

പൊതുപരീക്ഷയ്ക്കായി കൂടുതൽ ശ്രദ്ധ
നൽകേണ്ട പാഠഭാഗങ്ങൾ

സ്റ്റാൻഡേർഡ് 12 - വൊക്കേഷണൽ
ഹയർസെക്കണ്ടറിയുമായി ബന്ധപ്പെട്ട
വിഷയങ്ങൾ

കേരളസർക്കാർ
പൊതുവിദ്യാഭ്യാസവകുപ്പ്
വൊക്കേഷണൽ ഹയർസെക്കണ്ടറിവിഭാഗം

NAME OF SUBJECT: AUTO SERVICE TECHNICIAN LEVEL-IV Year - Second Year
FOCUS AREAS FOR THE ACADEMIC YEAR 2020-21
(NSQF Based subjects)

VOCATIONAL SKILLS

Sl.No.	NAME OF UNIT AND FOCUS AREAS
1	Unit 1: Service Manual 1.1 Service manual and its use in workshop
2	Unit 2: Serviceability, Replacement or Repair of Engine Components 2.1 Valve mechanism, reasons for leakage 2.2 Cooling System functions 2.3 Importance, advantages and use of MPFI 2.4 Importance and use of CRDI 2.5 Turbo charger
3	Unit 3: Transmission system 3.1 Differential unit and its adjustment 3.2 Introduction to automatic power transmission
4	Unit 4: Suspension system 4.1 Cambering of leaf springs, shackle, shackle pin and centre bolt 4.2 Manual steering systems Power steering systems
5	Unit5: Auto Electrical System 5.1 Use of electrical symbol and circuit diagram 5.2 Battery and its maintenance 5.3 Circuit diagram for ignition system and components

EMPLOYABILITY SKILL

SL.NO.	NAME OF UNIT AND FOCUS AREAS
01.	UNIT 1. COMMUNICATION SKILLS 1.1 Steps to active listening skills
02.	UNIT2. SELF MANAGEMENT SKILLS 2.1 Sources of motivation
03.	UNIT 3. INFORMATION AND COMMUNICATION TECHNOLOGY SKILLS 3.1 Prepare Presentation using presentation application
04.	UNIT 4. ENTREPRENEURIAL SKILLS 4.1 Entrepreneurial competencies (goal setting and risk taking, problem solving and creativity)
05	UNIT FIVE – Green Skills 5.1 Role of Green skill jobs in minimizing waste & pollution.

Name of subject-BEAUTY THERAPIST(SECOND YEAR)

FOCUS AREAS FOR THE ACADEMIC YEAR2020-21

NSQF BASED SUBJECTS

VOCATIONAL SKILL

SL NO	NAME OF UNIT AND FOCUS AREA
01	Unit 1:MAKE UP SERVICES
	1.1:BASIC SKIN TYPES AND SKIN TONES
	1.2:MAKE UP PRODUCTS
	1.3:SELECTION AND APPLICATION OF RIGHT PRODUCTS TO ENHANCE FACIAL FEATURES
	1.4:THE COLOUR WHEEL
	1.5:BASIC BINDI DESIGNS
	1.6:SAREE DRAPING
	1.7:MAKE UP REMOVAL METHODS
02	UNIT 2-FACIAL BEAUTY SERVICE
	2.1:FACIAL STEAMER
	2.2:ELECTRO FACIAL SKIN TREATMENT
03	UNIT 3-SALON RECEPTION DUTIES
	3.1:CLIENT CARE
	3.2:MAINTAIN RECEPTION AREAS
	3.3:PROCESS PAYMENT
04	UNIT 4-CREATING POSITIVE IMPRESSION AT WORK PLACE
	4.1:CREATING POSITIVE IMPRESSION AT WORK PLACE

EMPLOYABILITY SKILL

SL.NO.	NAME OF UNIT AND FOCUS AREAS
01.	UNIT 1. COMMUNICATION SKILLS 1.1 Steps to active listening skills
02.	UNIT2. SELF MANAGEMENT SKILLS 2.1 Sources of motivation
03.	UNIT 3. INFORMATION AND COMMUNICATION TECHNOLOGY SKILLS 3.1 Prepare Presentation using presentation application
04.	UNIT 4. ENTREPRENEURIAL SKILLS 4.1 Entrepreneurial competencies (goal setting and risk taking, problem solving and creativity)
05	UNIT FIVE – Green Skills 5.1 Role of Green skill jobs in minimizing waste & pollution.

NAME OF SUBJECT: Cable Jointer Electrical Power System Year- Second Year
 FOCUS AREAS FOR THE ACADEMIC YEAR 2020-21
 (NSQF Based Subjects)

VOCATIONAL SKILL

SL NO	NAME OF UNIT AND FOCUS AREAS
01.	UNIT ONE:Basic Electricity-II 1.1 SI Units Basic Electrical quantity-current, voltage, resistance, load, energy, power, work. 1.2 Constant Current Source. Constant Voltage Source. 1.3 Measuring instruments for electrical quantities. 1.4 Electronic components Types-active and passive components. 1.5 Active component and Passive component with examples. 1.6 Colour coding of Passive components. Problems 1.7 Circuit types- series connection, parallel connection. 1.8 Calculation of value of resistors in resistive circuits (series and parallel circuits)
02.	UNIT TWO: MAINTENANCE OF THE CABLE SYSTEM 2.1 Tests in cables(continuity test and insulation resistance test) 2.2 Corrosion and types of corrosion in cables.
03.	UNIT THREE: SAFETY PRECAUTIONS FOR ELECTRICAL WORK. 3.1 Safety precautions(Electric). 3.2 Shock and causes of electric shock. 3.3 Artificial respiration and CPR. 3.4 Fire extinguishers and parts of fire extinguishers. 3,4 Causes of fire and types of fire.
04.	UNIT FOUR: WORKPLACE MANAGEMENT, SAFETY AND HEALTH. 4.1 Types of fire extinguishers and techniques of using fire extinguisher. 4.2 Personal safety and personal Protection Equipments (Safety helmet, Safety gloves, safety belt etc)
05.	UNIT FIVE: CO-ORDINATION AND COMMITMENTS TO CUSTOMERS. 5.1 Team management and commitments to to customers.

EMPLOYABILITY SKILL

SL.NO.	NAME OF UNIT AND FOCUS AREAS
01.	UNIT 1. COMMUNICATION SKILLS 1.1 Steps to active listening skills
02.	UNIT2. SELF MANAGEMENT SKILLS 2.1 Sources of motivation
03.	UNIT 3. INFORMATION AND COMMUNICATION TECHNOLOGY SKILLS 3.1 Prepare Presentation using presentation application
04.	UNIT 4. ENTREPRENEURIAL SKILLS 4.1 Entrepreneurial competencies (goal setting and risk taking, problem solving and creativity)
05	UNIT FIVE – Green Skills 5.1 Role of Green skill jobs in minimizing waste & pollution.

NAME OF SUBJECT:DOMESTIC BIOMETRIC DATA OPERATOR Year- Second Year

FOCUS AREAS FOR THE ACADEMIC YEAR 2020-2021

(NSQF Based Subjects)

VOCATIONAL SKILL

SL.NO.	NAME OF UNIT AND FOCUS AREAS
01	UNIT ONE(APPLICATIONS OF BIOMETRIC DATA) 1.1 DATA ITEMS REQUIRED IN THE PREPARATION OF BAS, 1.2 PROCEDURE OF PREPARATION OF BAS, 1.3 TYPES OF REPORTS GENERATED IN BAS 1.4 DATA ITEMS REQUIRED IN THE PREPARATION OF AADHAR CARD 1.5 PROCEDURE OF PREPARATION OF AADHAR CARD
02	UNIT TWO(FUNDAMENTALS OF DATABASE SYSTEMS) 2.1 CONCEPT OF DATABASE SYSTEMS 2.2 RELATIONAL DATABASE SYSTEMS 2.3 CREATION AND UPDATION OF DATABASE USING SQL 2.4 COMMANDS FOR CREATION AND UPDATION 2.5 COMMANDS FOR QUERYING A DATABASE 2.6 BASIC CONCEPTS OF DATA SECURITY
03	UNIT THREE(ADVANCED TECHNOLOGIES) 3.1 CONCEPT OF CLOUD COMPUTING 3.2 BASIC ARCHITECTURE OF CLOUD 3.3 CLOUD SERVICES OFFERED BY GOOGLE, NIC AND APPLE 3.4 CONCEPT OF DATA MART AND DATA WAREHOUSE
04	UNIT FOUR(HEALTH AND SAFETY MEASURES) 4.1 IMPORTANCE OF HEALTH,SAFETY AND SECURITY AT WORKPLACE 4.2 POLICIES FOR HEALTH,SAFETY AND SECURITY

EMPLOYABILITY SKILL

SL.NO.	NAME OF UNIT AND FOCUS AREAS
01.	UNIT 1. COMMUNICATION SKILLS 1.1 Steps to active listening skills
02.	UNIT2. SELF MANAGEMENT SKILLS 2.1 Sources of motivation
03.	UNIT 3. INFORMATION AND COMMUNICATION TECHNOLOGY SKILLS 3.1 Prepare Presentation using presentation application
04.	UNIT 4. ENTREPRENEURIAL SKILLS 4.1 Entrepreneurial competencies (goal setting and risk taking, problem solving and creativity)
05	UNIT FIVE – Green Skills 5.1 Role of Green skill jobs in minimizing waste & pollution.

VOCATIONAL SKILL

SL. NO.	NAME OF UNIT AND FOCUS AREAS
01	<p>Unit 1: Maintain healthy performance of Livestock</p> <p>1.1. Signs of healthy and unhealthy animals 1.2. Concept of animal welfare and five basic freedoms 1.3. Routine monitoring and reporting of physical condition of the animals 1.4. Abnormal behaviour of dairy animals 1.5. Importance of external parasites 1.6. Treatment and control of external parasites 1.7. Heat detection Techniques 1.8. Artificial insemination. 1.9. Diagnosis of pregnancy and management of pregnant animals 1.10. Management of calves 1.11. Importance of colostrum feeding 1.12. Substitute for colostrum 1.13. Housing, weaning and feeding schedule of calves</p>
02	<p>Unit 2: Performing Hand and Machine Milking</p> <p>2.1. Structure of udder 2.2. Physiology of milk letdown 2.3. Inhibition of milk let down 2.4. Pre milking activities 2.5. Milking methods 2.6. Post milking activities 2.7. Mastitis detection methods 2.8. Control and prevention of mastitis 2.9. Parts of milking machine and their functions 2.10. Sources of contamination in milk 2.11. Steps of clean milk production</p>
03	<p>Unit 3: Entrepreneurship</p> <p>3.1. Entrepreneurship opportunities in dairy sector 3.2. Peculiar economic facts in dairy sector 3.3. Factors influencing economics of dairy farming 3.4. Planning a dairy business 3.5. Marketing of milk and milk products</p>
04	<p>Unit 4: Maintain Health and Safety at the Work place</p> <p>4.1. Importance of cleanliness and hygiene at the workplace 4.2. Safe handling of equipment and animals 4.3. First aid measures for dairy animals 4.4. Maintaining hygiene and bio security for infectious diseases at dairy farm 4.5. Disposal of carcass</p>

EMPLOYABILITY SKILL

SL.NO.	NAME OF UNIT AND FOCUS AREAS
01.	UNIT 1. COMMUNICATION SKILLS 1.1 Steps to active listening skills
02.	UNIT2. SELF MANAGEMENT SKILLS 2.1 Sources of motivation
03.	UNIT 3. INFORMATION AND COMMUNICATION TECHNOLOGY SKILLS 3.1 Prepare Presentation using presentation application
04.	UNIT 4. ENTREPRENEURIAL SKILLS 4.1 Entrepreneurial competencies (goal setting and risk taking, problem solving and creativity)
05	UNIT FIVE – Green Skills 5.1 Role of Green skill jobs in minimizing waste & pollution.

NAME OF SUBJECT: DISTRIBUTION LINEMAN
Year – Second Year
FOCUS AREAS FOR THE ACADEMIC YEAR 2020-21
(NSQF Based subjects)

VOCATIONAL SKILL

SL.NO.	NAME OF UNIT AND FOCUS AREAS
01.	UNIT ONE (BASIC ELECTRICITY II) 1.1 Basic Electrical Quantities – Definition, Units, symbols 1.2. Active & passive Components- Definition, examples 1.3. Measuring Instruments – AM, VM- Purpose, Circuits 1.4. Series Parallel Circuits- Figures, Calculation for Series Circuits
02.	UNIT SECOND (OPERATION & MAINTENANCE) 2.1. Various Components of 11 KV Distribution System 2.2. Distribution Transformer- Parts, Working 2.3. General Maintenance Works - Distribution Transformer, Yard
03.	UNIT THRID (SAFETY PRECAUTIONS) 3.1. Electric shock – Causes, First Aid 3.2. First Aid - CPR 3.3. Fire Protection- Types of Fire, Causes, Fire Extinguisher Parts & Types
04.	UNIT FOURTH (HEALTH & SAFETY) 4.1. Personal Protective Equipments 4.2. General Safety measures while handling Tools and Equipments

EMPLOYABILITY SKILL

SL.NO.	NAME OF UNIT AND FOCUS AREAS
01.	UNIT 1. COMMUNICATION SKILLS 1.1 Steps to active listening skills
02.	UNIT 2. SELF MANAGEMENT SKILLS 2.1 Sources of motivation
03.	UNIT 3. INFORMATION AND COMMUNICATION TECHNOLOGY SKILLS 3.1 Prepare Presentation using presentation application
04.	UNIT 4. ENTREPRENEURIAL SKILLS 4.1 Entrepreneurial competencies (goal setting and risk taking, problem solving and creativity)
05	UNIT FIVE – Green Skills 5.1 Role of Green skill jobs in minimizing waste & pollution.

NAME OF SUBJECT: FLORICULTURIST (OPEN CULTIVATION) Year – Second Year
FOCUS AREAS FOR THE ACADEMIC YEAR 2020-21
(NSQF Based subjects)

VOCATIONAL SKILL

SL.NO.	NAME OF UNIT AND FOCUS AREAS
01.	<p>Cultivation of Commercial flowers – I</p> <p>1.1 Chrysanthemum - Cultivation practices including harvest</p> <p>1.2 Tuberose - Cultivation practices including harvest</p> <p>1.3 Gladiolus - Cultivation practices including harvest</p>
02.	<p>Cultivation of Commercial flowers – II</p> <p>2.1 Rose - Cultivation practices including harvest</p> <p>2.2 Marigold - Cultivation practices including harvest</p> <p>2.3 Jasmine spp. - Cultivation practices including harvest</p>
03.	<p>Growing of Annuals</p> <p>3.1 Definition</p> <p>3.2 Importance</p> <p>3.3 Classifications</p> <p>3.4 Herbaceous border</p> <p>3.5 Preparation of Seed bed</p> <p>3.6 Types of sowing</p>
04.	<p>Growing of Perennials</p> <p>4.1 Trees – Importance, Classification</p> <p>4.2 Shrubs – Definition, Classification, Difference between shrubs and trees, Training and Pruning, Propagation, Topiary</p> <p>4.3 Climbers and Creepers – Definition, Classification, Propagation, Pergola.</p> <p>4.4 Indoor plants – Definition, Care and maintenance of indoor plants</p> <p>4.5 Bonsai – Definition, Plants suitable</p>
05.	<p>Post-Harvest Management and Value Addition</p> <p>5.1 Care taken after harvest of flowers</p> <p>5.2 Flower grading</p> <p>5.3 Pulsing & holding solution and its preparation</p> <p>5.4 Bruising</p> <p>5.5 Types of different value-added products of flower (bouquet, garland etc.)</p> <p>5.5 Preparation of gulkand and rosewater</p> <p>5.6 Describe flower arrangement</p>
06.	<p>Occupational Health, Hygiene and First Aid Practices</p> <p>6.1 Common hazards at flower production</p>

EMPLOYABILITY SKILL

SL.NO.	NAME OF UNIT AND FOCUS AREAS
01.	UNIT 1. COMMUNICATION SKILLS 1.1 Steps to active listening skills
02.	UNIT2. SELF MANAGEMENT SKILLS 2.1 Sources of motivation
03.	UNIT 3. INFORMATION AND COMMUNICATION TECHNOLOGY SKILLS 3.1 Prepare Presentation using presentation application
04.	UNIT 4. ENTREPRENEURIAL SKILLS 4.1 Entrepreneurial competencies (goal setting and risk taking, problem solving and creativity)
05	UNIT FIVE – Green Skills 5.1 Role of Green skill jobs in minimizing waste & pollution.

