

SIX-SEMESTER IN B.Sc. DEGREE
IN
HOSPITALITY & HOTEL ADMINISTRATION

CURRICULUM

JOINTLY OFFERED BY:
NATIONAL COUNCIL FOR HOTEL MANAGEMENT
AND CATERING TECHNOLOGY
NOIDA
(NCHM&CT)

AND

INDIRA GANDHI NATIONAL OPEN UNIVERSITY
(IGNOU)

SEMESTER - I (17 WEEKS)**National Council Component****MINIMUM CONTACT HOURS FOR EACH SUBJECT**

No.	Subject code	Subject	Contact Hours per Semester	
			Th.	Pr.
1	BHM111	Foundation Course in Food Production - I	30	120
2	BHM112	Foundation Course in Food & Beverage Service - I	30	60
3	BHM113	Foundation Course in Front Office - I	30	30
4	BHM114	Foundation Course in Accommodation Operations - I	30	30
5	BHM105	Application of Computers	15	60
6	BHM106	Hotel Engineering	60	-
7	BHM116	Nutrition	30	-
TOTAL:			225	300
GRAND TOTAL			525	

WEEKLY TEACHING SCHEME (17 WEEKS)

No.	Subject code	Subject	Hours per week	
			Th.	Pr.
1	BHM111	Foundation Course in Food Production - I	02	08
2	BHM112	Foundation Course in Food & Beverage Service - I	02	04
3	BHM113	Foundation Course in Front Office - I	02	02
4	BHM114	Foundation Course in Accommodation Operations - I	02	02
5	BHM105	Application of Computers	01	04
6	BHM106	Hotel Engineering	04	-
7	BHM116	Nutrition	02	-
TOTAL:			15	20
GRAND TOTAL			35	

EXAMINATION SCHEME

No.	Subject code	Subject	Term Marks*	
			Th.	Pr.
1	BHM111	Foundation Course in Food Production - I	100	100
2	BHM112	Foundation Course in Food & Beverage Service - I	100	100
3	BHM113	Foundation Course in Front Office - I	100	100
4	BHM114	Foundation Course in Accommodation Operations - I	100	100
5	BHM105	Application of Computers	50	100
6	BHM106	Hotel Engineering	100	-
7	BHM116	Nutrition	100	-
TOTAL:			650	500
GRAND TOTAL			1150	

* Term marks will comprise 30% Incourse & 70% Term end exam marks.

BHM111 - FOUNDATION COURSE IN FOOD PRODUCTION – I (THEORY)
HOURS ALLOTTED: 30 MAXIMUM MARKS: 100

S.No.	Topic	Hours	Weight age
01	INTRODUCTION TO COOKERY A. Levels of skills and experiences B. Attitudes and behaviour in the kitchen C. Personal hygiene D. Uniforms & protective clothing E. Safety procedure in handling equipment	02	5%
02	CULINARY HISTORY A. Origin of modern cookery	01	Intro only
03	HIERARCHY AREA OF DEPARTMENT AND KITCHEN A. Classical Brigade B. Modern staffing in various category hotels C. Roles of executive chef D. Duties and responsibilities of various chefs E. Co-operation with other departments	03	10%
04	CULINARY TERMS A. List of culinary (common and basic) terms B. Explanation with examples	02	5%
05	AIMS & OBJECTS OF COOKING FOOD A. Aims and objectives of cooking food B. Various textures C. Various consistencies D. Techniques used in pre-preparation E. Techniques used in preparation	02	10%
06	BASIC PRINCIPLES OF FOOD PRODUCTION - I i) VEGETABLE AND FRUIT COOKERY A. Introduction – classification of vegetables B. Pigments and colour changes C. Effects of heat on vegetables D. Cuts of vegetables E. Classification of fruits F. Uses of fruit in cookery G. Salads and salad dressings ii) STOCKS A. Definition of stock B. Types of stock C. Preparation of stock D. Recipes E. Storage of stocks F. Uses of stocks G. Care and precautions iii) SAUCES A. Classification of sauces B. Recipes for mother sauces C. Storage & precautions	03 03 02	15% 5% 10%
07	METHODS OF COOKING FOOD A. Roasting B. Grilling C. Frying D. Baking	04	15%

