

DIPLOMA IN FOOD PRODUCTION

Eligibility:	Senior Secondary (10+2) or equivalent with English as a subject.
Duration:	One Year + six months in industry
Teaching hours per week:	35 Hours
Effective teaching:	34 weeks
Industrial training:	24 weeks after the annual examinations.

TEACHING AND EXAMINATION SCHEME

No.	Subject code	Subject	Hours per week	Term Marks*
THEORY				
1	DFP-01	Cookery	3	100
2	DFP-02	Larder	2	50
3	DCS-01	Hygiene & Sanitation	2	50
4	DFP-03	Nutrition	1	50
5	DFP-04	Commodities	2	50
6	DCS-02	Food Costing	2	50
TOTAL			12	350
PRACTICAL				
7	DFP-11	Cookery	16	100
8	DFP-12	Larder	4	100
9	DCS-11	Computer Awareness	1	-
10	DCS-12	Library	2	-
TOTAL			23	200
GRAND TOTAL			35	550

* Term marks will comprise 30% Mid Term Exam & 70% End Term Exam Marks.

RULES AT A GLANCE

NO.	TOPIC	REQUIREMENT
1.	Minimum attendance required to become eligible for exam	75% in aggregate
2.	Minimum pass marks for each theory subject	40%
3.	Minimum pass marks for each practical subject	50%
4.	Maximum duration to pass/clear all subjects/ papers	03 academic years



COOKERY THEORY (DFP-01)

TIME ALLOTTED: 03 HOURS PER WEEK

MAXIMUM MARKS: 100

ACTIVITY	MAXIMUM MARKS
Marks for attendance	5
Mid-term exam marks	25
Total (Incourse Assessment Marks)	30
End term exam marks	70
Total	100

Knowledge based objectives for Cookery Theory:-

After the completion of Cookery Theory subject, the Students will be able to:

1. Explain the Organizational Structure of Food Production Department.
2. Design the layout of Kitchen.
3. Classify raw materials and their uses.
4. Describe the methods of mixing food.
5. Draw the structure of egg.
6. Explain the balancing of recipes.
7. Define and classify sauces and soups.
8. Breads and bread making
9. Different types of pastries
10. Kitchen equipment and its upkeep and interdepartmental coordination

UNIT	CONTENT	HOURS ALLOTTED	WEIGHTAGE FOR EXAM
1	Origin of hotel industry Importance of kitchen in Hotel & Catering establishments Aims and objectives of Cooking Classification of raw materials, preparation of ingredients. Methods of mixing foods, effect of heat on various foods, weighing and measure, texture of food, Culinary terms.	08	10%
2	Methods of cooking with special Application to meat, fish, vegetables, cheese, pulses and egg. Conventional and non-conventional methods of cooking, solar cooking, microwave cooking, fast food operation.	07	10%



3	Eggs – Structure, selection of quality, various ways of cooking eggs with example in each method and prevention of blue ring formation. Varieties of fish, meat and vegetables. Accompaniments, garnishes and rechauffe.	10	10%
4	Balancing of recipes, standardization of recipes, standard yield, maintaining recipe files. Menu planning, portion control, brief study of how portions are worked out. Invalid cookery. Purchase Specifications, quality control, Indenting and Costing	10	10%
5	Description and use of the following: Basic stocks, Aspics & Jellies. Roux blanc, Roux blonde and Roux brun, Recipes and quantities required to produce 10 litres of stock, white & brown. Recipes required to produce one litre of the following: Béchamel sauce, tomato sauce, Veloute sauce, espagnole sauce, Hollandaise and mayonnaise sauce with the necessary precautions to be observed while preparing these, with minimum five derivatives of each. Soup – Definition, classification of soups with example in each group, recipe for one litre consommé, 10 popular consommés with their garnishes.	10	10%
MID TERM EXAM			
6	Vegetables – Effect of heat on different vegetables in acid/alkaline medium and reaction with metals. Method of cooking different vegetables with emphasis on cooking asparagus, artichokes, brussel sprouts.	12	15%
7	Theory of Bread making, Bread rolls, Bread sticks, Indian Breads.	8	5%
8	Pastry – Recipes of short crust pastry, puff pastry, flaky pastry choux paste, Danish pastry and their derivatives. Recipes and method of	15	20%



	preparation of plain ice cream.		
9	Kitchen stewarding and upkeep of equipment.	05	05%
10	Staff organization of Kitchen, coordination with the Departments.	05	05%
	Total	90	100%