NAME OF SUBJECT: FLORICULTURIST(PROTECTED)CULTIVATION

Year: Second Year

FOCUS AREA FOR THE ACADEMIC YEAR 2020-21

UNIT	NAME OF UNIT AND FOCUS AREAS
1	Care and maintenance of Greenhouse - Full chapter
2	Protected cultivation of A. Rose B. Orchid C. Gerbera
3	1. Special operations of horticultural crops 2. calculations of ppm solutions
4	Pest and diseases of A. Rose B. Gerbera
5	Definitions

EMPLOYABILITY SKILL

SL.NO.	NAME OF UNIT AND FOCUS AREAS
01.	UNIT 1. COMMUNICATION SKILLS 1.1 Steps to active listening skills
02.	UNIT2. SELF MANAGEMENT SKILLS 2.1 Sources of motivation
03.	UNIT 3. INFORMATION AND COMMUNICATION TECHNOLOGY SKILLS 3.1 Prepare Presentation using presentation application
04.	UNIT 4. ENTREPRENEURIAL SKILLS 4.1 Entrepreneurial competencies (goal setting and risk taking, problem solving and creativity)
05	UNIT FIVE – Green Skills 5.1 Role of Green skill jobs in minimizing waste & pollution.

NAME OF SUBJECT: ...**FTCP**..... Year – Second Year
FOCUS AREAS FOR THE ACADEMIC YEAR 2020-21
(NSQF Based subjects)

VOCATIONAL SKILLS

SL.NO.	NAME OF UNIT AND FOCUS AREAS
01.	<p>UNIT ONE – Computer Network Essentials</p> <p>1.1 Computer network definition & examples 1.2 Network technologies – peer to peer & client server (figure & brief explanation) 1.3 Types of networking – LAN, MAN ,WAN (brief explanation) 1.4 Topologies – BUS, STAR, Mesh, Ring, Hybrid (Brief explanation) 1.5 OSI layers (Name only) & TCP/IP layer (Name only) 1.6 Protocols (Names only) 1.7 IP address –IPV4 & IPV6 (brief explanation) 1.8 Network devices (hub,modem,switch,router,gateway,)(brief explanation) 1.9 Examples of guided & unguided transmission 1.10 Comparison of simplex, half duplex & full duplex. 1.11 Colour code of straight through & cross over crimping</p>
02.	<p>UNIT SECOND – Installation & configuration of NOS Windows server</p> <p>2.1 windows server 2016 Hardware requirements 2.2 installation steps 2.3 ADDS definition</p>
03.	<p>UNIT THRID – Installation & configuration of NOS Linux Server</p> <p>3.1 Dual booting (concept only) 3.2 Linux server Installation process –steps only 3.3 commands – ifconfig,cd</p>

04.	<p>UNIT FOURTH – Computer Network Maintenance & trouble shooting</p> <p>Identify & trace problems related with</p> <p>4.1 Wiring problems in a network (check LAN cable crimping problem, NIC card problems like not added or driver problems)</p> <p>4.2 Physical connectivity of hardware devices (check connectivity using ping , ipconfig commands)</p>
05.	<p>UNIT FIFTH – IT Security</p> <p>5.1 IT Security definition</p> <p>5.2 Three principles of IT security (Name only)</p> <p>5.3 Malware definition & examples (Virus, Worm, Trojan)</p> <p>5.5 Antivirus software examples any two</p> <p>5.6 Hacking (only definition)</p> <p>5.7 Types of hackers (only names)</p> <p>5.8 Firewall definition</p> <p>5.9 Types of Firewall (name only – packet, application level gateway , stateful inspection)</p> <p>5.10 Cyber security Techniques (name only – authentication , encryption , digital signature , antivirus, firewall, steganography)</p>
06.	<p>UNIT SIXTH – ITIL V4</p> <p>6.1 Importance of ITIL(Information technology infrastructure library version 4) in IT services</p> <p>6.2 IT quality service parameters (names only – competence, courtesy, credibility, communication, reliability)</p> <p>6.3 SLA definition only</p> <p>6.4 Three phases of problem management (names only –problem identification, problem control, error control)</p>

EMPLOYABILITY SKILL

SL.NO.	NAME OF UNIT AND FOCUS AREAS
01.	UNIT 1. COMMUNICATION SKILLS 1.1 Steps to active listening skills
02.	UNIT2. SELF MANAGEMENT SKILLS 2.1 Sources of motivation
03.	UNIT 3. INFORMATION AND COMMUNICATION TECHNOLOGY SKILLS 3.1 Prepare Presentation using presentation application
04.	UNIT 4. ENTREPRENEURIAL SKILLS 4.1 Entrepreneurial competencies (goal setting and risk taking, problem solving and creativity)
05	UNIT FIVE – Green Skills 5.1 Role of Green skill jobs in minimizing waste & pollution.

NAME OF SUBJECT: GARDENER Year – Second Year
FOCUS AREAS FOR THE ACADEMIC YEAR 2020-21
(NSQF Based subjects)

VOCATIONAL SKILL

SL.NO.	NAME OF UNIT AND FOCUS AREAS
01.	<p>UNIT 1: NUTRITION AND IRRIGATION</p> <p>1.1 Classification of manures and fertilizers 1.2 Define green manures and bio-fertilizers with examples 1.3 Methods of manure and fertilizers application 1.4 List out different methods of irrigation (Surface, Subsurface, different specialized irrigation methods) 1.5 Advantages and disadvantages of Drip and sprinkler irrigation</p>
02.	<p>UNIT 2: CARE AND MAINTENANCE OF GARDEN</p> <p>2.1 Nature of insect damage 2.2 Five insect orders, Its characteristics and damaging stages 2.3 Different common disease symptoms 2.4 Classification of weeds (Based on life span –Annuals, Biennials and perennials, Based on ecological affinities – Dry land weeds and wetland weeds) 2.5 Methods in Integrated pest and disease management (Cultural, Mechanical, Physical, Biological and Chemical methods) 2.6 Common cultural operations (Mulching, Training, Pruning, Pinching, Disbudding)</p>
03.	<p>UNIT 3. ESTABLISHMENT AND MAINTENANCE OF LAWN</p> <p>3.1 Methods used for planting of lawn 3.2 Different operations for maintaining lawn</p>
04.	<p>UNIT 4. BASIC LANDSCAPE DESIGNING AND GARDEN COMPONENTS</p> <p>4.1 Principles of landscaping 4.2 Features of garden (garden components) 4.3 Different styles of garden (Formal garden, Informal garden and freestyle garden) 4.4 Features of Japanese garden 4.5 Indoor garden (Plants that can be grown indoor, Care and maintenance and containers used)</p>
05.	<p>UNIT 5. IDENTIFICATION OF ORNAMENTAL PLANTS</p> <p>5.1 Classification of ornamental plants with examples</p> <ul style="list-style-type: none"> ○ Based on life span –Annuals, biennials and perennials ○ Based on morphology –Herbs, shrubs, trees, climbers & creepers ○ Based on season of growth --winter season annuals, summer season annuals and rainy season annuals

EMPLOYABILITY SKILL

SL.NO.	NAME OF UNIT AND FOCUS AREAS
01.	UNIT 1. COMMUNICATION SKILLS 1.1 Steps to active listening skills
02.	UNIT2. SELF MANAGEMENT SKILLS 2.1 Sources of motivation
03.	UNIT 3. INFORMATION AND COMMUNICATION TECHNOLOGY SKILLS 3.1 Prepare Presentation using presentation application
04.	UNIT 4. ENTREPRENEURIAL SKILLS 4.1 Entrepreneurial competencies (goal setting and risk taking, problem solving and creativity)
05.	UNIT 5. GREEN SKILLS 5.1 Role of green jobs in toxin-free homes

NAME OF SUBJECT – GENERAL DUTY ASSISTANT - II year

Vocational Skills

SI No	Name of Unit and focus areas
1	Unit 1 -Hospital Management System 1.1 Physical examination 1.2 Role of GDA in assisting the health examination of patient 1.3 Various ways of transporting patients in hospital 1.4 Collecting specimens from patients
2	Unit 2 -Sterilisation and Disinfection 2.1 Different types of disinfection 2.2 Role of hand hygiene in prevention of infection 2.3 Disinfection of Operation Theatre 2.4 Role of GDA in preventing Hospital Acquired Infections
3	Unit 3 – Introduction to medication 3.1 Different routes of administering drugs 3.2 Novel Drug delivery methods 3.3 Safety measures of medicine administration 3.4 Standard abbreviations used in medication chart
4	Unit 4 – Immunisation 4.1 -Types of immunity 4.2 – Components of Universal Immunisation Programme 4.3 – Pulse polio Immunisation Programme
5	Unit 5 – Physiotherapy 5.1 – Principles of Good Body Mechanics 5.2 – Purpose of exercise 5.3 – ROM exercise
6	Unit 6 – Bio Medical Waste Management 6.1 – Sources of Bio Medical Waste 6.2 – Importance of color coding criteria recommended by WHO 6.3 - Bio Medical Waste Management Process
7	Unit 7 – Medical Records 7.1 – Significance of documentation 7.2 – Principles of documentation

EMPLOYABILITY SKILL

SL.NO.	NAME OF UNIT AND FOCUS AREAS
01.	UNIT 1. COMMUNICATION SKILLS 1.1 Steps to active listening skills
02.	UNIT2. SELF MANAGEMENT SKILLS 2.1 Sources of motivation
03.	UNIT 3. INFORMATION AND COMMUNICATION TECHNOLOGY SKILLS 3.1 Prepare Presentation using presentation application
04.	UNIT 4. ENTREPRENEURIAL SKILLS 4.1 Entrepreneurial competencies (goal setting and risk taking, problem solving and creativity)
05	UNIT FIVE – Green Skills 5.1 Role of Green skill jobs in minimizing waste & pollution.

**FOCUS AREAS FOR THE ACADEMIC YEAR 2020-21
(NSQF Based)**

VOCATIONAL SKILL

SL.NO.	NAME OF UNIT AND FOCUS AREAS
01.	UNIT ONE – Etiquette and Hospitable conduct 1.1 – Components of Hospitality 1.2 - Define need and necessities of etiquettes 1.3 – Customer centricity
02.	UNIT TWO – Gender and age sensitive service practices 2.1 – Female at work place 2.2- Age & gender Specific practices 2.3 – Behavioral etiquettes while dealing with female colleagues and guests
03.	UNIT THREE – Health & Hygiene 3.1 – Ensure cleanliness around the work place 3.2 – Personal Hygiene practices
04.	UNIT FOUR – Safety at work place 4.1 – Use of first aid and personal protective Equipments while doing hazardous work
05.	UNIT FIVE - Learn a foreign or local Language including English 5.1 – Use of language in Effective communication 5.2 – Basic knowledge in French & German
06.	UNIT SIX – Customer centric Services 6.1 – Working towards the achievement of customer satisfaction

EMPLOYABILITY SKILL

SL.NO.	NAME OF UNIT AND FOCUS AREAS
01.	UNIT 1. COMMUNICATION SKILLS 1.1 Steps to active listening skills
02.	UNIT2. SELF MANAGEMENT SKILLS 2.1 Sources of motivation
03.	UNIT 3. INFORMATION AND COMMUNICATION TECHNOLOGY SKILLS 3.1 Prepare Presentation using presentation application
04.	UNIT 4. ENTREPRENEURIAL SKILLS 4.1 Entrepreneurial competencies (goal setting and risk taking, problem solving and creativity)
05	UNIT FIVE – Green Skills 5.1 Role of Green skill jobs in minimizing waste & pollution.

NAME OF SUBJECT: MICRO-IRRIGATION TECHNICIAN – Second Year
FOCUS AREAS FOR THE ACADEMIC YEAR 2020-21
NSQF BASED SUBJECT

VOCATIONAL SKILL SL.NO.	NAME OF UNIT AND FOCUS AREAS
01.	<p>1. Layout and Installation of Micro-irrigation systems</p> <p>1.1. Identify components of micro-irrigation system 1.3 Identify tools and materials used for installation of drip irrigation system 1.5 Install Head Unit 1.6 Install Pipe Networks 1.8 Install the water Emitters/ drippers</p>
02.	<p>2. Maintenance of Drip irrigation system</p> <p>2.3 Maintain the Head Unit 2.4 Maintain the distribution network and emission devices</p>
03.	<p>3. Occupational health, hygiene and first aid practices</p> <p>3.1 Recognize and adopt strategies for preventing hazardous conditions and work practices 3.2 Administer first aid or undertake most important action in a life-threatening emergency</p>

EMPLOYABILITY SKILL

SL.NO.	NAME OF UNIT AND FOCUS AREAS
01.	<p>UNIT 1. COMMUNICATION SKILLS</p> <p>1.1 Steps to active listening skills</p>
02.	<p>UNIT2. SELF MANAGEMENT SKILLS</p> <p>2.1 Sources of motivation</p>
03.	<p>UNIT 3. INFORMATION AND COMMUNICATION TECHNOLOGY SKILLS</p> <p>3.1 Prepare Presentation using presentation application</p>
04.	<p>UNIT 4. ENTREPRENEURIAL SKILLS</p> <p>4.1 Entrepreneurial competencies (goal setting and risk taking, problem solving and creativity)</p>
05	<p>UNIT FIVE – Green Skills</p> <p>5.1 Role of Green skill jobs in minimizing waste & pollution.</p>

NAME OF SUBJECT: OPTICAL FIBER TECHNICIAN (OFT)
Year – Second Year
FOCUS AREAS FOR THE ACADEMIC YEAR 2020-21
(NSQF Based subjects)

