaning of tools, machines and equipment, Common practices of conserving electricity.

Practical (External) : 50 Marks

A. Hand on Skill

(30 Marks)

1. Role play on the communication process.
2. Delivering a speech and practicing public speaking by using 3P's.
3. Storytelling.
4. Preparations of posters on applications of ICT.
5. Chart preparation on components of a computer.
6. Group activity on connecting devices to a computer.
7. Group activity on becoming a successful entrepreneur.
8. Connect the electrical components in series and parallel combination.
9. Connect the electrical components in series and parallel combination.
10. Verify the Kirchhoff's law by using experiment.
11. Verify Faraday's law of electromagnetic induction.
12. List the active and passive components and draw their symbols.
13. Prepare a display board of Electric and Electronic Components.
14. Determine the value of resistance by using color code.
15. Test the continuity of given diode using multimeter.
16. Construct the circuit for forward and reverse bias of the diode and draw its characteristic curve.
17. Determine the input and output voltage of a given transformer.
18. Measure the given AC, DC voltage and current by using Multi-meter
19. Group activity to solder wires and make connections of loose wires to make them functional.
20. Group activity to use various hand tools like drills, TDS Meter, etc.
21. Group activity to detect faults in lights.
22. Demonstrate to repair and replace the damaged component of LED light and ensure its functioning.
23. Demonstrate the use of proper personal protective equipment (PPE) for safety
24. Identify and segregate recyclable/non-recyclable and hazardous wastes.
25. Perform routine cleaning of tools, machines and equipment.

B. Viva Voce

(10 Marks)

C. Student Portfolio / Practical Notebook

(10 Marks)

13.Plumbing

Job Role: Assistant Plumber General

Level-1 (9th)

SCHEME OF ASSESMENT

This course is a planned sequence of instructions consisting of Units meant for developing employability and vocational competencies of students of Class 9th opting for vocational subject along with general education subjects. The unit-wise distribution of hours and marks for Class 9th is as follows:

Class 9 th				
Term	Module Part and Name	Unit Name	No. of Hours for Theory and Practical (200)	Max. Marks Theory and Practical (100)
Term-I	Part - A Employability Skills	Communication Skills	16	05
		Self-Management & Entrepreneurship skills	07	05
	Part – B Vocational Skills	Introduction to Plumbing	10	04
		Tools for Plumbing	20	06
		Plumbing Materials & Pipes, Types & Grades of Pipes	10	04
Total			90	30 (15)
Term-II	Part - A Employability Skills	Basic ICT Skills	20	06
		Green Skills	10	04
	Part – B Vocational Skills	Measurements & Symbols Used in Plumbing	45	16
		Pipe fittings, joints & valves	15	04
Total			90	30 (15)
	Part - C Practical Work	Practical Exam	06	20
		Written Test	01	10
		Viva Voce	03	10
Total			10	40
	Part-D Project / Field work	Practical File / Student Portfolio	02	10
		Viva Voce	03	10
	Total			05
	Part- E	Continues and Comprehensive Evaluation (CCE)	05	10
Grand Total			200	100

Term-I

“Part–A”

Employability Skills -----(10 Marks)

Unit–I Communication Skills (05 Marks)

Introduction to communication, Verbal Communication, Non-Verbal Communication, Meaning of communication, Importance of communication skills, Elements of communication cycle. Perspectives in communication, Factors affecting perspectives in communication, Visual perception, Language, Past experience, Prejudices, Feelings, Writing Skills (Part of Speech and Sentence), Pronunciation Basics, Greetings and Introduction, talking about Self, Asking Questions I, Asking Questions II.

Unit–II Self-Management & Entrepreneurship skills (05 Marks)

Introduction to Self-management, Positive results of self-management, Self-management skills, Factors that help in building self-confidence – social, cultural, and physical factors, Strength and Weakness Analysis, Self-confidence, Positive Thinking, Personal Hygiene, Grooming. Role of Entrepreneurship, Qualities of a Successful Entrepreneur, Distinguishing Characteristics of Entrepreneurship and Wage Employment.