LARDER THEORY (DFP-02)

TIME ALLOTTED: 02 HOURS PER WEEK

MAXIMUM MARKS: 50

ACTIVITY	MAXIMUM MARKS
Marks for attendance	2 ½
Mid-term exam marks	12 ½
Total (Incourse Assessment Marks)	15
End term exam marks	35
Total	50

Knowledge based objectives for Larder Theory:- After the completion of the Larder Theory, the Students will be able to:

1. Design the layout of Larder Department.
2. Explain the Organizational Structure.
3. Identify and draw the tools and equipment used in Larder Department.
4. Classify and define cuts and uses of Fish, Poultry, Lamb, Beef and Pork
5. Explain the procedures of maintaining Larder Equipment.

UNIT	CONTENT	HOURS ALLOTTED	WEIGHTAGE FOR EXAM
1	Larder organization and layout. Larder control- maintenance and care of larder equipment	06	10%
2	Hors d' oeuvre and salads- classification	06	10%
3	Fish – classification, cleaning, basic cuts and uses and storage	06	10%
4	Poultry and game- classification preparation and cuts with uses	12	20%
MID TERM EXAM			
5	Butchery – cuts of beef, lamb, mutton and pork-uses and weights	12	20%
6	Types of force meat and uses	06	10%
7	Assembling cold buffet, sandwiches and canapés, decorative work with ice, vegetable, butter/fat and fruit	06	10%
8	Cleaning and care of larder equipment and tools	06	10%
	Total	60	100%



HYGIENE AND SANITATION (DCS-01)

TIME ALLOTTED: 02 HOURS PER WEEK

MAXIMUM MARKS: 50

ACTIVITY	MAXIMUM MARKS
Marks for attendance	2 ½
Mid-term exam marks	12 ½
Total (Incourse Assessment Marks)	15
End term exam marks	35
Total	50

LEARNING OBJECTIVES: After completion of the subject a student will be able to:

1. Understand Food Microbiology, Food Contamination and Spoilage;
2. Follow sanitary procedure during food handling;
3. Understand the importance of personal hygiene
4. Analyse critical control points; and
5. Practice laws governing the food safety and standards

No	CONTENT	TIME ALLOTTED	WEIGHTAGE FOR EXAM
1	FOOD MICROBIOLOGY <ul style="list-style-type: none">• Introduction• Microorganism groups important in food microbiology<ul style="list-style-type: none">- Viruses- Bacteria- Fungi (Yeast & Molds)- Algae- Parasites• Factors affecting the growth of microbes• Beneficial role of Microorganisms	10	15%
2	FOOD CONTAMINATION AND SPOILAGE <ul style="list-style-type: none">• Classification Of Food• Contamination And Cross Contamination• Spoilages Of Various Food With The Storing Method	05	10%
3	SANITARY PROCEDURE FOLLOWED DURING FOOD HANDLING <ul style="list-style-type: none">• Receiving,• Storage,• Preparation,• Cooking,• Holding, and	10	20%