A. VOCATIONAL SKILL

Sl.No.	NAME OF UNIT AND FOCUS AREAS
01.	<p>UNIT 1 (INTRODUCTION TO OPTICAL FIBER INDUSTRY)</p> <p>1. 1 (L.O: 1) Understand the opportunities in the broadband Industry</p> <ul style="list-style-type: none"> • Role of Optical Fiber Technician in Telecom industry • Duties and responsibilities of Optical Fiber Technician • Transmission media • Advantages of Fiber Optic Communication in Telecom Industry <p>1. 2 (L.O: 2) Read and interpret OFC route plan.</p> <ul style="list-style-type: none"> • Route inspection
02.	<p>UNIT 2 (OPTICAL FIBER CABLE AND TOOLS)</p> <p>2. 1 (L.O: 1) Describe the types of Optical Fiber</p> <ul style="list-style-type: none"> • Structure of Optical Fiber • Types of fiber based on modes of propagation – Single mode and Multi-mode fiber <p>2. 2 (L.O: 2) Describe the types of Optical Fiber Cable</p> <ul style="list-style-type: none"> • Types of cables – Indoor cables, Outdoor cables • Colour codes in Optical fiber cables <p>2. 3 (L.O: 3) Understand fiber Optic Cable Specification</p> <ul style="list-style-type: none"> • Bend radius <p>2. 4 (L.O: 4) Identify and use Fiber Optic tools in tool kit</p> <ul style="list-style-type: none"> • Basic Hand Tools- Round tube cutter, Optical Fiber Stripper • Splicing Tools- Optical Fiber Splicing Machine, Cleaver (scribe and precision), Protection sleeve • Cleaning Tools- Isopropyl alcohol • Testing tools- OTDR • Tools for installing cables: Tubing cutter, Rotary cable slitting and ringing tool, Cable jacket stripper, Buffer tube stripper
03.	<p>UNIT 3 (INSTALLATION OF OPTICAL FIBER CABLE)</p> <p>3.1 (L.O: 1) Demonstrate to handle OFC Cables</p> <ul style="list-style-type: none"> • Cable storage and handling <p>3.2 (L.O: 2) Carry out cable Laying</p>

	<ul style="list-style-type: none"> • Installation through trenching • Ducting process • Conduct figure 8' ing' • Cable pulling and blowing <p>3.3 (L.O: 3) Post implementation of fiber cables after laying</p> <ul style="list-style-type: none"> • Fusion splicing process
04.	<p>UNIT 4 (FAULT RESTORATION, SAFETY MEASURES AND NETWORKING)</p> <p>4.1 (L.O: 1) Test OFC using Visual Fault Locator</p> <ul style="list-style-type: none"> • Cable System Faults <p>4.2 (L.O: 2) Observe safety measures during installation of OFC</p> <ul style="list-style-type: none"> • Working Safety • Using Personal Protective Equipment – helmet, eye and face protection • LASER Light safety <p>4.3 (L.O: 3) Optical Networking</p> <ul style="list-style-type: none"> • Li – Fi Technology

B. EMPLOYABILITY SKILL

SL.NO.	NAME OF UNIT AND FOCUS AREAS
01.	UNIT 1. COMMUNICATION SKILLS 1.1 Steps to active listening skills
02.	UNIT2. SELF MANAGEMENT SKILLS 2.1 Sources of motivation
03.	UNIT 3. INFORMATION AND COMMUNICATION TECHNOLOGY SKILLS 3.1 Prepare Presentation using presentation application
04.	UNIT 4. ENTREPRENEURIAL SKILLS 4.1 Entrepreneurial competencies (goal setting and risk taking, problem solving and creativity)
05	UNIT FIVE – Green Skills 5.1 Role of Green skill jobs in minimizing waste & pollution.

NAME OF SUBJECT: PLUMBER GENERAL - Year – Second Year
FOCUS AREAS FOR THE ACADEMIC YEAR 2020-21
(NSQF Based subjects)

VOCATIONAL SKILL

SL.NO.	NAME OF UNIT AND FOCUS AREAS
01.	<p>UNIT ONE: Installation and repair of advanced sanitary fixtures</p> <p>1.1 Identification of advanced sanitary fixtures</p> <ul style="list-style-type: none"> • Advanced plumbing fittings and fixture • Advantages and Uses <p>1.2 Installation of advanced sanitary fixtures</p> <ul style="list-style-type: none"> • Installation method • Precaution during installation
02.	<p>UNIT SECOND: Functioning and maintenance of taps, valves, faucets and control device</p> <p>2.1 Explaining the function of taps and valves</p> <ul style="list-style-type: none"> • Taps and valves and its role • Parts of taps and valves • Advantages of using taps and valves <p>2.2 Identify taps and valve</p> <ul style="list-style-type: none"> • Importance of taps and valves • Components of taps and valves • Types of taps and valves • Advantage of using and Components of Plumbing and sanitary fixtures <p>4. Use and handle control devices</p> <ul style="list-style-type: none"> • Method of assembling and disassembling of control devices plumbing and sanitary fixtures
03.	<p>UNIT THIRD: Techniques related to cutting, bending and joining of fixtures and fittings</p> <p>3.1 Identify different components of a building structure</p> <ul style="list-style-type: none"> • Components of building structure, • Importance and use of building components in a structure • Purpose and utilization of various components of building structure <p>3.2. Do the cutting and opening in building structure for fixing plumbing fixtures etc.</p> <ul style="list-style-type: none"> • Tools used for cutting-(Wall Chaser) • Safety during cutting and opening

04	<p>UNIT FORTH :Defects in plumbing system</p> <p>4.1 Identify different types of defects</p> <ul style="list-style-type: none"> • Importance and use of checking the defects • Annual maintenance <p>4.2 Repairing of different types of defect</p> <ul style="list-style-type: none"> • Type of Defects like leakage, low pressure, no supply of water etc. • Importance of maintenance • Precautions during Maintenance
05	<p>UNIT FIFTH: Working and operation of special tools</p> <p>5.1 Identification of special tools</p> <ul style="list-style-type: none"> • Importance and use of special tools. • Method of fixing special sanitary fixture <p>5.2 Handling of special tools</p> <ul style="list-style-type: none"> • Handling of special tools • Precautions to be made during handling of special tools

Employability skills

SL. NO.	NAME OF UNIT AND FOCUS AREAS
01	<p>UNIT 1. COMMUNICATION SKILLS</p> <p>1.1 Steps to active listening skills</p>
02	<p>UNIT 2. SELF-MANAGEMENT SKILLS</p> <p>2.1. Sources of motivation</p>
03	<p>UNIT 3. INFORMATION AND COMMUNICATION TECHNOLOGY SKILLS</p> <p>3.1 Prepare presentation using presentation application</p>
04	<p>UNIT 4. ENTREPRENEURIAL SKILLS</p> <p>4.1. Entrepreneurial competencies – Goal Setting and risk taking, problem solving and creativity</p>
05	<p>UNIT 5. GREEN SKILLS</p> <p>5.1. Role of Green skill jobs in minimizing waste and pollution</p>

NAME OF SUBJECT: SALES ASSOCIATE Year – Second Year

**FOCUS AREAS FOR THE ACADEMIC YEAR 2020-21
(NSQF Based subjects)**

VOCATIONAL SKILL

SL.NO.	NAME OF UNIT AND FOCUS AREAS
01.	UNIT ONE (RESOLVE CUSTOMER CONCERNS) 1.1 Sources & Tools for identifying customer problems 1.2 Handling customer problems 1.3 Benefits of negotiation, steps involved to respond to customers 1.4 Methods to get feedback on solving customers Problems,
02.	UNIT SECOND (DELIVERY OF RELIABLE SERVICE) 2.1 Procedure of delivering customer service 2.2 Method of getting customers feedback, How to communicate customer feedback to others 2.3 Collection & storing of customer service information 2.4 Legal requirements for storage of data
03.	UNIT THIRD (CUSTOMER RELATIONSHIP MANAGEMENT) 3.1 Process of Customer Relationship Management 3.2 Ways to retail customer 3.3 Reason for not meeting customer expectation 3.4 Importance of communicate information to others
04.	UNIT FOURTH (CONTINUOUS IMPROVEMENT IN SERVICE) 4.1 Type of retail services 4.2 Mechanism for customer influences 4.3 Method of collecting & recording of customers feedback

	4.4 Impact of change in service on business
05	UNIT FIFTH (WORK IN TEAM AND ORGANIZATION) 5.1 Organization standard of appearance & behavior 5.2 Team work & its features 5.3 career prospects in retail 5.4 skill to complete goal

EMPLOYABILITY SKILL

SL.NO.	NAME OF UNIT AND FOCUS AREAS
01.	UNIT 1. COMMUNICATION SKILLS 1.1 Steps to active listening skills
02.	UNIT2. SELF MANAGEMENT SKILLS 2.1 Sources of motivation
03.	UNIT 3. INFORMATION AND COMMUNICATION TECHNOLOGY SKILLS 3.1 Prepare Presentation using presentation application
04.	UNIT 4. ENTREPRENEURIAL SKILLS 4.1 Entrepreneurial competencies (goal setting and risk taking, problem solving and creativity)
05	UNIT FIVE – Green Skills 5.1 Role of Green skill jobs in minimizing waste & pollution.

NAME OF THE SUBJECT: SELF-EMPLOYED TAILOR....YEAR- SECOND YEAR

FOCUS AREAS FOR THE ACADEMIC YEAR 2020-2021

(NSQF Based subjects)

VOCATIONAL SKILL

SL. NO.	NAME OF UNIT AND FOCUS AREAS
01.	UNIT-1 STUDY OF TEXTILES 1.1 Classification of fabric Weaves 1.2 Simple weaves and their derivatives 1.3 Construction of the following weaves: Plain, Rib, Basket, Twill and Satin 1.4 Classification of fabric finishes. 1.5 Basic fabric finishes along with their uses: brushing, scouring, singeing, calendaring, mercerization, embossing, glazing, waterproofing.
02.	UNIT-2 DART MANIPULATION 2.1 Introduction to dart and dart manipulation 2.2 Methods of shifting a dart (1) Slash and spread (2) Pivot method 2.3 Steps of manipulating darts using pivot method
03.	UNIT-3 DRAFTING, CUTTING AND SEWING PROCESS 3.1 Drafting and steps of construction of churidar pajama 3.2 Drafting and steps of construction of umbrella skirt
04.	UNIT-4 FITTING DEFECTS AND REMEDIES 4.1 Proper fitting and factors affecting fitting
05.	UNIT-5 INTRODUCTION TO FINISHING OF GARMENTS 5.1 Process of finishing of garments in a manufacturing unit

	5.2 Importance and types of labeling
06.	<p>UNIT-6HAZARDS, SAFETY MEASURES,CLEANING AND MAINTANENCE AT WORK PLACE</p> <p>6.1 Hazards in a manufacturing unit like fire hazards, electrical hazards, chemical hazards, biological hazards etc. and its reporting procedures</p> <p>6.2 Importance of cleaning and maintenance of tailoring tools and equipment</p>

EMPLOYABILITY SKILL

SL.NO.	NAME OF UNIT AND FOCUS AREAS
01.	<p>UNIT 1. COMMUNICATION SKILLS</p> <p>1.1 Steps to active listening skills</p>
02.	<p>UNIT2. SELF MANAGEMENT SKILLS</p> <p>2.1 Sources of motivation</p>
03.	<p>UNIT 3. INFORMATION AND COMMUNICATION TECHNOLOGY SKILLS</p> <p>3.1 Prepare Presentation using presentation application</p>
04.	<p>UNIT 4. ENTREPRENEURIAL SKILLS</p> <p>4.1 Entrepreneurial competencies (goal setting and risk taking, problem solving and creativity)</p>
05	<p>UNIT FIVE – Green Skills</p> <p>5.1 Role of Green skill jobs in minimizing waste & pollution.</p>

AGRI BUSINESS & FARM SERVICES - SECOND YEAR

FOCUS AREA - 20-21

MODULE 3

SL.NO.	NAME OF UNIT AND FOCUS AREAS
01.	UNIT ONE – INTRODUCTION TO AGRI-BUSINESS 1.1. Scope of Agri-business 1.2. Agri-business process – person involved 1.3. Risk factors in Agri-business
02.	UNIT SECOND – MAJOR ENTERPRISES 2.1.1. Basic principles of land scaping 2.1.2. Classification of ornamental plants 2.1.3. Types of garden & its components 2.1.4. Establishment of lawn, Rockery & water garden 2.1.5. Institutional garden & garden maintenance 2.1.6. Training & Pruning 2.2.1. Types of nurseries 2.2.2. Selection of site 2.2.3. Media & progeny orchard 2.2.4. Records to be kept in a nursery 2.2.5. Propagation techniques in nursery 2.3.1. Different types of protected cultivation 2.3.2. Instruments & various irrigation systems used in protected cultivation 2.3.3. Vase life of cut flowers and value added products of flowers 2.3.4. Preparation of jam
03.	UNIT THRID – OTHER ENTERPRISES 3.1. Vermi composting 3.2. Vegetable seeding production

ABFS SECOND YEAR

MODULE 4

SL.NO.	NAME OF UNIT AND FOCUS AREAS
04.	UNIT FOURTH - AGRICLINIC Diagnosis and management of pests & diseases:- 4.1. Pests of rice – Stem borer, BPH, rice bug Diseases of rice – Blight, bacterial leaf blight, sheath blight 4.2. Pests of coconut – Rhinoceros beetle, Red palm weevil & eriophyid mite 4.3. Disease of Pepper – Quick wilt 4.4. Pests of banana – Pseudo stem weevil, Rhizome weevil Diseases of banana – Bunchy top, sigatoka
05.	UNIT FIFTH – FARM MACHINERY AND PLANT PROTECTION EQUIPMENTS Different groups of farm machinery 5.1. For cultivation 5.2. For inter cultivation 5.3. For harvesting and post harvesting 5.4. Various plant protection equipment 5.5. Care while handling of P.P. equipment 5.6. Field problems & remedies of knapsack sprayer
06.	UNIT SIXTH – FARMER SUPPORT SERVICE 6.1. Schemes implemented by department of agriculture – LEADS, ATMA, SAMETI, RKYV, Crop insurance, Karshaka pension 6.2. ICT enabled support of farmers a. Holistic – Haritha Keralam, Agmark b. Specific information system – Fruitipedia, flowering plants of Kerala c. Diagnostic & calculation tools :- Pest doctor, KAU fertulator, Credit calculator d. KIOSK – nelkrishi.com

NAME OF SUBJECT : ACCOUNTING AND TAXATION YEAR : SECOND YEAR

FOCUS AREAS FOR THE ACADEMIC YEAR 2020-21

MODULE 3- COMPUTERISED ACCOUNTING.

SL NO.	NAME OF UNIT AND FOCUS AREAS
1.	Unit 3.1 Introduction to Computerised Accounting- Full
2.	Unit 3.2 Fundamentals of Tally ERP 9 – Full
3.	Unit 3.3 Basic Accounting Information in Tally. Groups-Predefined groups-Creating groups and Sub groups-Display alter and delete groups-single- Ledgers-single creation, display, alter and delete
4.	Unit 3.4 Accounting Vouchers in Tally. Voucher types-Functional keys-Cancellation and Deletion of Vouchers,Duplication of Vouchers
5.	Unit .3.5 Tax accounting in Tally Steps to enable GST and TDS Ledgers pertaining to GST and TDS
6.	Unit 3.6 Cost Centers and Inventory information. Create, display alter and delete Stock item, Godown and Units of Measure –Single
7.	Unit 3.7 Orders Invoices and Reports. Create Invoice, Bank Reconciliation Statement, Display reports
8.	Unit 3.8 Quick Books. Features of Quick Books, QB Reports and Differences between QB and Tally

MODULE 4- TAXATION

SL NO.	NAME OF UNIT AND FOCUS AREAS
1.	Unit 4.1 Introduction to Taxation- Full
2.	Unit 4.2 Income Tax Meaning of Income Tax, Income Tax Act and Rule, Basic terms- Person Assessee, Previous Year, Assessment Year, Heads of Income, GTI, TI, Computation of Income from Salary, Income tax rates old and new, Deductions 80C, 80D, Computation of Tax liability. PAN, Meaning of Tax evasion and Tax avoidance.
3.	Unit 4.3 Advance Tax, TDS and Tax Returns. Meaning of advance tax , Meaning of TDS, TAN Meaning of Income Tax returns, Due date for filing TDS returns
4.	Unit 4.4 Goods and Service Tax Meaning of GST, Classification of GST, Benefits of GST, GST Council, Supply, Goods, GST rates, Levy and collection of GST HSN/SAC, GSTN, GSTIN, Threshold limit for Registration, Compounding scheme, GST computation- simple problems.