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	<p>E. Broiling F. Poaching G. Boiling</p> <ul style="list-style-type: none"> • Principles of each of the above • Care and precautions to be taken • Selection of food for each type of cooking 		
08	<p>SOUPS</p> <p>A. Classification with examples B. Basic recipes of Consommé with 10 Garnishes</p>	2	10%
09	<p>EGG COOKERY</p> <p>A. Introduction to egg cookery B. Structure of an egg C. Selection of egg D. Uses of egg in cookery</p>	2	5%
10	<p>COMMODITIES:</p> <p>i) Shortenings (Fats & Oils)</p> <p>A. Role of Shortenings B. Varieties of Shortenings C. Advantages and Disadvantages of using various Shortenings D. Fats & Oil – Types, varieties</p> <p>ii) Raising Agents</p> <p>A. Classification of Raising Agents B. Role of Raising Agents C. Actions and Reactions</p> <p>iii) Thickening Agents</p> <p>A. Classification of thickening agents B. Role of Thickening agents</p> <p>iv) Sugar</p> <p>A. Importance of Sugar B. Types of Sugar C. Cooking of Sugar – various</p>	4	10%
TOTAL		30	100%

FOUNDATION COURSE IN FOOD PRODUCTION – I (PRACTICALS)**PART 'A' - COOKERY****HOURS ALLOTTED: 60****MAXIMUM MARKS: 50**

S.No	Topic	Method	Hours
1	i) Equipments - Identification, Description, Uses & handling ii) Hygiene - Kitchen etiquettes, Practices & knife handling iii) Safety and security in kitchen	Demonstrations & simple applications	04
2	i) Vegetables - classification ii) Cuts - julienne, jardinière, macedoines, brunoise, paysanne, mignonnette, dices, cubes, shred, mirepoix iii) Preparation of salad dressings	Demonstrations & simple applications by students	04
3	Identification and Selection of Ingredients - Qualitative and quantitative measures.	Market survey/tour	04
4	i) Basic Cooking methods and pre-preparations ii) Blanching of Tomatoes and Capsicum iii) Preparation of concasse iv) Boiling (potatoes, Beans, Cauliflower, etc) v) Frying - (deep frying, shallow frying, sautéing) Aubergines, Potatoes, etc. vi) Braising - Onions, Leeks, Cabbage vii) Starch cooking (Rice, Pasta, Potatoes)	Demonstrations & simple applications by students	04
5	i) Stocks - Types of stocks (White and Brown stock) ii) Fish stock iii) Emergency stock iv) Fungi stock	Demonstrations & simple applications by students	04
6	Sauces - Basic mother sauces <ul style="list-style-type: none"> • Béchamel • Espagnole • Veloute • Hollandaise • Mayonnaise • Tomato 	Demonstrations & simple applications	04
7	Egg cookery - Preparation of variety of egg dishes <ul style="list-style-type: none"> • Boiled (Soft & Hard) • Fried (Sunny side up, Single fried, Bull's Eye, Double fried) • Poaches • Scrambled • Omelette (Plain, Stuffed, Spanish) • En cocotte (eggs Benedict) 	Demonstrations & simple applications by students	04
8	Demonstration & Preparation of simple menu	Demonstrations & simple applications by students	04
9	Simple Salads & Soups: <ul style="list-style-type: none"> • Cole slaw, • Potato salad, • Beet root salad, • Green salad, • Fruit salad, • Consommé Simple Egg preparations: <ul style="list-style-type: none"> • Scotch egg, • Assorted omelettes, • Oeuf Florentine • Oeuf Benedict • Oeuf Farci • Oeuf Portugese • Oeuf Deur Mayonnaise 	Demonstration by instructor and applications by students	28

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	<p>Simple potato preparations</p> <ul style="list-style-type: none"> • Baked potatoes • Mashed potatoes • French fries • Roasted potatoes • Boiled potatoes • Lyonnaise potatoes • Allumettes <p>Vegetable preparations</p> <ul style="list-style-type: none"> • Boiled vegetables • Glazed vegetables • Fried vegetables • Stewed vegetables. 		
TOTAL			60