	<ul style="list-style-type: none"> • Service Of The Food 		
MID TERM EXAM			
4	SAFE FOOD HANDLER <ul style="list-style-type: none"> • Personal Hygiene discussing all the standard. • Hand Washing Procedure • First Aid definition, types of cuts, wounds, lacerations with reasons and precautions. 	10	15%
5	HAZARD ANALYSIS CRITICAL CONTROL POINT <ul style="list-style-type: none"> • Introduction to HACCP • History • Principles of HACCP 	10	15%
6	FOOD SAFETY STANDARDS AUTHORITY OF INDIA (FSSAI) <ul style="list-style-type: none"> • Introduction to FSSAI • Role of FSSAI • FSSAI compliance 	05	15%
7	GARBAGE DISPOSAL <ul style="list-style-type: none"> • Different Methods • Advantages and disadvantages • Municipal Laws and Swachh Abhiyan 	10	10%
	Total	60	100%



NUTRITION (DFP-03)

TIME ALLOTTED: 01 HOURS PER WEEK

MAXIMUM MARKS: 50

ACTIVITY	MAXIMUM MARKS
Marks for attendance	2 ½
Mid-term exam marks	12 ½
Total (Incourse Assessment Marks)	15
End term exam marks	35
Total	50

Learning objectives: After completion of the Nutrition subject a student will be able to:

1. Develop basic awareness of important nutrients;
2. Knowledge of nutritional requirements for human beings;
3. Plan nutritionally balance menu; and
4. Planning of menus for special needs.

UNIT	CONTENT	HOURS ALLOTTED	WEIGHTAGE FOR EXAM
1.	BASIC ASPECTS <ul style="list-style-type: none">• Definition of Food and Nutrition• Importance of Food<ul style="list-style-type: none">- Physiological,- Psychological and- Social• Functions of food (in maintaining good health)	03	10%
2.	CLASSIFICATION OF NUTRIENTS <ul style="list-style-type: none">• Macro Nutrients<ul style="list-style-type: none">- Carbohydrates<ul style="list-style-type: none">○ Simple<ul style="list-style-type: none">▪ Monosaccharides▪ Disaccharides○ Complex<ul style="list-style-type: none">▪ Polysaccharides- Fats<ul style="list-style-type: none">○ Saturated○ Unsaturated<ul style="list-style-type: none">▪ Monounsaturated▪ Polyunsaturated- Proteins<ul style="list-style-type: none">○ Based on structure<ul style="list-style-type: none">▪ Fibrous▪ Globular▪ Intermediate○ Based on composition	04	10%



	<ul style="list-style-type: none"> ▪ Simple ▪ Conjugated <ul style="list-style-type: none"> - Water • Micro Nutrients <ul style="list-style-type: none"> - Vitamins <ul style="list-style-type: none"> ○ Water soluble ○ Fat soluble - Minerals <ul style="list-style-type: none"> ○ Macro elements ○ Trace or Micro elements 		
3	<p>MACRO NUTRIENTS</p> <ul style="list-style-type: none"> • Carbohydrates <ul style="list-style-type: none"> - Functions of Carbohydrates - Sources - Recommended Daily Allowances (RDA) - Effects of Deficiency and excess intake of Carbohydrates • Fats <ul style="list-style-type: none"> - Functions of Fats - Sources - Recommended Daily Allowances (RDA) - Effects of Deficiency and excess intake of Fats • Proteins <ul style="list-style-type: none"> - Functions of Proteins - Sources - Recommended Daily Allowances (RDA) - Effects of Deficiency and excess intake of Proteins • Water <ul style="list-style-type: none"> - Functions - Source - Recommended Daily Allowance (RDA) 	04	15%
4	<p>MICRO NUTRIENT</p> <ul style="list-style-type: none"> • Vitamins <p>Functions, sources, Recommended Daily Allowances (RDA) and Effects of Deficiency / Excess intake of;</p> <ul style="list-style-type: none"> - Vitamins of B-Complex Group - Vitamin C - Vitamin A - Vitamin D - Vitamin E - Vitamin K • Minerals 	04	15%