Agriculture Crop Health Management-Second Year

Focus areas for the Academic Year 2020-21

MODULE 3

Sl No	Name of the Unit & Focus Areas
01	<p>UNIT 1 PEST & DISEASE DIAGNOSIS</p> <p>1.1 Pest 1.2 Different Pest Groups 1.3 Classification of different pest groups 1.4 Categories of pests 1.5 Pest Outbreak 1.6 Impact of Global warming on pest status 1.7 Specific characters of Insect pests 1.8 Classification of Insects 1.9 Classification of Insects as Solid feeders & Liquid Feeders 1.10 Disease 1.11 Classification of Factors causing Disease 1.12 Classification of disease based on causal organism 1.13 Diagnosis of Disease 1.14 Disease Epidemiology 1.15 Essential conditions for the development of a disease or Epidemic 1.16 Plant Disease forecasting and Its application 1.17 Soft wares for Pest and Disease diagnosis</p>
02	<p>Unit 2 Integrated Pest and Disease Management of Crops of Kerala</p> <p>2.1 Integrated Pest management Principles of IPM Methods of IPM 2.2 Plant Disease Management Integrated Disease Management 2.3 Weed Management Mechanical Weed Control Cultural Weed Control Chemical Control Biological Control Bio Herbicides/Mycoherbicides Integrated Weed Management 2.4 Integrated Pest & Disease Management 2.5 Pest Surveillance 2.6 Identification and Management of Pests & Diseases of Crops of Kerala Rice(IPDM),Coconut(IPDM),Banana(IPDM),Pepper,Vegetables(Cucurbits, Solanaceous Vegetables, Bhindi),Tapioca,Cashew,Cowpea 2.7 Pests of Stored Products Name of Important Storage Pests Management of storage pests Storage Conditions in an FCI godown</p>
03	<p>Unit 3-Agro-BioPharmacy</p> <p>3.1 Botanicals Neem oil Garlic Emulsion Tobacco Decoction</p>

	3.2 Preparation of permitted fungicides for organic farming Bordeaux Mixture Bordeaux Paste 3.3 Preparation of Organic nutrient solutions Panchagavya Fish amino acid 3.4 Fungal and Bacterial pathogens Trichoderma Pseudomonas Entomopathogens 3.8 Low cost trap for fruitfly management
04	Unit 4 –Plant Protection Equipments 4.1 Knapsack Sprayer Rocker sprayer

MODULE 4

Sl No	Name of the unit & Focus Area
01	Unit 1 Protected cultivation 1.14 Hydroponics, Aquaponics
02	Unit 2 Pesticides & Pesticide Residue Management 2.16 Formulations 2.19 Pesticide Calculations 2.27 MRL 2.28 Waiting Period 2.29 Precautions to be taken while handling Pesticides 2.30 Pesticide Residue decontamination
03	Unit 4 ICT enabled extension services in Agriculture 4.2 Holistic Information system 4.3 Kissan call centres

SUBJECT:AQUACULTURE

MODULE:III(Seed production & hatchery management of fishes
& shell fishes)

Sl No	Name of unit & Focus areas
1	Introduction to reproduction in fin fishes & shell fishes
2	Seed production of carps
3	Seed production of Tilapia
4	Seed production of pearl spot

MODULE:IV (Ornamental fisheries&Aquarium management)

Sl No	Name of unit & Focus areas
1	Aquarium equipment's&accessories
2	Making of an aquarium tank
3	Assembling an aquarium
4	Aquarium management

NAME OF SUBJECT-AMPE (AGRO MACHINERY AND POWER
ENGINEERING)YEAR-second year

FOCUS AREA FOR THE ACADEMIC YEAR 2020-21

MODULE-3

SL.NO	NAME OF UNIT AND FOCUS AREA
UNIT-1 AGRICULTURAL IMPLEMENTS	
1.1	Tillage-definition, objectives ,types of tillage
1.2	Tillage implements
1.3	Seeding-definition,seeding methods
1.4	Seeding equipments-transplanter,seed drills
1.5	Plant protection machineries
UNIT-2 HARVESTING MACHINES	
2.1	Harvesting-definition,actions involved in harvesting
2.2	Mechanical harvesting equipments
2.3	Mowers,reapers
2.4	Combine harvestors
Unit-3 POST HARVEST OPERATIONS	
3.1	Threshing,winnowing,types of threshers
3.2	Dryingof grains-comparison of different methods
3.3	Dry storage structures
3.4	Deshelling of paddy-types of deshellers
3.5	Paddy processing-parboiling,whitening,
MODULE-4	
UNIT-4 IRRIGATION	
4.1	Irrigation-definition objectives
4.2	Surface irrigation methods
4.3	Sprinkler irrigation-components,advantages
4.4	Drip irrigation-components,advantages
UNIT-5 PUMPS FOR IRRIGATION	

5.1	Pumps-definition,classification
5.2	Centrifugal pump-parts,working,figure
5.3	Reciprocating pump
5.4	selection of pumps

NAME OF SUBJECT : AGRICULTURE SCIENCE AND PROCESSING TECHNOLOGY(ASPT)

Year : Second Year

FOCUS AREAS FOR THE ACADEMIC YEAR -2020-2021**MODULE 3**

Sl No	Name of Unit and Focus Areas
01	UNIT ONE (HI TECH AGRICULTURE) 1.1. Protected Cultivation- Definition, Advantages, Scope and Constraints in Kerala. 1.2. Green house- Definition, Components, Growing media and Bed Preparation, List of Crops Cultivated in Greenhouse. 1.3. Drip Irrigation, Fertigation. 1.4. Automated Climate Regulation. 1.5. Rain shelter Cultivation. 1.6. New Trends- Aquaponics, Hydroponics and Aeroponics.
02	UNIT TWO (ORGANIC FARMING AND CERTIFICATION) 2.1. Organic Farming- Principles, Objectives, Components, Comparative advantage. 2.2. Resources for Soil nutrient management- Bio fertilizer, Green manure, Compost. 2.3. Resources for Pest Management- Botanicals, Permitted Fungicides, Panchagavya. 2.4. Organic Certification- Procedure, Agencies Involved.
03	UNIT THREE (FOOD SAFETY MEASURES AND CERTIFICATION) 3.1. Functions of FSSAI 3.2. GAP- Definition, Objectives and Principles. 3.3. Domestic Practice for insecticide residue removal.
04	UNIT FOUR (AGRI ENTERPRISES) 4.1. Mushroom Cultivation. 4.2. Apiculture. 4.3. Vegetable Seed Production. 4.4. Landscaping- Lawn making. 4.5. Flower Arrangement.
05	UNIT FIVE (FARMER SUPPORT SERVICES) 5.1. Services from 'KRISHI BHAVAN- Agri clinic, Bio-pharmacy, Agri input Centers. 5.2. IPDM- Concept, IPDM of Rice. 5.3. Identification of Pest, Nature of Damage, Disease, Symptom, Management in- Rice, Coconut, Banana, Pepper, Mango.

MODULE IV

Sl.No	Name of unit and Focus Areas
06	UNIT SIX(POST HARVEST AND PROCESSING TECHNOLOGY) 6.1. Post harvest Technology-Objectives, Scope in Kerala, Causes of Post harvest losses,Steps in Post harvest handling
07	UNIT SEVEN(POST HARVEST HANDLING) 7.1. Maturity indices of Fruits and Vegetables 7.2. Sorting and Grading-Advantages 7.3. Packaging-Advantages, Classification of packing materials
08	UNIT EIGHT(POST HARVEST TECHNOLOGY OF MAJOR CROPS) Rice ,Banana, Coconut, Cashew
09	UNIT NINE(AGRO PROCESSING TECHNOLOGY) 9.1. Principles of Preservation 9.2. Methods of Preservation 9.3 Preparation of Jam,Squash,Pickles
10	UNIT TEN (ENTREPRENEURSHIP DEVELOPMENT IN AGRIBASED PROCESSING INDUSTRIES) 10.1. Machinerries used in Processing industry

NAME OF SUBJECT: AUTOMOBILE TECHNOLOGY Year – Second Year
FOCUS AREAS FOR THE ACADEMIC YEAR 2020-21

MODULE 3

SL.NO.	NAME OF UNIT AND FOCUS AREAS
01.	UNIT ONE ..CLUTCH 1.1 Location and Functions of Clutch 1.2 Types of clutch 1.3 Construction and Working single plate clutch, multi plate clutch
02.	UNIT SECOND .. Transmission 2.1 Location and functions of transmission 2.2 Types of gear boxes 2.3. Construction and Working of Synchronesh gear box
03.	UNIT THRID : Drive line 3.1 Construction of Propeller shaft (Universal joints & slip joints) 3.2 construction and Working of Differential

MODULE 4

SL.NO.	NAME OF UNIT AND FOCUS AREAS
04.	UNIT FOURTH: AUTOMOTIVE BATTERY 4.1 Construction and Working of Lead Acid Battery 4.2 Characteristics of Lead acid battery 4.3 Battery charging methods 4.4 Care and maintenance of battery
05.	UNIT FIFTH : Charging system 5.1 Functions and Requirements of Charging system 5.2 Construction and Working of Alternator 5.3 Comparison with DC generator
06	UNIT SIXTH: Starting system 6.1 Construction and Working of starting System 6.2 Over running clutch type starter motor
07	UNIT SEVEN : Lighting system 7.1 Electrical symbols 7.2 Horn circuit
08	UNIT EIGHT: Ignition system 8.1 Types of ignition system 8.2 Construction and working of battery coil ignition system.

NAME OF SUBJECT: BIOMEDICAL EQUIPMENT TECHNOLOGY-BET
Year – Second Year

FOCUS AREAS FOR THE ACADEMIC YEAR 2020-21

MODULE 3

SL.NO.	NAME OF UNIT AND FOCUS AREAS
01.	UNIT ONE (OPERATION THEATRE EQUIPMENT) 1.1 List of OT equipment and its uses. 1.2 Anesthesia machine 1.3 Surgical Diathermy-Principle,Modes,Electrodes 1.4 Block diagram of ESU
02.	UNIT SECOND (CENTRAL STERILE SUPPLY DEPARTMENT) 2.1 Work flow in CSSD 2.2 Autoclave 2.3 Hot air oven 2.4 EtO sterilization
03.	UNIT THIRD (DIALYSIS EQUIPMENT) 3.1 Principle of Dialysis. 3.2 Hemodialysis 3.3 Peritoneal Dialysis 3.4 Hemodialysis machine working diagram

MODULE 4

SL.NO.	NAME OF UNIT AND FOCUS AREAS
04.	UNIT FOURTH (MEDICAL IMAGING) 4.1 X ray production and properties. 4.2 Block diagram of X-ray. 4.3 Layers of X-ray film 4.4 Different types of X ray machines
05.	UNIT FIFTH (PATIENT SAFETY) 5.1 Effect of electric current on human body 5.2 Micro and Macro shock 5.3 Precautions to avoid shock 5.4 Threshold of perception and Let go current

NAME OF SUBJECT: BANKING AND INSURANCE SERVICES(BIS)

Year – Second Year

FOCUS AREAS FOR THE ACADEMIC YEAR 2020-21

MODULE 3

SL.NO	NAME OF UNIT AND FOCUS AREAS
01.	UNIT ONE (INTRODUCTION TO INSURANCE) 1.1 Meaning of risk & Classification of risk 1.2 Features of insurable risk 1.3 Functions of Insurance 1.4Types of Insurance 1.5 Peril and Hazard 1.6Legal Principles of Insurances
02.	UNIT SECOND (UNDERWRITING AND INSURANCE DOCUMENTS) 2.1 Underwriting procedure of Life Insurance 2.2 Assignment, Nomination, Revival and Surrender 2.3 Insurance Premium 2.4 Insurance documents

MODULE 4

SL.NO	NAME OF UNIT AND FOCUS AREAS
03.	UNIT THIRD(MEANING AND IMPORTANCE OF SERVICE MARKETING) 3.1 Meaning and features of service 3.2 Meaning &Significance of Service Marketing 3.3 Difference between product marketing and service marketing 3.4 7 P's of service Marketing (Marketing mix)
04.	UNIT FOURTH (MARKETING OF INSURANCE PRODUCTS) 4.1 Strategies for Insurance marketing 4.2 Qualities of a good Insurance salesman 4.3 Marketing of various life insurance products. 4.4 Marketing of major non - life insurance product (Motor, Health and Personal Accident Insurance)

NAME OF SUBJECT: BASIC NURSING AND PALLIATIVE CARE - SECOND YEAR
FOCUS AREAS FOR THE ACADEMIC YEAR 2020-21

MODULE 3 - PALLIATIVE AND GERIATRIC CARE

SL.NO.	NAME OF UNIT AND FOCUS AREAS
01.	UNIT NO: 3.1 ADMINISTRATION OF MEDICATION 3.1.1 Nomenclature 3.1.2 Forms of medicines 3.1.3 Classification of medicines 3.1.4 Abbreviations in common use 3.1.5 Medication order 3.1.6 Dosage 3.1.7 Routes of medication administration 3.1.8 Safety measures 3.1.9 Administration of Oral Medication 3.1.10 Injections a) Types of injections b) Drugs and fluids administered c) Selection of equipment for injections d) Forms of medications available
02.	UNIT NO: 3.2 OXYGEN ADMINISTRATION 3.2.1 Definition 3.2.2 Indications for oxygen therapy 3.2.3 Methods of Oxygen Administration 3.2.4 Care of oxygen cylinder 3.2.5 Management of home oxygen therapy
03.	UNIT NO: 3.3 CARE OF WOUND 3.3.1 Definition of wound 3.3.2 Types of wound 3.3.3 Wound dressing 3.3.4 Complications of wound healing
04.	UNIT NO: 3.4 PALLIATIVE CARE 3.4.1 Definition 3.4.2 Common conditions requiring palliative care 3.4.3 Hospice Care 3.4.4 Pain Management