PART 'B' - BAKERY & PATISSERIE
HOURS ALLOTTED: 60 MAXIMUM MARKS: 50

S.No	Topic	Method	Hours
1	Equipments <ul style="list-style-type: none"> • Identification • Uses and handling Ingredients - Qualitative and quantitative measures	Demonstration by instructor and applications by students	04
2	BREAD MAKING <ul style="list-style-type: none"> • Demonstration & Preparation of Simple and enriched bread recipes • Bread Loaf (White and Brown) • Bread Rolls (Various shapes) • French Bread • Brioche 	Demonstration by instructor and applications by students	10
3	SIMPLE CAKES <ul style="list-style-type: none"> • Demonstration & Preparation of Simple and enriched Cakes, recipes • Sponge, Genoise, Fatless, Swiss roll • Fruit Cake • Rich Cakes • Dundee • Madeira 		10
4	SIMPLE COOKIES <ul style="list-style-type: none"> • Demonstration and Preparation of simple cookies like • Nan Khatai • Golden Goodies • Melting moments • Swiss tart • Tri colour biscuits • Chocolate chip • Cookies • Chocolate Cream Fingers • Bachelor Buttons. 	Demonstration by instructor and applications by students	16
5	HOT / COLD DESSERTS <ul style="list-style-type: none"> • Caramel Custard, • Bread and Butter Pudding • Queen of Pudding • Soufflé – Lemon / Pineapple • Mousse (Chocolate Coffee) • Bavaroise • Diplomat Pudding • Apricot Pudding • Steamed Pudding - Albert Pudding, Cabinet Pudding. 	Demonstration by instructor and applications by students	20
TOTAL			60

MARKING SCHEME FOR PRACTICAL EXAMINATION

MAXIMUM MARKS	100	PASS MARKS	50
DURATION	04.30 HRS		
Indenting and Scullery 30 minutes before and after the practical			

All menu items to be made from the prescribed syllabus only

Part – A (Cookery)

1. One simple salad OR soup	10
2. One simple sauce	10
3. One simple egg preparation	10
4. One simple vegetable or potato preparation	05
5. Journal	05
	40

Part – B (Bakery)

1. Bread or bread rolls	15
2. Simple cake or cookies	10
3. One dessert hot or cold	10
4. Journal	05
	40

Part – C (General Assessment)

1. Uniform & Grooming	05
2. Indenting and plan of work	05
3. Scullery, equipment cleaning and Hygiene	05
4. Viva	05

20

PARAMETERS OF ASSESMENT OF EACH DISH

A) Temperature	20%
B) Texture / Consistency	20%
C) Aroma / Flavour	20%
D) Taste	20%
E) Presentation	20%
	<u>100%</u>

NOTE:

- Journal is not allowed during indenting or practical. It must be handed over to the examiner before commencement of examination.
- Invigilation will be done by both internal and external persons.
- Extra ingredients may be made available in case of failure but of limited types and quantity (groceries and dairy products only). Only one extra attempt may be permitted.
- Uniform and grooming must be checked by the examiners before commencement of examination.
- Students are not allowed to take help from books, notes, journal or any other person.

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	B. Coffee - Origin & Manufacture - Types & Brands	01	
	C. Juices and Soft Drinks	01	
	D. Cocoa & Malted Beverages - Origin & Manufacture		
TOTAL		30	100%