	<p>Functions, Sources, Recommended Daily Allowances (RDA) and Effects of Deficiency / excess intake of;</p> <ul style="list-style-type: none"> - Calcium - Iron - Iodine - Sodium - Phosphorous 		
MID TERM EXAM			
5	<p>CONSERVING NUTRIENTS</p> <ul style="list-style-type: none"> • During Storing • During Food Preparation (Pre-cooking e.g. Washing, Peeling, Cutting, Chopping, Slicing, Pounding, Grinding, Soaking, Sprouting, Fermentation, Mixing) • During Cooking 	04	10%
6	<p>BALANCED DIET</p> <ul style="list-style-type: none"> • Definition and its importance • Factors Affecting Balanced Diet (Age, Gender and Physiological state) 	03	10%
7	<p>MENU PLANNING</p> <ul style="list-style-type: none"> • Nutritionally balanced meals as per three food group system • Factors affecting meal planning • Calculation of Nutritive value of dishes and meals • Critical evaluation of a given meal 	04	15%
8	<p>MENU PLANNING – FOR SPECIAL NEEDS</p> <ul style="list-style-type: none"> • Obesity • Diabetes • Hypertension • Cardiac 	04	15%
	Total	30	100%



COMMODITIES THEORY (DFP-04)

TIME ALLOTTED: 02 HOURS PER WEEK

MAXIMUM MARKS: 50

ACTIVITY	MAXIMUM MARKS
Marks for attendance	2 ½
Mid-term exam marks	12 ½
Total (Incourse Assessment Marks)	15
End term exam marks	35
Total	50

Learning Objectives for Commodities:- After the completion of the Commodities subject, the students will be able to:

1. Classify Cereals and Describe their uses and storage.
2. Classify Pulses and Describe their uses and storage.
3. Define and Classify Fruits and Vegetables.
4. Classify dairy products and describe the composition and storage of milk, cheese, butter and cream.
5. Find and Test the food adulterants.
6. Fruits and vegetables classification and uses
7. Identification and uses of spices and herbs
8. Define and classify tea, coffee, coco and food colours and flavours.
9. Preservation of food

UNIT	CONTENT	HOURS ALLOTTED	WEIGHTAGE FOR EXAM
1	Cereals- wheat rice maize Breakfast cereals like cornflakes, rice flakes, Choco flakes and pressed rice uses and storage	06	10%
2	Pulses –its types and uses	04	10%
3	Fruits and vegetables- classification and uses	10	15%
4	Dairy products- milk –its uses composition and storage, classification and uses of cheese, butter, cream	10	15%
MID TERM EXAM			
5	Prevailing food standards in INDIA, food adulterations as public health hazard, and common adulterants, simple tests in	06	10%



	detection of common food adulterants, ISI, AGMARK and FSSAI		
6	Herbs spices and condiments- classification and uses of different types	04	10%
7	Fruits and vegetables; classification and uses	05	10%
8	Tea, coffee, coco and their sources, storage and uses. Food flavours, essences and food colours with brand names.	10	10%
9	Food Preservation – long term and short term methods. Convenience food, sugar preserves and confectionery gums	05	10%
	Total	60	100%



FOOD COSTING (DCS-02)

TIME ALLOTTED: 02 HOURS PER WEEK

MAXIMUM MARKS: 50

ACTIVITY	MAXIMUM MARKS
Marks for attendance	2 ½
Mid-term exam marks	12 ½
Total (Incourse Assessment Marks)	15
End term exam marks	35
Total	50

Learning Objectives : At the end of the term / course the Students will be able to:

1. Know different pricing methods and explain the different types of Menu.
2. Explain the importance of food costing and costing techniques.
3. Develop standard recipes and adjust the quantities using adjustment factor.
4. Define and explain Material Costing.
5. Explain in controlling food cost, labour cost, overhead cost etc.
6. Define yield and its types.
7. Calculate standard food cost and explain the techniques in portion cost and dinner cost.