	<p>4.3.3 Constituents of food - Protein, fat and carbohydrates, Vitamins, Minerals and water</p> <p>4.3.4 Balanced diet</p>
11.	<p>UNIT NO: 4.4 COMMUNICABLE AND NON-COMMUNICABLE DISEASES</p> <p>4.4.1 Prevention and Control of Infectious Diseases – Bacterial: -</p> <ul style="list-style-type: none"> a) Tuberculosis b) Leptospirosis (Weil’s disease) c) Cholera <p>Viral: -</p> <ul style="list-style-type: none"> a) Chicken Pox b) Poliomyelitis c) Dengue fever d) Chikungunya <p>4.4.2 Prevention and Control of Non-Communicable Diseases</p> <ul style="list-style-type: none"> a) Hypertension b) Cancers c) Diabetes Mellitus
12.	<p>UNIT NO: 4.5 MATERNAL AND CHILD HEALTH</p> <p>4.51 Antenatal care</p> <p>4.52 Post-Natal Care</p> <p>4.53 Breast feeding</p> <p>4.54 Immunization</p>
13.	<p>UNIT NO: 4.6 ADOLESCENCE</p> <p>4.6.1 Problems of adolescents - physical, physiological and psychosocial</p>
14.	<p>UNIT NO: 4.7 NATIONAL HEALTH PROGRAMMES</p> <p>4.7.1 National Vector Borne Disease Control Programme</p>
15.	<p>UNIT NO: 4.8 HEALTH CARE OF THE COMMUNITY</p> <p>4.8.1 Levels of health care</p> <p>4.8.2 Primary Health care in India</p> <p>4.8.3 Integrated Child Development Scheme</p> <p>4.8.4 International health agencies - WHO</p>

16.	UNIT NO: 4.9	HEALTH EDUCATION
	4.9.1	Definition
	4.9.2	Contents of Health education
	4.9.3	Settings for health education
	4.9.4	Methods of health education
17.	UNIT NO: 4.10	DISASTER MANAGEMENT
	4.10.1	Disaster management cycle
TOTAL		

NAME OF SUBJECT: cosmetology and beauty therapy Year – Second Year
FOCUS AREAS FOR THE ACADEMIC YEAR 2020-21

MODULE 3

SL.NO.	NAME OF UNIT AND FOCUS AREAS
01.	UNIT ONE makeup artistry 1.1 bridal makeup 1.2 qualities of a professional makeup artist 1.3 facial shapes 1.4.....
02.	UNIT SECOND mehandi designs 2.1 types of mehandi designs 2.2 mehandi cone preparation 2.3..... 2.4.....
03.	UNIT THRID flower arrangement 3.1 principles of flower arrangement 3.2..... 3.3 materials used for Artificial bouquet setting 3.4 types of flower arrangement

MODULE 4

SL.NO.	NAME OF UNIT AND FOCUS AREAS
04.	UNIT FOURTH beauty business 4.1 Importance of beauty business management 4.2 personality development 4.3..... 4.4.....
05.	UNIT FIFTH health and Wellness 5.1 dimensions of the health and Wellness 5.2 benefits of yoga 5.3 benefits of exercise 5.4.....

CCT 2ND YEAR MODULE 3&4

FOCUS AREA FOR THE ACADEMIC YEAR 2020-21

Sl.No	Name of Unit & Focus Area
1)	<u>Module 3. Quantity Surveying and Costing</u> <u>Introduction to Quantity Survey</u> <u>(Unit I)</u> Estimate, Purpose of estimate Units and measurements Plinth Area, Floor Area, Carpet Area, Circular area Data required for preparation of estimate Necessity of specification
2	<u>Types of Estimate (Unit II)</u> Different types of estimates Centre line method of estimation Bar bending schedule
3	<u>Analysis of Rates (Unit III)</u> Earth work excavation, P.C.C, R-R-M, B.M
4	<u>Contract and Tenders (Unit IV)</u> Terms used, -- Contract, EMD, S.D, work order form, Administrative approval, Technical approval Tender invitation, e-tender M-Boom, Muster Roll
5	<u>Net Work Analysis (Unit V)</u> Terms related with CPM &PERT Net work Diagram preparation
6	<u>Valuation of Buildings (Unit VI)</u> Purpose and methods of valuation Rent Fixation
	MODULE -4 Water Supply and Sanitary Arrangements
7	<u>Sources and purification of water (Unit I)</u> Sources and ISI specification of potable water Hardness of water Purification of water
8	<u>Water Supply System (Unit II)</u> Systems of water supply & Lay outs of water distribution

NAME OF SUBJECT: COMPUTERISED OFFICE MANAGEMENT SECOND YEAR
FOCUS AREAS FOR THE ACADEMIC YEAR 2020- 21

MODULE 3

Sl. No.	Name of Unit and Focus Area
1	Unit 1 : Office Communication Meaning and Definition of Communication Importance of Communication Communication Process Barriers of Communication Type of communication Postal Service
2	UNIT 2. COMMUNICATION THROUGH LETTER Structure of Business Letter Application letter and Biodata Mail Service – Inward and Outward
3 Module 4	UNIT 3 ENTERPRISE RESOURCE PLANNING Introduction and Meaning of ERP Benefit and Limitation of ERP ERP implementation Methodologies
4	UNIT 4: PAPERLESS OFFICE Meaning and features of Paperless office Merits and demerits of paperless office
5	UNIT 5 E-GOVERNANCE Meaning of E governance and E government Domains of E governance
6	Unit 6 I T ENABLED SERVICES Business Process Outsource

CRECHE AND PRESCHOOL MANAGEMENT-II YEAR

FOCUS AREAS

SL NO	MODULE	UNIT	TOPIC
III	METHODOLOGY OF MONTESSORI TEACHING	1.The foundations of Montessori Education	<ul style="list-style-type: none"> • DR. Maria Montessori- her life and contributions • Principles of Montessori education • Philosophy • The three key components in Montessori education
		2.Areas and Methods of Montessori Teaching	<ul style="list-style-type: none"> • Areas of Montessori Education • Methods of Montessori education • Role preparation and qualities of Montessori Directress
		3. Organization of Montessori Environment and its design	<ul style="list-style-type: none"> • Infrastructure facilities needed in Montessori house of children • The didactic apparatus
		4.Assessment and Evaluation in Montessori Education	<ul style="list-style-type: none"> • Methods of assessment and evaluation in Montessori method • Learning outcomes of Montessori activities
IV	ORGANIZATION AND MANAGEMENT OF CRECHE/PRESCHOOLS/MONTESSORI SCHOOLS	1. Planning and organization of Crèche/Preschools and Montessori schools	<ul style="list-style-type: none"> • Management-role, importance and steps • Resources-Meaning, classification and characteristics
		2.Human resource management	<ul style="list-style-type: none"> • Human resource management • Methods of resolving conflicts
		3.Infrastuctural requirements	<ul style="list-style-type: none"> • Land • Building • Furniture
		4.Fiscal management and budgeting	<ul style="list-style-type: none"> • Fiscal management-resource mobilization • Basic accounts needed for pre schools

**NAME OF SUBJECT: CUSTOMER RELATIONSHIP MANAGEMENT - SECOND YEAR
FOCUS AREAS FOR THE ACADEMIC YEAR 2020-21**

Module 3 Unit 3.1	<ul style="list-style-type: none"> • Meaning of Hospitality • Components of Hospitality Industry • Hotel Industry Meaning and Definition
Unit 3.2 Classification of Hotel	<ul style="list-style-type: none"> • Types of Rooms • Plans Adopted in Hotels • Departments in Hotel
Unit 3.3 Importance of Front Office in Hotel	<ul style="list-style-type: none"> • Reservation Section • Registration • Night Auditor
Unit 3.4 Front Office Accounting	<ul style="list-style-type: none"> • Stages of Accounting • Creation of Accounts • Maintenance of Accounts • Settlement of Accounts
Unit 3.5 Guest Cycle	<ul style="list-style-type: none"> • Stages in Guest Cycle
MODULE 4 Unit 4.1	<ul style="list-style-type: none"> • Introduction to Health • Components of Hospital • Patient friendly hospital • Patient Welfare Scheme
Unit 4.2 Importance of Front office	<ul style="list-style-type: none"> • Sections of Hospital Front office • Qualities of Front office personnel
Unit 4.3 Functions of OP department	<ul style="list-style-type: none"> • Rights and responsibilities of patient
Unit 4.4 Need for public relations in hospital	<ul style="list-style-type: none"> • Principles of effective communication • Financial Statements of hospital

NAME OF SUBJECT: CSIT Year - Second Year

Focus Areas for the Academic Year 2020-21

Sl. No.	Name of Unit and Focus Areas
1	Unit 1: Fundamentals of Computer Languages
	1.1 Types of computer languages
	1.2 Language translators
	1.3 Approaches in problem solving
	1.4 Algorithm and flowchart
2	Unit 2: Introduction to C++
	2.1 Character set and tokens
	2.2 Input/Output statements
	2.3 Turbo and Geany development environment
	2.4 Data types
	2.5 Control statements
	2.6 Branching statements
	2.7 Looping statements
	2.8 Jump statements
3	Unit 3: Arrays and Strings
	3.1 Arrays
	3.2 Strings
	3.3 String manipulation functions
4	Unit 4: Structure
	4.1 Structure
	4.2 C++ pgm using structure
5	Unit 5: Functions and Pointers
	5.1 Built-in functions
	5.2 User defined functions
	5.3 Parameter passing
6	Unit 6: Object Oriented Programming
	6.1 Object Oriented Programming Concepts
	6.2 Class and Objects
	Unit 7: Database Designing Periods
	7.1 Concept of DBMS

Sl. No.	Name of Unit and Focus Areas
7	7.2 Advantages of the database management system 7.3 Data abstraction and Data independence 7.4 Data models 7.5 Terminologies in RDBMS. 7.6 Keys in RDBMS
8	Unit 8: Internet and Cyber Security Periods 8.1 History of Internet 8.2 Terminologies 8.3 Cyber ethics
9	Unit 9: Basic HTML 9.1 Web pages 9.2 Static and Dynamic web pages 9.3 Tags in HTML 9.4 Structure tags 9.5 Formatting tags 9.6 Comments in an HTML document 9.7 Image Tags 9.8 Linking tag 9.9 List Tags
10	Unit 10: Advanced HTML Periods 10.1 Table Tags 10.2 Form Tags

NAME OF SUBJECT: DAIRY TECHNOLOGY Year – Second Year
FOCUS AREAS FOR THE ACADEMIC YEAR 2020-21

MODULE 3

SL.NO.	NAME OF UNIT AND FOCUS AREAS
01.	UNIT 1 (Special Milks) <ul style="list-style-type: none">• Flavoured Milks (Excluding sterilized milks)• Definition and FSSAI standards of different classes of milk
02.	UNIT II (Fermented Milks) <ul style="list-style-type: none">• Health Benefits• Yoghurt
03.	UNIT III (Fat Rich Dairy Products) <ul style="list-style-type: none">• Principle of Cream Separation• Methods of Cream Separation Gravitational & Centrifugal• Ghee Anyone method of Preparation
04.	UNIT V (Cheese) <ul style="list-style-type: none">• Cheddar Cheese
05.	UNIT VI (Frozen Dairy Products) <ul style="list-style-type: none">• Ice Cream

NAME OF SUBJECT: DAIRY TECHNOLOGY. Year – Second Year
FOCUS AREAS FOR THE ACADEMIC YEAR 2020-21

SL.NO.	NAME OF UNIT AND FOCUS AREAS
06.	<p>UNIT VII (Indigeneous Milk Products)</p> <ul style="list-style-type: none"> • Indigeneous Milk Products <ul style="list-style-type: none"> ➤ Khoa&Khoa based products (Peda, Gulabjamun, Kalakand, Burfi) ➤ Channa&Channa based products (Rasagula, Channa Kheer, ChannaMurkhi) ➤ Pantooa ➤ Paneer
07.	<p>UNIT IX (Quality Assurance)</p> <ul style="list-style-type: none"> • Number of principles of HACCP • Name different Quality Assurance Systems • GMP • MMPO

MODULE 4

08.	<p>UNIT IV.1 (Introduction to Dairy Extension)</p> <ul style="list-style-type: none"> • Audio – Visual Aids - Definition, Functions, Limitations and Examples • Examples of Visual Aids
09.	<p>UNIT IV. 3 (Packaging of Milk & Milk Products)</p> <ul style="list-style-type: none"> • Purpose of Packaging • Packaging Material - Glass • Packaging Material - Plastic
10.	<p>UNIT IV.4 (Marketing of Milk & Milk Products)</p> <ul style="list-style-type: none"> • Transportation of Milk <ul style="list-style-type: none"> ➤ Modes of Transport ➤ Advantage of tanker over cans ➤ Comparative advantage of Road transport Vs Rail transport
11.	<p>UNIT IV. 5 (Dairy Economics)</p> <ul style="list-style-type: none"> • Methods of Pricing of milk

NAME OF SUBJECT: DENTAL TECHNOLOGY. Year – Second Year
FOCUS AREAS FOR THE ACADEMIC YEAR 2020-21

MODULE 3

SL.NO.	NAME OF UNIT AND FOCUS AREAS
01.	UNIT ONE (STEPS IN CASTING) 3.1.2 Steps in Casting
02.	UNIT TWO (TOOTH PREPARATION) 3.2.4 Gingival Finish lines
03.	UNIT THREE (CAST DUPLICATION) 3.3.1 Objectives 3.3.2 Cast Duplication with Alginate 3.3..... 3.4.....
04.	UNIT FOUR (DIE PREPARATION) 3.4.1Types of Die Preparations
05.	UNIT FIVE (WAX PATTERN) 3.5.1 Wax Pattern fabrication on Anterior teeth 3.5.2 Wax pattern fabrication on posterior teeth 3.5.3Waxing up of occlusal aspect 3.5.4 Finishing up of margins
06.	UNIT SIX (PONTICS) 3.6.1 Classification of Pontics 3.6.3 Types of Pontics
07.	UNIT SEVEN (INVESTING) 3.7.1 Sprue 3.7.4 Casting Ring 3.7.5 Investing
08.	UNIT EIGHT (BURNOUT) 3.8.1 Alloy Solidification Shrinkage 38.2 Burnout Procedure
09.	UNIT NINE (CASTING) 3.9.1 Casting Machine 3.9.2 Melting of Alloy 3.9.3 Casting of metal
10.	UNIT TEN (DIVESTING AND FINISHING) 3.10.2 Pickling 3.10.3 Finishing and Polishing

11.	UNIT ELEVEN (CASTING DEFECTS) 3.11.1 Consequences 3.11.2 Distortion of Casting 3.11.3 Surface Roughness and Irregularities 3.11.4 Porosity 3.11.5 Incomplete casting
12.	UNIT TWELVE (FABRICATION OF CERAMIC CROWN) 3.12.3 Steps and advantages
13.	UNIT THIRTEEN (MATERIALS USED) 3.13.1 Types of investment materials and indications 3.13.2 Classification of alloys, Stainless steel
14.	UNIT FOURTEEN (TARNISH AND CORROSION) 3.14.1 Definition and Types

MODULE 4

SL.NO.	NAME OF UNIT AND FOCUS AREAS
01.	UNIT ONE (INTRODUCTION TO ORTHODONTICS) 4.1.1 Angles Classification, Key of Occlusion, Occlusion 4.1.2 Types of Tooth movement 4.1.4 Classification of orthodontic appliance 4.1.5 Instruments used for wire bending
02.	UNIT THREE (REMOVABLE ORTHODONTIC APPLIANCE) 4.3.1 Components 4.3.2 Clasps- Adams clasp 4.3.3 Bows- Labial bows 4.3.4 Springs- Definition, Z spring 4.3.6 Appliance for proclined upper anteriors, Palatally tilted Central Incisor
03.	UNIT SIX (HABIT BREAKING APPLIANCES) 4.6.1 Introduction Cases and indicated appliances
04.	UNIT SEVEN (RETAINERS) 4.7.1 Hawleys Retainer
05.	UNIT EIGHT (DENTAL ASSISTANCE PART 2) 4.8.1..... 4.4.....