FOUNDATION COURSE IN FOOD & BEVERAGE SERVICE – I (PRACTICAL)
HOURS ALLOTTED: 60 MAXIMUM MARKS: 100

S.No	Topic	Hours
01	Food Service areas – Induction & Profile of the areas	04
02	Ancillary F&B Service areas – Induction & Profile of the areas	04
03	Familiarization of F&B Service equipment	08
04	Care & Maintenance of F&B Service equipment	04
05	Cleaning / polishing of EPNS items by: <ul style="list-style-type: none"> - Plate Powder method - Polivit method - Silver Dip method - Burnishing Machine 	04
06	Basic Technical Skills Task-01: Holding Service Spoon & Fork Task-02: Carrying a Tray / Salver Task-03: Laying a Table Cloth Task-04: Changing a Table Cloth during service Task-05: Placing meal plates & Clearing soiled plates Task-06: Stocking Sideboard Task-07: Service of Water Task-08: Using Service Plate & Crumbing Down Task-09: Napkin Folds Task-10: Changing dirty ashtray Task-11: Cleaning & polishing glassware	16
07	Tea – Preparation & Service	04
08	Coffee - Preparation & Service	04
09	Juices & Soft Drinks - Preparation & Service <ul style="list-style-type: none"> • Mocktails • Juices, Soft drinks, Mineral water, Tonic water 	08
10	Cocoa & Malted Beverages – Preparation & Service	04
TOTAL		60

MARKING SCHEME FOR PRACTICAL EXAMINATION

MAXIMUM MARKS 100 PASS MARKS 50
 DURATION 03.00HRS

All Technical Skills to be tested as listed in the syllabus

	MARKS
1. Uniform / Grooming	: 10
2. Service Equipment Knowledge / Identification	: 20
3. Care Cleaning & Polishing of service equipment	: 20
4. Service skills / tasks	: 20
5. Beverage service Tea / Coffee / Soft drinks	: 20
6. Journal	: 10

100

NOTE:

- The examination should test skills and knowledge of the students by assigning sets of tasks as listed in the practical syllabus under each category.
- During table service each guest should pose one question to the candidate on the item being served. The invigilators can brief guests prior to service.

BHM113 - FOUNDATION COURSE IN FRONT OFFICE OPERATIONS – I (THEORY)
HOURS ALLOTTED: 30 MAXIMUM MARKS: 100

S.No.	Topic	Hours	Weight age
01	INTRODUCTION TO TOURISM, HOSPITALITY & HOTEL INDUSTRY A. Tourism and its importance B. Hospitality and its origin C. Hotels, their evolution and growth D. Brief introduction to hotel core areas with special reference to Front Office	03	10%
02	CLASSIFICATION OF HOTELS A. Size B. Star C. Location & clientele D. Ownership basis E. Independent hotels F. Management contracted hotel G. Chains H. Franchise/Affiliated I. Supplementary accommodation J. Time shares and condominium	05	15%
03	TYPES OF ROOMS A. Single B. Double C. Twin D. Suits	02	5%
04	TIME SHARE & VACATION OWNERSHIP A. What is time share? Referral chains & condominiums B. How is it different from hotel business? C. Classification of timeshares D. Types of accommodation and their size	03	10%
05	FRONT OFFICE ORGANIZATION A. Function areas B. Front office hierarchy C. Duties and responsibilities D. Personality traits	05	20%
06	HOTEL ENTRANCE, LOBBY AND FRONT OFFICE A. Layout B. Front office equipment (non automated, semi automated and automated)	03	10%
07	BELL DESK A. Functions B. Procedures and records	04	20%
08	FRENCH: To be taught by a professional French language teacher. A. Understanding and uses of accents, orthographic signs & punctuation B. Knowledge of cardinaux & ordinaux (Ordinal & cardinal) C. Days, Dates, Time, Months and Seasons	05	10%
TOTAL		30	100

FOUNDATION COURSE IN FRONT OFFICE OPERATIONS – I (PRACTICALS)
HOURS ALLOTTED: 30 MAXIMUM MARKS: 100

S.No.	Topic	Hours
1	Appraisal of front office equipment and furniture	2
2	Rack, Front desk counter & bell desk	2
3	Filling up of various proforma	4
4	Welcoming of guest	2
5	Telephone handling	4
6	Role play: <ul style="list-style-type: none"> • Reservation • Arrivals • Luggage handling • Message and mail handling • Paging 	4 4 2 4 2
TOTAL		30

MARKING SCHEME FOR PRACTICAL EXAMINATION

MAXIMUM MARKS 100 PASS MARKS 50
DURATION 03.00 HRS

		MARKS
1.	UNIFORM & GROOMING	: 10
2.	COURTESY & MANNERS	: 10
3.	SPEECH AND COMMUNICATION	: 10
4.	TECHNICAL KNOWLEDGE	: 20
5.	PRACTICAL SITUATION HANDLING	: 40
6.	JOURNAL	: 10
		100

NOTE:

1. Speech, Communication, Courtesy and Manners should be observed throughout.
2. 200 technical questions to be prepared in advance, covering the entire syllabus.
3. Practical situations – at least 25 situations be made representing all aspects of the syllabus.