UNIT	CONTENT	HOURS ALLOTTED	WEIGHTAGE FOR EXAM
1	Pricing <ul style="list-style-type: none"> • Menu pricing styles • Types of menu • Different methods in pricing 	08	15%
2	Costing <ul style="list-style-type: none"> • Importance of food costing • Methods of costing • Costing techniques 	07	10%
3	Standard recipes <ul style="list-style-type: none"> • Use of standardized recipes • Developing standardized recipes • Adjustment factor 	07	10%
4	Material costing <ul style="list-style-type: none"> • Through purchasing • receiving • issuing • production • sales and accounting 	08	15%



MID TERM EXAM

5	Control of <ul style="list-style-type: none">• food cost• labour cost• overhead cost• miscellaneous cost	10	15%
6	Yield <ul style="list-style-type: none">• butchers yield• cooking yield• portion control	10	15%
7	Costs <ul style="list-style-type: none">• determining standard food cost• calculating portion cost• calculating dinner cost	10	20%
	Total	60	100%



COOKERY PRACTICAL (DFP-11)

TIME ALLOTTED: 16 HOURS PER WEEK

MAXIMUM MARKS: 100

ACTIVITY	MAXIMUM MARKS
Marks for attendance	5
Mid-term exam marks	25
Total (Incourse Assessment Marks)	30
End term exam marks	70
Total	100

Skill based learning objectives for Cookery Practical:- After the completion of the practical course, the student will be able to:

1. Prepare and Present Indian dishes like Rice Varieties, Dal Varieties, Indian bread, Vegetables and Non-Vegetarian.
2. Prepare and Present Indian Sweets and Snacks.
3. Prepare and Present Tandoor dishes.
4. Prepare and Present festival menus.
5. Prepare and Present Sauces, Soups and Pastas
6. Prepare and Present Continental dishes of Fish, Poultry and other meat with accompaniments.
7. Prepare and Present Chinese Soups, Noodles and Rice Varieties etc.

IMPORTANT:

1. Two students to work on one station in Basic Training Kitchen.
2. Practical in Quantity Food Kitchen shall be a team activity for bulk cooking.
3. Each menu to be practiced in Basic Training Kitchen by preparing four portions of each dish at each station.
4. Same menu to be practiced in Quantity Food Kitchen through team exercise on minimum twenty portions.

Familiarisation of tools / equipment and their use. (One week/ 16 Hours)

A set of 60 menus shall be drawn, by the institute covering all the items listed below, ensuring that all cooking methods have been employed. It may also be ensured that each menu is prepared once in the basic training kitchen and once in the quantity food kitchen.

(Hours available: 31 weeks x 4 days/week x 4 hours/day= 496 Hours)



INDIAN

Rice	08 varieties
Indian Bread	10 varieties
Dal	10 varieties
Vegetables	15 varieties
Chutney	05 varieties
Raita	05 varieties
Egg dishes	03 varieties
Fish dishes	05 varieties (including two local cuisine dishes)
Meat dishes	08 varieties (including two local cuisine dishes)
Chicken dishes	08 varieties (including two local cuisine dishes)
Shorba	02 varieties
Tandoor dishes	Tandoori chicken, tandoori fish, seek kabab, boti kabab.
Snacks	10 varieties (including two local cuisine dishes)
Sweets	08 varieties (including two local cuisine dishes)
Special dishes for festivals	– 5 festival menus (emphasis on regional cuisine-)

Continental:

Stock – white stock, brown stock, fish stock.

Sauce – Béchamel sauce, Veloute sauce, tomato, espagnole, hollandaise and mayonnaise with 5 derivatives of each. Demi-glace, Mint sauce, horse radish, bread sauce and apple sauce.

Compound Butters – **3 varieties.**

Soups:

Purees	2 varieties
Cream	3 varieties
Veloute	2 varieties
Broths	2 varieties
Bisques	1 varieties
Consommés	5 varieties
Cold Soups	2 varieties
International soups	2 varieties

Fish:

Baked	2 varieties
Grilled	2 varieties
Shallow fried	2 varieties
Deep fried	4 varieties
Poached	2 varieties



Chicken and other Meats:

Stew	2 varieties
Casseroles	2 varieties
Roast	2 varieties
Braised	2 varieties
Grilled/Baked	2 varieties
Chicken (Sautés)	5 varieties

Vegetables:

Preparation and cooking of vegetables –	10 varieties.
Potatoes –	10 varieties.