NAME OF SUBJECT: ECG AND AMT Year – Second Year
FOCUS AREAS FOR THE ACADEMIC YEAR 2020-21

MODULE 3

SL.NO.	NAME OF UNIT AND FOCUS AREAS
01.	UNIT ONE (SOUND AND HEARING) 1.1 PHYSICAL AND PSYCHOLOGICAL PROPERTIES OF SOUND 1.2 TYPES OF SOUND
02.	UNIT SECOND (AUDITORY SYSTEM) 2.1 EXTERNAL EAR 2.2 TYMPANIC MEMBRANE 2.3 MIDDLE EAR 2.4 INNER EAR 2.5 AUDITORY NERVE 2.6 CENTRAL AUDITORY PATHWAY
03.	UNIT THRID (HEARING LOSS) 3.1 TYPES OF HEARING LOSS. 3.2 DEGREE OF HREARING LOSS. 3.3 DEGREE OF HEARING LOSS 3.4 UNILATERAL VS BILATERAL HEARING LOSS 3.5 SYMMETRICAL VS ASSYMMETRICAL HEARING LOSS. 3.6 AUDIOGRAM NOTATIONS
04	UNIT FOUR (HEARING ASSESSMENT) 4.1 TYPES OF AUDIOMETERS 4.2 CASE HISTORY

MODULE 4

SL.NO.	NAME OF UNIT AND FOCUS AREAS
05.	UNIT FIFTH(PURE TONE AUDIOMETRY) 5.1 AIR CONDUCTION TESTING 5.2 BONE CONDUCTION TESTING 5.3 PURETONE AVERAGE 5.4PROCEDURE OF PURETONE AUDIOMETRY 5.5AUDIOGRAM
06.	UNIT SIXTH (SPEIAL TESTS OF HEARING) 6.1 RECRUITMENT 6.2NAME OF THE SPECIAL TESTS
07	UNIT SEVENTH (SPEECH AUDIOMETRY) 7.1 NEED OF SPEECH AUDIOMETRY 7.2 SRT AND SDS

08	UNIT EIGHTH (OBJECTIVE TESTS OF AUDIOMETRY) 8.1 NAME OF DIFFERENT OBJECTIVE TESTS 8.2 USE OF DIFFERENT OBJECTIVE TESTS
09	UNIT NINTH (HEARING AIDS AND EAR MOLDS) 9.1 TYPES OF HEARING AIDS 9.2 USE OF EAR MOLD

SUBJECT: ELECTRONICS AND COMMUNICATION TECHNOLOGY(ECT)

FOCUS AREAS FOR THE ACADEMIC YEAR 2020-2021

MODULE 3

Sl. No.	NAME OF UNIT AND FOCUS AREA
1	UNIT 1(INTRODUCTION OF MICROCONTROLLER) Hexadecimal ,ASCII and Embedded System (Basic concept with example), Comparison with microcontroller and micro processor, RISC and CISC processor.
2	UNIT 2(PIC MICROCONTROLLER PIC16F877A) PIC micro controller(PIC16F877A) specification (any 5 points), Internal architecture , I/O ports, Special function registers(any 5 name),Working register
3	UNIT 3(ROBOTICS) Advantage and application of ROBOTICS.

MODULE 4

Sl. No.	NAME OF UNIT AND FOCUS AREA
1	UNIT 4(ANALOG COMMUNICATION) Block diagram of a communication System, Electromagnetic waves(basic concept and any 5 feature) ,Ground wave , Space wave and sky wave Propagation (definition and Frequency range), Modulation, Need of modulation(3 points) , AM & FM (Definition ,frequency range and wave form) ,Transmitter (block diagram only) ,.Demodulation (definition), Super heterodyne AM receiver (block diagram and function),Antenna(basic Concept)
2	UNIT 5(SATELLITE &DIGITAL COMMUNICATION) Satellite communication block diagram, Geo stationary satellite, Transponder (block diagram and function),uplink and down link frequency. Basic concept and Advantages of Digital communication, Simplex, Half duplex, Full duplex. ASK and FSK Wave forms, Structure of optical fiber cable and its advantages, Structure of coaxial cable
3	UNIT 6(WIRELESS COMMUNICATION) Advantages of GSM, GPRS, features of 3G and 4G , Basic concept of Bluetooth, Wifi, SIM

NAME OF SUBJECT: **ELECTRICAL AND ELECTRONICS TECHNOLOGY**

Year – Second Year

FOCUS AREAS FOR THE ACADEMIC YEAR 2020-21

MODULE 3 SOLAR PV SYSTEM INSTALLATION AND MAINTENANCE

Sl. No.	NAME OF UNIT AND FOCUS AREAS
01.	UNIT -1 : CELLS AND BATTERIES 1.1 Parts of Lead acid cell 1.2 Care and maintenance of lead acid battery (5 Points) 1.3 Indications of a fully charged battery 1.4 Charging Methods of Lead acid battery 1.5 Defects of a Secondary Cell 1.6 Lead Acid Battery Types (Names Only) 1.7 Advantages and disadvantages of Lead Acid Battery
02.	UNIT - 2 : ELECTRONIC COMPONENTS AND DEVICES-II 2.1 Transistor – Symbol , Terminal 2.2 Transistor Connections- Fig: with i/p - o/p Terminals (Any 2 out of 3) 2.3 Full form, Symbol with Terminals of FET, MOSFET, IGBT, SCR, LDR 2.4 Regulated power supply using IC 7805 / 78XX 2.5 Decimal to Binary Conversion- Problems without fraction 2.6 Logic Gates- Symbol & Truth Table of AND/OR/NOT/NAND/NOR
03.	UNIT – 3 : SOLAR PV SYSTEM INSTALLATION AND MAINTENANCE 3.1 Solar Energy – Advantages and Disadvantages, Photo Voltaic Effect 3.2 Shading (Any 3 points) and Hot spots (Reason and remedies) 3.3 Brief Description about Open Circuit Voltage and Short Circuit Current 3.4 Circuit Arrangement to measure I-V Characteristics (Circuit only) 3.5 Components of a Solar PV system – With AC load 3.6 MPPT ,STC (Full form only) 3.7 General Safety Precautions for installation of PV Module (Any 5)

MODULE 4 SERVICING OF COMMON HOME APPLIANCES

SL.NO	NAME OF UNIT AND FOCUS AREAS
04.	UNIT - 1 : ELECTRICAL MACHINES 4.1 Working Principle of 3 Phase Induction Motor 4.2 Equation for Synchronous speed and simple problem 4.3 Functions of Starter 4.4 Single Phase Induction Motor – PSC, CSIR , Universal Motor 4.5 BLDC – Full Form , Advantages and Applications
05.	UNIT - 2 : SERVICING OF COMMON HOME APPLIANCES 5.1 Parts identification and trouble shooting of Automatic Electric Iron 5.2 Parts identification and trouble shooting of Ceiling Fan 5.3 Parts identification and trouble shooting of Electric Mixer – (Mixy) 5.4 Purpose of Pressure Release valve in Water Heater
06.	UNIT - 3 : ENGINEERING GRAPHICS 6.1 Dividing Line Into Equal Parts 6.2 Polygons (Names Based on number of sides) 6.3 CAD - Definition

NAME OF SUBJECT: **FASHION & APPAREL DESIGNING** Year – Second Year
FOCUS AREAS FOR THE ACADEMIC YEAR 2020-21

MODULE 3

SL.NO.	NAME OF UNIT AND FOCUS AREAS
01.	UNIT ONE - BODY MEASUREMENTS 1.1. Important Body Measurements – Bodice, Skirt, Sleeve
02.	UNIT SECOND – PATTERN MAKING 2.1. Importance of Pattern Making 2.2. CAD 2.3. Types of Patterns 2.4. Tools & Equipment 2.5. Pattern Making Terminology 2.6. Pattern Information - Symbols 2.8. Drafting of Basic Block – Skirt and Sleeve
03.	UNIT THRID –GARMENT DESIGN DEVELOPMENT 3.1. Dart Manipulation – Definition 3.2. Dart Manipulation – Slash & Spread Method 3.3. Sleeve Variations – Puff Sleeve (Top Gathering & Bottom Gathering) 3.4. Skirt Variations – A-Line Skirt 3.5. Pattern Alteration – Meaning, Alteration for large bust and Small arm
04	UNIT FOURTH– CONSTRUCTION OF HOUSEHOLD TEXTILES 4.1. Construction of Apron – Measurements, Drafting
05	UNIT FIFTH– CONSTRUCTION OF LADIES AND CHILDRENS GARMENTS 5.1. Construction of Aline Frock – Measurements, Drafting (Bodice & Sleeve) 5.2. Construction of Salwar – Measurement, Drafting
06	UNIT SIXTH– CONSTRUCTION OF GENTS GARMENTS 6.1. Construction of Shirt – Parts of a shirt, Drafting of Shirt Collar.

MODULE 4

SL.NO.	NAME OF UNIT AND FOCUS AREAS
07.	UNIT SEVENTH – ELEMENTS OF DESIGN 7.1. Design 7.2. Types of Design 7.3. Elements of Design –(Illustrations only)
08.	UNIT EIGHT – PRINCIPLES OF DESIGN 8.1. Principles of Design – Balance(formal &informal), Proportion, Rhythm (Repetition, Radiation, Gradation), Emphasis & Harmony (Illustrations only)
09	UNIT NINETH - COLOUR 9.1. Prang Colour Wheel 9.2. Warm and Cool Colours 9.3. Colour Schemes – Monochromatic, Analogous, Direct complementary, Split Complementary & Triad
10	UNIT TENTH – FASHION ILLUSTRATION 10.1. 10 Head Theory& Figure 10.2. Fashion figures – Stick, Block & Flesh Figures (Female - Front pose) 10.3. Illustrations – Any Four types of – Hair Styles, Neck lines,Collar, Sleeve, Skirts
11	UNIT ELEVENTH – DESIGNING & PORTFOLIO DEVELOPMENT 11.1. Fashion Portfolio – Names and explanation of each boards.
12	UNIT TWELTH – FASHION MERCHANDISING & BOUTIQUE MANAGEMENT 12.1. Fashion Merchandising 12.2. Boutique

**NAME OF SUBJECT: Food & Restaurant Management (FRM) Year – Second Year
FOCUS AREAS FOR THE ACADEMIC YEAR 2020-21**

MODULE 3

SL.NO.	NAME OF UNIT AND FOCUS AREAS
01.	UNIT ONE - Fish and Meat Cookery 1.1 Classification of fish 1.2 Purchase Specification 1.3 Cuts of fish 1.4 Meat cookery 1.5 Cuts of beef 1.6 Cuts of mutton 1.7 Cuts of pork 1.8 Poultry 1.9 Cuts of Chicken
02.	UNIT SECOND - Cheese, Pastas and Sandwiches 2.1 Cheese, Classification of Cheese 2.2 Pastas, Introduction to pastas cookery. 2.3 Types of pastas 2.4 Sandwiches – Types of sandwiches
03.	UNIT THRID - Bakery and Sweets 3.1 Introduction to bakery 3.2 Ingredients used in bakery 3.3 Introduction to Sweets 3.4 Indian Sweets and Continental Sweets
04.	UNIT FOUR - International and Regional Cuisine 4.1 Continental Cuisine 4.2 Chinese Cuisine 4.3 Indian - South Indian & North Indian Cuisine
05.	UNIT FIVE- Types of Service and Menu Planning 5.1 English Service, French Service 5.2 American Service, Silver Service 5.3 Russian Service, Room Service 5.4 Cafeteria Service, Gueridon Service 5.5 Menu Planning 5.6 Factors to be considered while planning a menu
06.	UNIT SIX - Alcoholic beverages and their service 6.1 Introduction to Alcoholic beverages 6.2 Classification of Alcoholic Beverages 6.3 Fermented drinks – (Beer, wine) 6.4 Distilled Drinks (whisky, brandy, gin, vodka, rum, tequila)
07.	UNIT SEVEN- Function Catering 7.1 Types of Functions 7.2 Function prospects (FP) 7.3 Banquets – Staff organization)

MODULE 4

SL.NO.	NAME OF UNIT AND FOCUS AREAS
01.	UNIT ONE - Information Technology 1.1 Introduction to Information Technology 1.2 Classification of computers 1.3 Memory representation 1.4 Characteristics of computers 1.5 Functional units 1.6 The Memory - Memory organization, Classification 1.7 Classification of hardware software, Malware 1.8 Application of information Technology
02.	UNIT TWO - Computer hardware and operating system 2.1 Parts in CPU- SMPS, Motherboard, Processer 2.2 Hard Disk , NIC 2.3 CMOS 2.4 Expansion Slots & Ports 2.5 CD / DVD Drive 2.6 Booting 2.7 BIOS & POST 2.8 Formatting 2.9 Connecting computer with internet
03.	UNIT THREE - Office Automation 3.1 Office Automation basics 3.2 Concept of office. 3.3 Need for office automation 3.4 MS Word 3.5 MS Excel 3.6 MS Power Point
04.	UNIT FOUR - Linux and open office 4.1 introduction to Linux 4.2 Advantage of Linux 4.3 Linux and Windows Differentiation
05.	UNIT FIVE - Internet and Malayalam computing 5.1 Introduction Computer Networks 5.2 Web Browser. 5.3 Search Engines 5.4 E-mail (Electronic mail) 5.5 Malayalam Typing 5.6 Malayalam Fonts

NAME OF SUBJECT: GRAPHIC DESIGN & PRINTING TECHNOLOGY
Year – Second Year

FOCUS AREAS FOR THE ACADEMIC YEAR 2020-21

MODULE 3

SL.NO.	NAME OF UNIT AND FOCUS AREAS
01.	UNIT 1 Printing Materials 3.1.1- Identifies the Physical properties of paper. 3.1.2 - Classifies Paper according to its types, sizes & paper weight 3.1.3 - Lists the Ingredients of ink, its Properties and the steps in manufacturing of ink. 3.1.4 - categorises the methods of Ink drying
02.	UNIT 2 Sheetfed Offset Press 3.2.1 - classifies presses based on various aspects. 3.2.2 - understands working principle of an offset press. 3.2.3 - operates different units of an offset machine. 3.2.4 - understands the structure and properties of offset blankets.
03.	UNIT 3 Offset Press Operations 3.3.1- understands the Make ready Procedure. 3.3.2 - understands the working of a multi colour sheet fed offset machine. 3.3.3 - understands about sequence of colours in multicolour printing. 3.3.4 - lists the leading manufacturers of Offset machines. estimates the cost of production of a printing job in offset printing.
05	UNIT 5 Press maintenance and Troubleshooting 3.5.3 identifies printing problems and suggest remedies 3.5.4 - identifies problems due to blanket and rollers and suggest remedies

MODULE 4

SL.NO.	NAME OF UNIT AND FOCUS AREAS
08.	UNIT 1 - Safety, Health and Green printing 4.1.1 understands the Safety regulations related to printing industry. 4.1.2 understands the importance of Safety guards in an offset machine. 4.1.3 understands the safety measures for operating a cutting machine. 4.1.4 chooses personal protective devices. 4.1.5 classifies Fire & choose appropriate fire extinguishers. 4.1.6 understands the importance of Green printing
09.	UNIT 2 - Conventional Binding 4.2.1 - understands and define binding 4.2.2 - classifies different methods of binding 4.2.3 - understands the styles of binding

	4.2.4 - lists the different steps involved in the binding process 4.2.5 - understands different covering and finishing operations
10.	UNIT 3- Modern Finishing Operations 4.3.1 - understands and demonstrate the operation of a paper cutting machine. 4.3.2 - categorises Folding operations. 4.3.3 - understands Other finishing operations. 4.3.4 - lists out various methods of binding.