BHM114 - FOUNDATION COURSE IN ACCOMMODATION OPERATIONS – I (THEORY)
HOURS ALLOTTED: 30 MAXIMUM MARKS: 100

S.No.	Topic	Hours	Weight age
01	THE ROLE OF HOUSEKEEPING IN HOSPITALITY OPERATION Role of Housekeeping in Guest Satisfaction and Repeat Business	02	5%
02	ORGANISATION CHART OF THE HOUSEKEEPING DEPARTMENT A. Hierarchy in small, medium, large and chain hotels B. Identifying Housekeeping Responsibilities C. Personality Traits of housekeeping Management Personnel. D. Duties and Responsibilities of Housekeeping staff E. Layout of the Housekeeping Department	08	25%
03	CLEANING ORGANISATION A. Principles of cleaning, hygiene and safety factors in cleaning B. Methods of organising cleaning C. Frequency of cleaning daily, periodic, special D. Design features that simplify cleaning E. Use and care of Equipment	04	15%
04	CLEANING AGENTS A. General Criteria for selection B. Classification C. Polishes D. Floor seats E. Use, care and Storage F. Distribution and Controls G. Use of Eco-friendly products in Housekeeping	05	20%
05	COMPOSTION, CARE AND CLEANING OF DIFFERENT SURFACES A. Metals B. Glass C. Leather, Leatherites, Rexines D. Plastic E. Ceramics F. Wood G. Wall finishes H. Floor finishes	05	15%
06	INTER DEPARTMENTAL RELATIONSHIP A. With Front Office B. With Maintenance C. With Security D. With Stores E. With Accounts F. With Personnel G. Use of Computers in House Keeping department	02	10%
07	USE OF COMPUTERS IN HOUSE KEEPING DEPARTMENT	04	10
TOTAL		30	100%

FOUNDATION COURSE IN ACCOMMODATION OPERATIONS – I (PRACTICAL)
HOURS ALLOTTED: 30 MAXIMUM MARKS: 100

S.No.	Topic	Hours
01	Sample Layout of Guest Rooms <ul style="list-style-type: none"> • Single room • Double room • Twin room • Suite 	02
02	Guest Room Supplies and Position <ul style="list-style-type: none"> • Standard room • Suite • VIP room special amenities 	04
03	Cleaning Equipment-(manual and mechanical) <ul style="list-style-type: none"> • Familiarization • Different parts • Function • Care and maintenance 	04
04	Cleaning Agent <ul style="list-style-type: none"> • Familiarization according to classification • Function 	02
05	Public Area Cleaning (Cleaning Different Surface) <p>A. WOOD</p> <ul style="list-style-type: none"> • polished • painted • Laminated <p>B. SILVER/ EPNS</p> <ul style="list-style-type: none"> • Plate powder method • Polivit method • Proprietary solution (Silvo) <p>C. BRASS</p> <ul style="list-style-type: none"> • Traditional/ domestic 1 Method • Proprietary solution 1 (brasso) <p>D. GLASS</p> <ul style="list-style-type: none"> • Glass cleanser • Economical method(newspaper) <p>E. FLOOR - Cleaning and polishing of different types</p> <ul style="list-style-type: none"> • Wooden • Marble • Terrazzo/ mosaic etc. <p>F. WALL - care and maintenance of different types and parts</p> <ul style="list-style-type: none"> • Skirting • Dado • Different types of paints(distemper Emulsion, oil paint etc) 	14
06	Maid's trolley <ul style="list-style-type: none"> • Contents • Trolley setup 	02
07	Familiarizing with different types of Rooms, facilities and surfaces <ul style="list-style-type: none"> • Twin/ double • Suite • Conference etc 	02
TOTAL		30