Farinaceous dishes:

Spaghetti and macaroni dishes –	6 varieties.
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Egg:

Breakfast egg preparation –	5 varieties
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Sweets:

Mousse	3 varieties
Soufflés	3 varieties
Baked	3 varieties
Steamed (Pudding)	3 varieties

Chinese:

Soups	2 varieties
Noodles & Rice	4 varieties
Chicken	2 varieties
Pork	2 varieties
Meat	2 varieties
Prawns	2 varieties
Fish	1 dish
Vegetables	3 varieties



**Marking scheme for Examination
Cookery Practical (DFP-11)**

Maximum Marks 100 Pass Marks 50

Part 'A' (25 Marks)

	MARKS
1. Uniform & Grooming	: 05
2. Indenting	: 05
3. Scullery, equipment cleaning & Hygiene	: 05
4. Journal	: 10
 Total	 : 25

Part 'B' (75 Marks)

1. Each student will prepare five dishes in a meal. Dishes shall be from the prescribed syllabus.
2. Each dish shall carry 15 marks
3. Parameters of assessment of each dish.

	Marks
a) Temperature	: 03
b) Texture/ consistency	: 03
c) Aroma/ flavour	: 03
d) Taste	: 03
e) Presentation	: 03
 Total	 : 15

NOTE:

1. Journal is not allowed during indenting or practical. It must be handed over to the examiner before commencement of examination.
2. Assessment will be done by both internal and external Examiner.
3. Each student will prepare 04 portions of each dish/item.
4. Extra ingredients may be made available in case of failure but of limited types and quality (groceries and dairy products only). Only one extra attempt may be permitted.
5. Uniform and grooming must be checked by the examiners before commencement of examination.
6. Students are not allowed to take help from books, notes, journal or any other person.
7. The Examiners will ensure that examinee adheres to Good Hygiene and Food safety practices during the examination.



LARDER PRACTICAL (DFP-12)

TIME ALLOTTED: 04 HOURS PER WEEK

MAXIMUM MARKS: 100

ACTIVITY	MAXIMUM MARKS
Marks for attendance	5
Mid-term exam marks	25
Total (Incourse Assessment Marks)	30
End term exam marks	70
Total	100

Skill Based objectives for Larder Practical:- After the completion of Larder Practical the Students will be able to:

1. Prepare and Present Simple and Compound Salads.
2. Prepare and Present Hors d'oeuvre and Sandwiches.
3. Prepare and Present Cold Soups.
4. Assemble cold buffet and decorative works like Ice & Butter Sculpture, Vegetable and Fruit Carving etc.
5. Prepare and Present cold cuts like Galantine, Ballottine, Mousse etc.

1. Preparation of various simple and compound hors d'oeuvres
2. Sandwiches - 5 varieties
3. Simple salads - 5 varieties
4. Cold Soups - 3 varieties
5. Compound Salads:
 - Fruit based - 2 varieties
 - Fish based - 2 varieties
 - Meat based - 2 varieties
 - Vegetable based - 2 varieties
 - Preparation of salad dressings – 3 varieties
6. Butchery:
 - i) Lamb and Mutton – Demonstration of jointing mutton carcasses. Deboning of mutton leg and shoulder. Curry cuts and boti kababs.
 - ii) Pork – Demonstration and preparation of pork chops, deboning of pork leg.
 - iii) Fish – cuts of fish and its use in cold buffets.
 - iv) Poultry – Dressing, trussing and deboning.
7. Decorative Work:
 - i) Demonstration of Ice & Butter Sculpture
 - ii) Hand on Training on Vegetable & Fruit Carving
8. Demonstration and Preparation of Galantine, Ballottine, Mousse etc.