“Part – B”

Vocational Skills----- (20 Marks)

Unit-I Introduction to Plumbing (05 Marks)

Introduction to plumbing & it's importance, Job role of plumber & job opportunities in plumbing sector, Plumbing fittings(elbow, tee, union, reducer etc) - Sketches & their uses.

Unit-II Tools for Plumbing (08 Marks)

Introduction, Tools used in Plumbing- (Holding Tools - Bench Vice , Pipe Vice),(Fitting Tools - Wrenches , Water-Pump Pliers, Spanners, Adjustable Wrenches), (Cutting Tools - Pipe Cutter , Hacksaw), (Pipe Bending Tools - Pipe Bending Machine)

(Other Tools - Chisel, hammer, chain wrench, rover jumper, trowel, screw driver, file, plier, caulking tools ,drill machine, drill bit , hanger ,measuring tape, plumb bob, spirit level, spade, shovel, pickaxe, mortar pan, mason’s square, water level tube, pipe-threader),

Methods of holding tools, Safety precautions, Maintenance of tools- impact of factors such as Temperature, pH, Chemical Composition & ageing on plumbing tools, process of prevention and their application used in the plumbing industry.

Unit-III Plumbing Materials & Pipes, Types & Grades of pipes (07 Marks)

Introduction, Plumbing materials & their importance, Methods/Techniques of application of plumbing materials and precautionary measures, Tools used for application of plumbing materials, Importance & use of plumbing pipes - Types, quality, grade, cost & characteristics of pipes,

Precautions while handling pipes, Pipe Laying Procedure & Care during work.

Term-II
“Part – A”

Employability Skills -----(10 Marks)

Unit-I Basic ICT Skills (06 Marks)

Introduction to ICT, ICT Tools: Smart phones and Tablets — I, ICT Tools: Smart phones and Tablets — II, Parts of Computer and Peripherals, Basic Computer Operations, Performing Basic File Operations, Communication and Networking — Basics of Internet, Communication and Networking — Internet Browsing, Communication and Networking — Introduction to e-mail, Communication and Networking — Creating an e-mail Account, Communication and Networking — Writing an e-mail, Communication and Networking — Receiving and Replying to e-mails.

Unit-II Green Skills (04 Marks)

Introduction, Society and Environment, Natural resources, Renewable and Non Renewable resources, Exhausted and non-Exhaustible Resources, Conserving Natural Resources, Natural Disasters, Water conservation, Energy conservation, Food conservation, Forest conservation, Sustainable Development and Green Economy, Sustainable Development Goals, Components of Green Economy, Skill development for Green Economy, Green Skills, Green Projects.

“Part – B”

Vocational Skills ----- (20 Marks)

Unit-IV Measurements & Symbols Used In Plumbing (08 Marks)

Importance, types of measurement (length, thickness, diameter, pressure)& tools of measurement (measuring tape, vernier calliper, screw gauge, steel ruler, pressure gauge) important units and their conversion methods used in measurement, Techniques of measurement with different tools, Importance of plumbing symbols & their types.

Unit-V Pipe Fittings, Joints & Valves (12 Marks)

Importance, types(elbow, socket, reducer, tee, union, cross etc.) properties & use of plumbing fittings, Tools & procedure required for fixing the plumbing fittings, Importance, types, properties & uses of plumbing joints(threaded joint, welded joint, flanged joint, brazed joint, compression joint etc.), Tools & procedure required for fixing the joints.

Practical (External) : 50 Marks

A. Hand on Skill

(30 Marks)

1. Visit to the school building & list the different plumbing items
2. Identify & draw the different plumbing tools
3. Identify the different types of plumbing pipes
4. Measurement of length, width & height of a room
5. Measurement of pipe dimensions
6. List & draw the plumbing symbols
7. Identify & draw the different types of plumbing fittings
8. Build a simple plumbing system using pipes & fittings

B. Viva Voce

(10 Marks)

C. Student Portfolio / Practical Notebook

(10 Marks)