MARKING SCHEME FOR PRACTICAL EXAMINATION

MAXIMUM MARKS	100	PASS MARKS	50
DURATION		03.00HRS	

			MARKS
1.	UNIFORM & GROOMING	:	10
2.	GUEST ROOM SUPPLIES & POSITION	:	10
3.	SURFACE CLEANING (TWO DIFFERENT SURFACES)	:	30
4.	MAIDS TROLLEY	:	10
5.	CARE & CLEANING OF EQUIPMENT	:	10
6.	VIVA	:	20
7.	JOURNAL	:	10
			100

NOTE:

1. Time limit of the examination should be strictly adhered to.
2. Tasks should be limited to the syllabus

BHM105 - APPLICATION OF COMPUTERS – THEORY
HOURS ALLOTTED: 15 MAXIMUM MARKS: 50

S.No.	Topic	Hours	Weight age
01	<p>COMPUTER FUNDAMENTALS - THEORY</p> <p>INFORMATION CONCEPTS AND PROCESSING</p> <p>A. Definitions B. Need, Quality and Value of Information C. Data Processing Concepts</p> <p>ELEMENTS OF A COMPUTER SYSTEM</p> <p>A. Definitions B. Characteristics of Computers C. Classification of Computers D. Limitations</p> <p>HARDWARE FEATURES AND USES</p> <p>A. Components of a Computer B. Generations of Computers C. Primary and Secondary Storage Concepts D. Data Entry Devices E. Data Output Devices</p> <p>SOFTWARE CONCEPTS</p> <p>A. System Software B. Application Software C. Language Classification D. D. Compilers and Interpreters</p>	05	05%
02	<p>OPERATING SYSTEMS/ENVIRONMENTS - THEORY</p> <p>BASICS OF MS-DOS</p> <p>A. Internal commands B. External commands</p> <p>INTRODUCTION TO WINDOWS</p> <p>A. GUI/Features B. What are Windows and Windows 95 and above? C. Parts of a Typical Window and their Functions</p>	05	20%
03	<p>NETWORKS – THEORY</p> <p>A. Network Topology</p> <ul style="list-style-type: none"> • Bus • Star • Ring <p>B. Network Applications</p> <p>C. Types of Network</p> <ul style="list-style-type: none"> • LAN • MAN • WAN <p>D. Network Configuration Hardware</p> <ul style="list-style-type: none"> • Server • Nodes <p>E. Channel</p>	05	35%

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	<ul style="list-style-type: none"> • Fibre optic • Twisted • Co-axial <p>F. Hubs</p> <p>G. Network Interface Card</p> <ul style="list-style-type: none"> • Arcnet • Ethernet <p>H. Network Software</p> <ul style="list-style-type: none"> • Novel • Windows NT 		
TOTAL		15	100%

APPLICATION OF COMPUTERS – PRACTICAL
HOURS ALLOTTED: 60 MAXIMUM MARKS: 100

S.No.	Topic	Hours	Weight age
01	WINDOWS OPERATIONS A. Creating Folders B. Creating Shortcuts C. Copying Files/Folders D. Renaming Files/Folders E. Deleting Files F. Exploring Windows G. Quick Menus	05	15%
02	MS-OFFICE 2007 MS WORD CREATING A DOCUMENT A. Entering Text B. Saving the Document C. Editing a Document already saved to Disk D. Getting around the Document E. Find and Replace Operations F. Printing the Document FORMATTING A DOCUMENT A. Justifying Paragraphs B. Changing Paragraph Indents C. Setting Tabs and Margins D. Formatting Pages and Documents E. Using Bullets and Numbering F. Headers/Footers G. .Pagination SPECIAL EFFECTS A. Print Special Effects e.g. Bold, Underline, Superscripts, Subscript B. Changing Fonts C. .Changing Case CUT, COPY AND PASTE OPERATION A. Marking Blocks B. Copying and Pasting a Block C. Cutting and Pasting a Block D. Deleting a Block E. Formatting a Block F. Using Find and Replace in a Block USING MS-WORD TOOLS A. Spelling and Grammar B. Mail Merge C. .Printing Envelops and Labels TABLES A. Create B. Delete C. Format GRAPHICS A. Inserting Clip arts B. Symbols (Border/Shading) C. Word Art PRINT OPTIONS	15	25%