Marking scheme for Examination
Larder Practical (DFP-12)

Maximum Marks **100** **Pass Marks** **50**

Part 'A' 25 Marks

	MARKS
1. Uniform & Grooming	: 05
2. Indenting	: 10
3. Journal	: 10
Total	: 25

Part 'B' 75 marks

1. Five dishes to be prepared as under;
 - i) 02 Hors d'oeuvres
 - ii) 02 Compound salad
 - iii) 01 Sandwich
2. Each dish shall carry 12 marks
3. Parameters of assessment of each dish.

a) Appearance	: 04
b) Taste	: 04
c) Standard Recipe	: 04
Total	: 12
4. Adherence to Hygiene & Food Safety (overall) : 15

NOTE:

1. Journal is not allowed during indenting or practical. It must be handed over to the examiner before commencement of examination.
2. Assessment will be done by both internal and external Examiner.
3. Each student will prepare 02 (Two) portions of each dish/item.
4. Extra ingredients may be made available in case of failure but of limited types and quantity. Only one extra attempt may be permitted.
5. Uniform and grooming must be checked by the examiners before commencement of examination.
6. Students are not allowed to take help from books, notes, journal or any other person.
7. The Examiners will ensure that examinee adheres to Good Hygiene and Food safety practices during the examination.



COMPUTER AWARENESS (DCS-11)

TIME ALLOTTED: 01 HOURS PER WEEK

MAXIMUM MARKS: Nil

Learning Objectives:- After the completion of Computer Awareness subject, the Students will be able to:

1. Understand computer and its hardware & software.
2. To produce word document with proper formatting
3. To work on an excel sheet with basic functions.
4. Brows on net and communicate through e-mail
5. Prepare small power point presentations.

UNIT	CONTENT	HOURS ALLOTTED
1	KNOWING COMPUTER <ul style="list-style-type: none">• What is computer?<ul style="list-style-type: none">➤ Basic Applications of Computer• Components of Computer System<ul style="list-style-type: none">➤ Central Processing Unit➤ Keyboard, mouse and VDU➤ Other Input devices➤ Other Output devices➤ Computer Memory• Concept of Hardware and Software<ul style="list-style-type: none">➤ Hardware➤ Software<ul style="list-style-type: none">❖ Application Software❖ Systems software• Concept of computing, data and information• Applications of IECT<ul style="list-style-type: none">➤ e-governance➤ Entertainment• Bringing computer to life<ul style="list-style-type: none">➤ Connecting keyboard, mouse, monitor and printer to CPU➤ Checking power supply	4
2	OPERATING COMPUTER USING GUI BASED OPERATING SYSTEM <ul style="list-style-type: none">• Basics of Operating System<ul style="list-style-type: none">➤ Operating system➤ Basics of popular operating system (LINUX, WINDOWS)• The User Interface<ul style="list-style-type: none">➤ Task Bar	4



	<ul style="list-style-type: none"> ➤ Icons ➤ Menu ➤ Running an Application • Operating System Simple Setting <ul style="list-style-type: none"> ➤ Changing System Date And Time ➤ Changing Display Properties ➤ To Add Or Remove A Windows Component ➤ Changing Mouse Properties ➤ Adding and removing Printers • File and Directory Management <ul style="list-style-type: none"> ➤ Creating and renaming of files and directories 	
3	<p>UNDERSTANDING WORD PROCESSING</p> <ul style="list-style-type: none"> • Word Processing Basics <ul style="list-style-type: none"> ➤ Opening Word Processing ➤ Menu Bar ➤ Using The Help ➤ Using The Icons Below Menu Bar • Opening and closing Documents <ul style="list-style-type: none"> ➤ Opening Documents ➤ Save and Save as ➤ Page Setup ➤ Print Preview ➤ Printing of Documents • Text Creation and manipulation <ul style="list-style-type: none"> ➤ Document Creation ➤ Editing Text ➤ Text Selection ➤ Cut, Copy and Paste ➤ Spell check ➤ Thesaurus • Formatting the Text <ul style="list-style-type: none"> ➤ Font and Size selection ➤ Alignment of Text ➤ Paragraph Indenting ➤ Bullets and Numbering ➤ Changing case • Table Manipulation <ul style="list-style-type: none"> ➤ Draw Table ➤ Changing cell width and height ➤ Alignment of Text in cell ➤ Delete / Insertion of row and column ➤ Border and shading 	5
4	<p>USING SPREAD SHEET</p> <ul style="list-style-type: none"> • Elements of Electronic Spread Sheet <ul style="list-style-type: none"> ➤ Opening of Spread Sheet ➤ Addressing of Cells 	5