NAME OF SUBJECT : LIVESTOCK MANAGEMENT , YEAR – SECOND YEAR

FOCUS AREA FOR THE ACADEMIC YEAR 2020-2021

MODULE :3 (POULTRY, PET AND LAB ANIMAL MANAGEMENT)

SL NO	NAME OF UNIT AND FOCUS AREA
01	UNIT 1. Introduction to Poultry Husbandry 1.1 Definition of grower, layer, broiler, chick 1.2 Scientific name of chicken, duck, turkey, quail 1.3 Merits and demerits of poultry farming
02	UNIT 2. Anatomy and Physiology of Poultry 2.1 Digestive system 2.2 Reproductive system 2.3 Egg formation 2.4 Effects of light on egg formation 2.5 Moulting and Bleaching
03	UNIT 3. Feeds and Feeding of Poultry 3.1 CP and ME of broiler and layer feed 3.2 Poultry feed ingredients 3.3 Feeding systems and forms of feed 3.4 Nutritive and non -nutritive feed additives 3.5 Feed requirement for chicken
04	UNIT4. Management of Chicken 4.1 Brooding and brooder setup 4.2 Sexing of chicks 4.3 Summer Management of layers 4.4 Culling of Layer birds 4.5 Management practices for producing good quality eggs 4.6 Method of Mating
05	UNIT 5. Selection of Eggs and Hatchery Management 5.1 Candling of eggs 5.2 Physical requisites for incubation 5.3 Hatchery operations 5.4 Abnormal/Defective eggs 5.5 Structure of an egg

06	<p>UNIT 6. Diseases of Poultry</p> <p>6.1 Vaccination schedule of chicken from 0-8 weeks of age</p> <p>6.2 Various bio security measures in a farm to prevent spread of diseases</p> <p>6.3 Identify disease ,causative agent and symptoms - Pullorum disease, fowl pox, Marek’s disease, Coccidiosis, RD, prevention and control of Aspergillosis</p> <p>6.4 Nutritional deficiency diseases</p>
07	<p>UNIT 7. Rearing of Duck, Turkey and Quail</p> <p>7.1 Advantages of duck, quail rearing</p> <p>7.2 Sex differentiation of duck, turkey and quail</p> <p>7.3 Diseases of duck</p>
08	<p>UNIT 8. Husbandry of Pet Birds</p> <p>8.1 Feeding of pet birds and their classification based on feeding habits</p> <p>8.2 Housing requirements of pet birds</p> <p>8.3 Diseases of pet birds especially sour crop</p>
09	<p>UNIT 9. Management of Dogs and Cats</p> <p>9.1 Signs of aggression in dogs</p> <p>9.2 Selection of pups</p> <p>9.3 Signs of heat</p> <p>9.4 Rabies</p> <p>9.5 Cat breeds</p> <p>9.6 Nutrient requirement of cats</p>
10	<p>UNIT 10. Rearing of Rabbits and Laboratory Rodents</p> <p>10.1 Importance of rabbits & laboratory rodents</p> <p>10.2 Handling of mouse, rat & rabbit</p> <p>10.3 Common terms of rabbit</p> <p>10.4 Sex differentiation in rabbit</p> <p>10.5 Housing of laboratory mouse</p>

MODULE :4 (LIVESTOCK PRODUCTS PROCESSING AND FOOD SAFETY)

SL NO	NAME OF UNIT AND FOCUS AREA
11	UNIT 11 : Milk and Milk Products 11.1 Chemical Composition of milk 11.2 PFA and BIS Standards for Milk and Milk Products 11.3 Preservation of milk- pasteurization and sterilization 11.4 Classification of milk products with examples, BIS standards 11.5 Steps in cheddar cheese and ice cream preparation
12	UNIT 12. Wholesome Milk Production 12.1 Source of contamination of milk and control measures 12.2 Adulterants of milk
13	UNIT13. Processing of Meat and Abattoir Management 13.1 Stunning methods 13.2 Slaughter steps for cattle, pig and poultry 13.3 Importance of meat inspection
14	UNIT 14. Egg and Meat Products 14.1 Chemical composition of egg and meat 14.2 Preservation of egg and meat 14.3 Preparation of sausage
15	UNIT 15. Zoonotic Diseases 15.1 Definition of zoonoses & classification 15.2 Disease and it's causative agent of anthrax, brucellosis, avian influenza 15.3 Control of food borne diseases
16	UNIT 16. Animal Welfare And Food Safety Guidelines 16.1 Prevention of cruelty to animals act (PCA) -1960

Focus Area for the Academic Year 2020-21
Marketing and Financial Services (II Year)

Module 3 – Retail

Unit	Name of Unit and Focus Area
1	Fundamentals of Retail 1.1 Organised Retailing Vs. Unorganised Retailing 1.2 Classification of Retail Formats 1.3 Driving Forces of retail Industry in India
2	Retail Store Management 2.1 Different Types of Store Lay Out 2.2 Visual Merchandising 2.3 Duties and Responsibilities of Sales Associate
3	Retail Selling Skills 3.1 Sales Promotion in Retail 3.2 Retail Selling Process 3.3 CRM
4	Health, Safety and Hygiene Practices 4.1 Potential Hazards in Retail Industry 4.2 Steps to prevent Hazards in Retail Industry
5	Non Store Retailing 5.1 E Tailing – Classification of E Tailing 5.2 Advantage of E tailing to Customer 5.3 Television Home shopping / Vending Machine

Module 4 – Financial System and Financial Markets

Unit	Name of Unit and Focus Area
1	Financial System and Financial Markets 1.1 Money Market and Capital Market 1.2 SEBI - Major Functions 1.3 BSE, NSE- NIFTY, Sensex
2	Marketing of Banking and Insurance Products 2.1 Different Banking Products- (Assets and Liabilities) 2.2 Different Insurance company products 2.3 Life Insurance , General Insurance, Health Insurance (Expansion IRDA/LIC/ULIP/CASA)
3	Emerging Opportunities in Financial Service Sector 3.1 Mutual Fund, Different Type of Mutual Funds –NAV 3.2 Post Office Schemes- NBFC-KSFE- Foreign Exchange
4	Financial Planning and Portfolio Management 4.1 Factors to be considered while investing 4.2 Most popular instruments for Income Tax Planning
5	Professional Selling in Financial service sector 5.1 Time Management – Benefits & Methods of Time Management 5.2 Ethics in Selling 5.3 Business Meeting Etiquettes

NAME OF SUBJECT: Marine Fisheries & Seafood Processing Year – Second Year
FOCUS AREAS FOR THE ACADEMIC YEAR 2020-21

MODULE 3: FISH QUALITY CONTROL AND INSPECTION SYSTEMS

SL.NO.	NAME OF UNIT AND FOCUS AREAS
01.	UNIT 3.1 (Basic Microbiology) 1 Bacterial Structure 2 Growth of Bacteria 3 Classification of Bacteria based on Shape, Oxygen requirement 4 Pathogenic and Non pathogenic bacteria
02.	UNIT 3.2 (Fishery Microbiology) 1 Sampling Methods 2 Laboratory Equipments
03.	UNIT 3.3 (Microbes in Public Health) 1 Escherichia coli 2 Vibrio cholerae 3 Clostridium botulinum 4 Shigella
04	UNIT 3.4 (Hygiene and Sanitation in Fish Processing Plants) 1 GMP 2 SSOP 3 Chlorination
05	UNIT 3.5 (Quality Standards for Fish and Fishery Products) 1 FSSAI 2 HACCP

MODULE 4: FISHERY VALUE ADDED AND BYPRODUCTS

SL.NO.	NAME OF UNIT AND FOCUS AREAS
06.	UNIT 4.1(Value Added Fishery Products) 1 Fish Marinades 2 Fish Cutlet 3 FPC 4 Fish momos
07.	UNIT 4.2 (Fishery Byproducts) 1 Chitin & Chitosan 2 Fish Meal 3 Fish maws/ Isinglass

08	UNIT 4.3 (Miscellaneous Aquatic Products) 1 Agar agar 2 Ambergris
09	UNIT 4.4 (Packaging of Fishery Products) 1 Retort pouch 2 Modern Packaging methods

**MEDICAL LABORATORY TECHNOLOGY (MLT) Second Year
FOCUS AREAS FOR THE ACADEMIC YEAR 2020-21**

MODULE 3

SL.NO.	NAME OF UNIT AND FOCUS AREAS
01.	UNIT ONE (Laboratory Management)
	1.1 Lab safety
	1.2.....
	1.3.....
	1.4.....
02.	UNIT SECOND (Clinical Pathology)
	2.1.....
	2.2...Urine Analysis.
	2.3.....
	2.4.....
03.	UNIT THIRD (Clinical Biochemistry)
	3.1.....
	3.2.....
	3.3 Blood Glucose Estimation
	3.4 Renal Function Tests
	3.5
	3.6 Lipid Profile

MODULE 4

SL.NO.	NAME OF UNIT AND FOCUS AREAS
01	UNIT FOURTH (Diagnostic Microbiology)
	4.1.1.....
	4.1.2 Structure and classification of bacteria
	4.1.3 Sterilization and disinfection
	4.1.4 Growth & Cultivation of Bacteria
	4.1.5
	4.1.6
	4.1.7 Laboratory Diagnosis of Common Bacterial diseases
	4.1.8
	4.1.9 Laboratory Diagnosis of Common Parasitic diseases
02	UNIT FIFTH (Histotechnology & Cytology)
	5.1.....
	5.2.....
	5.3.....
	5.4.....

NAME OF SUBJECT: MARINE TECHNOLOGY **Year – Second Year**
FOCUS AREAS FOR THE ACADEMIC YEAR 2020-21

MODULE 3

SL.NO.	NAME OF UNIT AND FOCUS AREAS
01.	UNIT – 1 (INTRODUCTION TO MARINE DIESEL ENGINE) 1.1 Working of 4 Stroke CI engine 1.2 Difference between SI & CI engines
02.	UNIT – 2 (MARINE LOW SPEED ENGINE CONSTRUCTION) 2.1 Categorization Of Marine engines- Low, Medium & High speed engines 2.2 Necessity of Main & Auxiliary engines in Ships & Vessels 2.3 Heavy Vessel Diesel Engine Construction-Piston and Piston Rod
03.	UNIT – 3 (MARINE DIESEL ENGINES SYSTEMS) 3.1 Fuel system in fishing boats- Block diagram 3.2 Starting system- Types of starting systems 3.3 Fixed pitch propeller 3.4 Decompression mechanism
04.	UNIT – 4 (MARINE DIESEL ENGINES MAINTENANCE AND TROUBLE SHOOTING) 4.1 Types of maintenance 4.2 Smoke colour -Blue, White and Black 4.3 Engine oil quality checking-Viscosity Test, Ph test, Spot test, crackle test
05.	UNIT – 5 (GAUGES AND METERS) 5.1 Bourdon tube pressure gauge, Gauge glass 5.2 Flow meter, Engine hour meter, Inclinator
06.	UNIT – 6 (VESSEL AND VESSEL TERMINOLOGY) 6.1 Vessel terminology 6.2 Colour lights used in ships 6.3 Types of ships

MODULE 4

SL.NO.	NAME OF UNIT AND FOCUS AREAS
07.	UNIT – 1 (MARINE AUXILIARY MACHINES) 1.1 Pumps – Centrifugal pump and Gear pump 1.2 Compressor – Single stage reciprocating compressor 1.3 Power Take off - Types
08.	UNIT – 2 (DECK EQUIPMENTS AND FISHING ACCESSORIES) 2.1 Net drum and winch
09.	UNIT – 3 (NAVIGATION AIDS) 3.1 GPS, VHF Radio, RADAR, Fish finder, Echo Sounder
10.	UNIT – 4 (LIFE SAVING EQUIPMENTS) 4.1 Life Jacket, Lifebuoy, Life Raft and Life Boat
11.	UNIT – 5 (WELDING AND WELDING DEFECTS) 5.1 Types of welding 5.2 Gas welding 5.3 Weld Defects - Lack of Penetration, Lack of Fusion, Porosity, Cracking, Spatter
12.	UNIT – 6 (NON DESTRUCTIVE TESTING) 6.1 Visual Testing 6.2 Penetrant Testing

**NAME OF SUBJECT: PHYSIOTHERAPY ... Year – Second Year
FOCUS AREAS FOR THE ACADEMIC YEAR 2020-21**

MODULE 3

SL.N O.	NAME OF UNIT AND FOCUS AREAS
01.	UNIT ONE (EXERCISE THERAPY) 1.1...MOVEMENTS... 1.2...POSITIONS... 1.3...POSTURE... 1.4...EQUIPMENTS
02.	UNIT SECOND (HUMAN LOCOMOTION) 2.1...GAIT 2.2...PATHOLOGICAL GAIT 2.3...GAIT TRAINING 2.4...TRANSFER TECHNIQUE
03.	UNIT THRID (HYDROTHERAPY) 3.1...POOLTHERAPY 3.2...CRYOTHERAPY 3.3...CONTRAST BATH
04	UNIT FORTH (ELECTRO THERAPY) 3.1 CLASSIFICATION OF EQUIPMENT S 3.2 INDICATION AND CONTRA INDICATIONS OF ELECTRO THERAPY EQUIPMENT S.