	<ul style="list-style-type: none"> A. Previewing the Document B. Printing a whole Document C. Printing a Specific Page D. Printing a selected set E. Printing Several Documents F. Printing More than one Copies 		
03	<p>MS OFFICE 2007 MS-EXCEL</p> <ul style="list-style-type: none"> A. How to use Excel B. Starting Excel C. Parts of the Excel Screen D. Parts of the Worksheet E. Navigating in a Worksheet F. Getting to know mouse pointer shapes <p>CREATING A SPREADSHEET</p> <ul style="list-style-type: none"> A. Starting a new worksheet B. Entering the three different types of data in a worksheet C. Creating simple formulas D. Formatting data for decimal points E. Editing data in a worksheet F. Using AutoFill G. Blocking data H. Saving a worksheet I. Exiting excel <p>MAKING THE WORKSHEET LOOK PRETTY</p> <ul style="list-style-type: none"> A. Selecting cells to format B. Trimming tables with Auto Format C. Formatting cells for: <ul style="list-style-type: none"> - Currency - Comma - Percent - Decimal - Date D. Changing columns width and row height E. Aligning text <ul style="list-style-type: none"> - Top to bottom - Text wrap - Re ordering Orientation F Using Borders <p>GOING THROUGH CHANGES</p> <ul style="list-style-type: none"> A. Opening workbook files for editing B. Undoing the mistakes C. Moving and copying with drag and drop D. Copying formulas E. Moving and Copying with Cut, Copy and Paste F. Deleting cell entries G. Deleting columns and rows from worksheet H. Inserting columns and rows in a worksheet I. Spell checking the worksheet <p>PRINTING THE WORKSHEET</p> <ul style="list-style-type: none"> A. Previewing pages before printing B. Printing from the Standard toolbar C. Printing a part of a worksheet D. Changing the orientation of the printing E. Printing the whole worksheet in a single pages 	15	25%

	<p>F. Adding a header and footer to a report G. Inserting page breaks in a report H. Printing the formulas in the worksheet</p> <p>ADDITIONAL FEATURES OF A WORKSHEET</p> <p>A. Splitting worksheet window into two four panes B. Freezing columns and rows on-screen for worksheet title C. Attaching comments to cells D. Finding and replacing data in the worksheet E. Protecting a worksheet F. Function commands</p> <p>MAINTAINING MULTIPLE WORKSHEET</p> <p>A. Moving from sheet in a worksheet B. Adding more sheets to a workbook C. Deleting sheets from a workbook D. Naming sheet tabs other than sheet 1, sheet 2 and so on E. Copying or moving sheets from one worksheet to another</p> <p>CREATING GRAPHICS/CHARTS</p> <p>A. Using Chart wizard B. Changing the Chart with the Chart Toolbar C. Formatting the chart's axes D. Adding a text box to a chart E. Changing the orientation of a 3-D chart F. Using drawing tools to add graphics to chart and worksheet G. Printing a chart with printing the rest of the worksheet data</p> <p>EXCEL'S DATABASE FACILITIES</p> <p>A. Setting up a database B. Sorting records in the database</p>		
04	<p>MS OFFICE 2007 MS-POWER POINT</p> <p>A. Making a simple presentation B. Using Auto content Wizards and Templates C. Power Points five views D. Slides - Creating Slides, re-arranging, modifying - Inserting pictures, objects - Setting up a Slide Show E. Creating an Organizational Chart</p>	20	25%
05	Internet & E-mail – PRACTICAL	05	10%
TOTAL		60	100%

MARKING SCHEME FOR PRACTICAL EXAMINATION

MAXIMUM MARKS

100

PASS MARKS

50

MARKS

- | | | | |
|----|------------------------------|---|----|
| 1. | VIVA | : | 20 |
| 2. | Typing & Printing (20 lines) | : | 20 |
| 3. | 6 tasks of 10 marks each | : | 60 |

100

(Refer syllabus for tasks)