	<ul style="list-style-type: none"> ➤ Printing of Spread Sheet ➤ Saving Workbooks • Manipulation of Cells <ul style="list-style-type: none"> ➤ Entering Text, Numbers and Dates ➤ Creating Text, Number and Date Series ➤ Editing Worksheet Data ➤ Inserting and Deleting Rows, Column ➤ Changing Cell Height and Width • Formulas and Function <ul style="list-style-type: none"> ➤ Using Formulas ➤ Function 	
5	<p>INTRODUCTION TO INTERNET, WWW AND WEB BROWSERS</p> <ul style="list-style-type: none"> • Basic of Computer Networks <ul style="list-style-type: none"> ➤ Local Area Network (LAN) ➤ Wide Area Network (WAN) • Internet <ul style="list-style-type: none"> ➤ Concept of Internet ➤ Applications of Internet ➤ Connecting to the Internet ➤ Troubleshooting • World Wide Web (WWW) • Web Browsing Softwares <ul style="list-style-type: none"> ➤ Popular Web Browsing Softwares • Search Engines <ul style="list-style-type: none"> ➤ Popular Search Engines / Search for content ➤ Accessing Web Browser ➤ Using Favourites Folder ➤ Downloading Web Pages ➤ Printing Web Pages • Understanding URL • Surfing the web • Using e-governance website 	4
6	<p>COMMUNICATIONS AND COLLABORATION</p> <ul style="list-style-type: none"> • Basics of E-mail <ul style="list-style-type: none"> ➤ What is an Electronic Mail • Using E-mails <ul style="list-style-type: none"> ➤ Opening Email account ➤ Mailbox: Inbox and Outbox ➤ Creating and Sending a new E-mail ➤ Replying to an E-mail message ➤ Forwarding an E-mail message ➤ Sorting and Searching emails • Document collaboration • Instant Messaging and Collaboration 	3



	<ul style="list-style-type: none"> ➤ Using Instant messaging ➤ Instant messaging providers ➤ Netiquettes 	
7	<p>MAKING SMALL PRESENTATIONS</p> <ul style="list-style-type: none"> • Basics <ul style="list-style-type: none"> ➤ Using PowerPoint ➤ Opening A PowerPoint Presentation ➤ Saving A Presentation • Creation of Presentation <ul style="list-style-type: none"> ➤ Creating a Presentation Using a Template ➤ Creating a Blank Presentation ➤ Entering and Editing Text ➤ Inserting And Deleting Slides in a Presentation • Preparation of Slides <ul style="list-style-type: none"> ➤ Inserting Word Table or An Excel Worksheet ➤ Adding Clip Art Pictures ➤ Inserting Other Objects ➤ Resizing and Scaling an Object • Presentation of Slides <ul style="list-style-type: none"> ➤ Viewing A Presentation ➤ Choosing a Set Up for Presentation ➤ Printing Slides And Hand-outs • Slide Show <ul style="list-style-type: none"> ➤ Running a Slide Show ➤ Transition and Slide Timings ➤ Automating a Slide Show 	5
	Total	30