MODULE 4

SL.N O.	NAME OF UNIT AND FOCUS AREAS
04.	UNIT FOURTH(NEUROLOGICAL PHYSIOTHERAPY) 4.1 STROKE 4.2 ATAXIA 4.3 SPINAL CORD INJURY 4.4 PARKINSON'S DISEASE. 4.5 PERIPHERAL NERVE INJURY
05.	UNIT FIFTH (ORTHOPEDIC PHYSIOTHERAPY) 5.1 FRACTURE 5.2 SOFT TISSUE INJURY 5.3 ARTHRITIS 5.4 AMPUTATION
06	UNIT SEVENTH (GERIATRIC PHYSIOTHERAPY) 6.1 COMMON CONDITIONS 6.2 AIMS OF GERIATRIC PHYSIOTHERAPY 6.3 DIFFERANT SETTINGS OF GERIATRIC PT

NAME OF SUBJECT: PHYSICAL EDUCATION Year – Second Year
FOCUS AREAS FOR THE ACADEMIC YEAR 2020-21

MODULE 3

SL.NO.	NAME OF UNIT AND FOCUS AREAS
01.	UNIT ONE GROWTH & DEVELOPMENT 1.1. MEANING OF GROWTH & DEVELOPMENT 1.2. VARIOUS STAGES OF GROWTH & DEVELOPMENT 1.3. MEANING OF GROWTH & DEVELOPMENT 1.4. FACTORS AFFECTING GROWTH & DEVELOPMENT
02.	UNIT SECOND SPORTS TRAINING 2.1. DEFINITION OF SPORTS TRAINING 2.2. TRAINING LOAD 2.3. ADAPTATION 2.4. SUPER COMPENSATION & PRINCIPLELS OF SPORTS TRAINING
03.	UNIT THRID PHYSICAL FAINTNESS & WELLNES 3.1. DEFINITION OF PHYSICAL FAINTNESS & WELLNES 3.2. HEALTH RELATED PHYSICAL FITNESS & ITS COMPONENTS 3.3. SKILL RELATED PHYSICAL FITNESS & ITS COMPONENTS 3.4. IMPORTANTS OF WARM-UP, & COOLING DOWN
04.	UNIT FOURTH DEVELOPMENT OF PHYSICAL FAINTNESS 4.1. DEVELOPMENT OF STRENGTH & ENDURANCE 4.2. RESISTANCE TRAINING 4.3. DEVELOPMENT OF SPEED ABILITY & FLEXIBILITY 4.4. TRAINING CYCLE
05.	UNIT FIFTH DRUGS & DOPIN 5.1. MEANING DRUGS & DOPIN 5.2. MEANING OF DRUGS & DOPIN 5.3. BLOOD DOPIN 5.4. SIDE EFFECT OF DOPIN
06.	UNIT SIX FIRST AID AND SPORTS INJURY & MANAGEMENT 6.1 MEANING OF FIRST AID 6.2 PRICE 6.3 TYPES OF SPORTS INJURIES 6.4 QUALITIES OF FIRST AIDER

NAME OF SUBJECT: PHYSICAL EDUCATION Year – Second Year
FOCUS AREAS FOR THE ACADEMIC YEAR 2020-21

MODULE 4

SL.NO.	NAME OF UNIT AND FOCUS AREAS
01.	UNIT ONE FUNDAMENTAL OF YOGA 1.1. HISTORY OF YOGA 1.2. MEANING & DEFINITION OF YOGA 1.3. SATKRIYAS & ASANAS 1.4. DIFFERENCE BETWEEN YOGA ASANAS AND PHYSICAL EXERCISE
02.	UNIT SECOND HEALTH EDUCATION 2.1. MEANING AND DEFINITION OF HEALTH 2.2. IMPORTANT OF HEALTH EDUCATION
03.	UNIT THRID POSTURE AND CORRECTIVE MEASURES 3.1. MEANING AND DEFINITION OF POSTER 3.2. IMPORTENTS OF GOOD POSTER 3.3. CAUSES OF POOR POSTURE 3.4. POSTURAL DEFORMARTIES
04.	UNIT FOURTH SPORTS NUTRITION 4.1. AEROBIC AND AEROBIC ENERGY 4.2. WATER LOADING 4.3. ENERGY NEUTRIANCE AND ROLE OF DURING PHYSICAL ACTIVITIES
05.	UNIT FIFTH SPORTS PSYCHOLOGY 5.1. MEANING OF SPORTS PSYCHOLOGY 5.2. PERSONALITY
06.	UNIT SIX SOCIOLOGY 6.1 MEANING OF SOCIOLOGY 6.2 MEANING OF RECREATION

POLYMER TECHNOLOGY SECOND YEAR

FOCUS AREAS FOR THE ACADEMIC YEAR 2020-21

Module 3 PLASTIC PROCESSING

Sl. No.	Name of unit and focus areas
01	3.1 INTRODUCTION TO PLASTIC PROCESSING. <ul style="list-style-type: none">• Effect of polymer properties on processing. Moisture absorption, Thermal stability.• Important properties, applications and processing parameters of common plastics such as HDPE, LDPE, PP, PS, PMMA, PVC,
02	3.2 INJECTION MOLDING <ul style="list-style-type: none">• Injection molding process - advantages, disadvantages.• Types of injection moulding machine• Parts of injection molding machines and their functions.• Screw Design - feed, transition and metering zones,• Clamping Systems - Toggle clamping, Hydraulic clamping,• Molds - Parts of molds - Runner - cold runner, hotrunner, gate, ejection systems.• Process parameters - Shot weight, Barrel residence time,• Molding cycle.
03	3.3 EXTRUSION <ul style="list-style-type: none">• Plastic Extrusion – types of extruder, different parts and their functions• Types of screws - polyolefin, PVC and Nylon screws,• Screen pack, breaker plate,• Pipe extrusion, blown film extrusion, extrusion of cable.
04	3.4 BLOW MOLDING AND ROTATIONAL MOLDING. <ul style="list-style-type: none">• Different types of blow molding - extrusion blow molding, injection blowmolding, stretch blow molding.• Rotational molding
05	3.5 THERMOFORMING AND CALENDARING <ul style="list-style-type: none">• Vacuum forming, Pressure forming• Calendaring of plastics - Different types of calenders,
06	3.6 TESTING OF PLASTICS <ul style="list-style-type: none">• Testing of Impact strength.• Melt flow Index

Module 4 FIBRE REINFORCED COMPOSITES

Sl. No.	Name of unit and focus areas
01	4.1 INTRODUCTION TO COMPOSITES <ul style="list-style-type: none">• Definition of composites,• Constituents of composites - Matrix, reinforcement, Advantages, disadvantages and applications of composites.• Classification of composites - based on matrix - based on reinforcement
02	4.2 REINFORCEMENT FIBRES <ul style="list-style-type: none">• Functions of reinforcement,• Requirements of reinforcement fibres• Forms of reinforcement - Reinforcing mat - Chopped strand mat (CSM), continuous filament mat, veil, woven roving/fabric.• Glass fibres - E-Glass, S-Glass, C-Glass, Carbon fibre, Aramid fibre, Boron fibre, UHMWHDPE, Natural fibres
03	4.3 MATRIX MATERIALS AND ADDITIVES <ul style="list-style-type: none">• Functions of matrix• Polyester resins, Epoxy resins, Phenolic resins, Vinyl ester resins.• Curing reactions, gelation and gel time, cure time.• Catalyst or initiators, Fillers,
04	4.4 MANUFACTURING METHODS <ul style="list-style-type: none">• Hand lay-up, Spray lay-up, Filament Winding.• Compression molding Vacuum bag molding, Pressure bag molding, Injection molding, Resin transfer molding, Vacuum assisted resin infusion molding.• Pultrusion,
05	4.5 QUALITY AND SAFETY IN FRP PROCESSING <ul style="list-style-type: none">• Storage of raw materials• Preparation of molds, Repair of composites

FOCUS AREA FOR THE ACADEMIC YEAR 2020 -21

MODULE 3

SL NO	NAME OF UNIT AND FOCUS AREAS
1	UNIT 2 PSYCHROMETRY <ul style="list-style-type: none">• CONDITIONS FOR HUMAN COMFORT• PSYCHROMETRIC TERMS• PSYCHROMETRIC CHART• PSYCHROMETRIC PROCESS
2	UNIT 4 AIR CONDITIONING EQUIPMENTS <ul style="list-style-type: none">• WINDOW AC• SPLIT AC• CENTRAL AC
3	UNIT 6 SPLIT AIR CONDITIONER <ul style="list-style-type: none">• COMPONENTS• INSTALLATION

MODULE 4

1	UNIT 1 INVERTER SPLIT AIR CONDITIONER
2	UNIT 2 HEAT LOAD CALCULATIONS <ul style="list-style-type: none">• COMPONENTS OF COOLING LOAD ONLY
3	UNIT 3 SPECIAL AIR CONDITIONING APPLICATIONS <ul style="list-style-type: none">• AUTOMOBILE AC• RAILWAY AIR CONDITIONING

NAME OF SUBJECT: Textile Technology Year – Second Year
FOCUS AREAS FOR THE ACADEMIC YEAR 2020-21

MODULE 3

SL.NO.	NAME OF UNIT AND FOCUS AREAS
01.	UNIT ONE (Weaving preparatory) 1.1 Warping. 1.2 Sizing 1.3 Pirn winding 1.4 Weave design basics
02.	UNIT SECOND (Handloom) 2.1 Shedding 2.2 Picking 2.3 Beat up 2.4 Passage of warp in handloom
03.	UNIT THRID (Power loom) 3.1 Shedding – tappet 3.2 Picking – cone under pick 3.3 Beat up 3.4 Take up and let off motions

MODULE 4

SL.NO.	NAME OF UNIT AND FOCUS AREAS
04.	UNIT FOURTH(Textile Dyeing) 4.1 Scouring & bleaching of cotton yarns 4.2 Theory of textile dyeing 4.3 Direct / reactive dye application on cotton yarn 4.4 Vat dye application on cotton yarn
05.	UNIT FIFTH (Textile Printing) 5.1 Defining textile printing 5.2 Textile printing methods (four) 5.3 Textile print paste ingredients and preparation 5.4 Textile printing styles

NAME OF SUBJECT : TRAVEL AND TOURISM 2020-21 SECOND YEAR

FOCUS AREAS FOR THE ACADEMIC YEAR 2020-21

Module 3

Sl.No	Name of Unit And Focus Areas
01.	Unit1 Tour Handling 1.1 Itinerary- Definition 1.2 Tour Costing-Definition- Cost components 1.3 Tour Pricing- Definition 1.4 Tour Brochure Definition 1.5 Tour Guide- Etiquettes and approval 1.6 Itinerary Preparation
02.	Unit 2 HOSPITALITY MANAGEMENT 2.1 Major Hotel chains In India and International 2.2 Departments in a Hotel 2.3 Types of Rooms 2.4 Types of Chefs 2.5 Hotel Industry terms
03.	Unit 3 Event Management 3.1 Definition 3.2 5Cs of Event management 3.3 Categories of Event 3.4 MICE, ICPB, ICCA 3.5 Major Travel Marts

Module 4

Sl.No	Name of Unit And Focus Areas
04.	Unit 4 Air Travel and Airport Management 4.1 Air Travel Organisations 4.2 Freedoms of Air 4.3 Continents of the World and TC Areas 4.4 CITY/ AIRPORT , Airline & Currency codes 4.5 Airport Procedures 4.6 Time zones(GMT, IDL, 12Hour&24 Hour Clock) 4.7 Anatomy of Journey, Type of Journey 4.8 Logistics
05.	Unit 5 On Line Travel Services and CRS 5.1 CRS- Definition 5.2 Different Types of CRS 5.3 PNR 5.4 SSR and OSI -Difference, SSR Codes 5.5 BSP

Management-Second year

Focus Areas for the Academic Year 2020-21

SL.No	Name of unit & focus areas
1	<p>Unit-1:Economic Environment for Management</p> <ul style="list-style-type: none"> * Meaning of Economic Environment *Economic System -Meaning and two examples for each * Economic policies- Fiscal policy-Monetary policy *Quantitative credit control *Qualitative credit control *National Income- meaning * Basic concepts in National Income-GDP,NDP,GNP,NNP *Problems in the estimation of national income *Business Cycles. Brief explanation with four phases and diagram
2.	<p>Unit-2: Working Capital Management</p> <ul style="list-style-type: none"> * Meaning* Concepts of Working Capital (i)Gross Working Capital (ii)Net working capital-Simple problem *Factors determining the working capital requirements (8 Points) *Operating cycle-meaning with diagram *Dangers of inadequate working capital
3	<p>Unit 3: Long Run Investment Decision -Capital Budgeting</p> <ul style="list-style-type: none"> *Meaning *Steps of Capital budgeting with diagram *Methods of Capital Budgeting *Non-Discounted Cash Flow Criteria *Pay Back Period -Meaning and problem *Accounting Rate Of Return -Meaning and equation *Discounted Cash Flow Criteria -Net Present Value – Problem
4	<p>Unit 4-Production and Operations Management</p> <ul style="list-style-type: none"> *Meaning of Production Management *Difference between Production and Operation (5Points) *Major Decisions of Production Management Strategic, Tactical ,Operational (Brief explanations with examples) *Plant Location and factors affecting plant location (6Points) *Plant Layout and different types of Plant Layouts with examples
5	<p>Unit 5-Quality Management</p> <ul style="list-style-type: none"> *Meaning & Definition of Quality *Dimensions of quality with diagram-Product (8 Dimensions) *Service Quality-5 Dimensions*ISO-Brief Explanation*ISO 9000:2000-Meaning

6	<p>Unit 6-Meaning of measures of central tendency</p> <p>*Qualities of a good average</p> <p>*Types of Averages1*Arithmetic Mean Simple Arithmetic Mean-Individual series -Discrete series (Direct method only) Continuous series (Direct method only)</p> <p>*Combined mean2.Median (Individual, Discrete series and Continuous series)</p> <p>3.Mode(Individual series only) *Location of Mode Graphically</p> <p>*Partition Values-Meaning and Types</p> <p>Quartiles(Q1,Q2,Q3 in individual series only) Deciles-Meaning only</p> <p>Percentiles-Meaning only</p>
7	<p>Unit 7-Measures of Dispersion</p> <p>*Meaning</p> <p>*Methods of studying Dispersion.</p> <ul style="list-style-type: none"> • Range and its coefficient • Quartile Deviation and its coefficient
8	<p>Unit 8-Correlation</p> <p>*Meaning *Types of correlation. *Methods of measuring correlation. Karl Pearsons Coefficient of Correlation -Direct Method (deviations from Actual Mean)</p>
9	<p>Unit 9-Index Number</p> <p>*Meaning *Uses of index numbers</p> <p>*Methods of construction of Index Number</p> <ul style="list-style-type: none"> A) Simple Index Number <ul style="list-style-type: none"> a. Simple aggregate price method (aggregate method) B) Weighted Index Number <ul style="list-style-type: none"> a.Laspeyers price index method
	Total

VHSE II YEAR - ENTREPRENEURSHIP DEVELOPMENT
Focus Areas for the Academic Year 2020-21

Sl. No.	NAME OF UNITS AND FOCUS AREAS
1	<p>UNIT 1- ENTREPRENEURIAL OPPORTUNITY IDENTIFICATION</p> <p><i>1.2. Sources of entrepreneurial opportunity</i></p> <p><i>1.2.2. Transformation of idea in to opportunity (chart)</i></p> <p><i>1.5. PESTEL model</i></p> <p><i>1.6. Types of Trends</i></p>
2	<p>UNIT 2 - ENTERPRISE PLANNING</p> <p><i>2.1.2. Features of Sole trading Concern</i></p> <p><i>2.3.2. Features of a Joint-stock company</i></p> <p><i>2.4.2. Features of cooperative organisations</i></p>
3	<p>UNIT 3 - PROJECT FORMULATION</p> <p><i>3.5.1. Determinants of working capital</i></p> <p><i>3.5.2. Operating cycle of Working capital</i></p> <p><i>3.5.3 .Calculation of gross working capital and net working capital</i></p> <p><i>3.8.1. contribution and profit statement</i></p> <p><i>3.9.1. Current ratio</i></p>
4	<p>UNIT 4 - PROJECT APPRAISAL AND REPORT</p> <p><i>4.2. Aspects of Project appraisal (points only)</i></p> <p><i>4.3.2. Pay-back period calculation (when cash inflows are equal)</i></p> <p><i>4.3.3. Net Present Value calculation(single project without scrap)</i></p>
5	<p>UNIT 5 - ENTERPRISE MANAGEMENT</p> <p><i>5.3. Functions of management(diagram)</i></p> <p><i>5.7.1. Benefits of Advertising</i></p> <p><i>5.8.1. Qualities of a Salesman</i></p>