BHM106 - HOTEL ENGINEERING
HOURS ALLOTTED: 60 MAXIMUM MARKS: 100

S.No.	Topic	Hours	Weight age
01	MAINTENANCE: A. Preventive and breakdown maintenance, comparisons B. Roll & Importance of maintenance department in the hotel industry with emphasis on its relation with other departments of the hotel. C. Organization chart of maintenance department, duties and responsibilities of maintenance department	03	5%
02.	Fuels used in catering industry: A. Types of fuel used in catering industry; calorific value; comparative study of different fuels B. Calculation of amount of fuel required and cost.	04	5%
03	Gas: A. Heat terms and units; method of transfer B. LPG and its properties; principles of Bunsen and burner, precautions to be taken while handling gas; low and high-pressure burners, corresponding heat output. C. Gas bank, location, different types of manifolds	04	5%
04	Electricity: A. Fundamentals of electricity, insulators, conductors, current, potential difference resistance, power, energy concepts; definitions, their units and relationships, AC and DC; single phase and three phase and its importance on equipment specifications B. Electric circuits, open circuits and close circuits, symbols of circuit elements, series and parallel connections, short circuit, fuses; MCB, earthing, reason for placing switches on live wire side. C. Electric wires and types of wiring D. Calculation of electric energy consumption of equipment, safety precaution to be observed while using electric appliances. E. Types of lighting, different lighting devices, incandescent lamps, fluorescent lamps, other gas discharged lamps, illumination, and units of illumination. F. External lighting G. Safety in handling electrical equipment.	06	10%
05.	Water systems: A. Water distribution system in a hotel B. Cold water systems in India C. Hardness of water, water softening, base exchange method (Demonstration) D. Cold water cistern swimming pools E. Hot water supply system in hotels F. Flushing system, water taps, traps and closets.	04	5%
06	Refrigeration & Air-conditioning: A. Basic principles, latent heat, boiling point and its dependence on pressure, vapour compressor system of refrigeration and refrigerants B. Vapour absorption system, care and maintenance of refrigerators, defrosting, types of refrigerant units, their care and maintenance. (Demonstration) C. Conditions for comfort, relative humidity, humidification, de-humidifying, dew point control, unit of air conditioning D. Window type air conditioner, central air conditioning, preventive maintenance E. Vertical transportation, elevators, escalators.	10	15%
07	Fire prevention and fire fighting system: A. Classes of fire, methods of extinguishing fires (Demonstration)	04	10%

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	<ul style="list-style-type: none"> B. Fire extinguishers, portable and stationery C. Fire detectors and alarm D. Automatic fire detectors cum extinguishing devices E. Structural protection F. Legal requirements 		
08	<p>Waste disposal and pollution control:</p> <ul style="list-style-type: none"> A. Solid and liquid waste, sullage and sewage, disposal of solid waste B. Sewage treatment C. Pollution related to hotel industry D. Water pollution, sewage pollution E. Air pollution, noise pollution, thermal pollution F. Legal Requirements 	05	10%
09	<p>Safety:</p> <ul style="list-style-type: none"> A. Accident prevention B. Slips and falls C. Other safety topics 	01	5%
10.	Security	01	10%
11.	<p>Equipment replacement policy:</p> <ul style="list-style-type: none"> A. Circumstances under which equipment are replaced. B. Replacement policy of items which gradually deteriorates C. Replacement when the average annual cost is minimum D. Replacement when the present cost is minimum E. Economic replacement cycle for suddenly failing equipment 	05	5%
12.	<p>Audio visual equipments:</p> <ul style="list-style-type: none"> A. Various audio visual equipment used in hotel B. Care and cleaning of overhead projector, slide projector, LCD and power point presentation units C. Maintenance of computers: D. Care and cleaning of PC, CPU, Modem, UPS, Printer, Laptops E. Sensors – Various sensors used in different locations of a hotel – type, uses and cost effectiveness 	08	10%
13.	<p>Contract maintenance:</p> <ul style="list-style-type: none"> A. Necessity of contract maintenance, advantages and disadvantages of contract maintenance B. Essential requirements of a contract, types of contract, their comparative advantages and disadvantages. C. Procedure for inviting and processing tenders, negotiating and finalizing 	03	5%
TOTAL		60	100%

BHM116 - NUTRITION
HOURS ALLOTTED: 30 MAXIMUM MARKS: 100

S.No.	Topic	Hours	Weight age
01	BASIC ASPECTS A. Definition of the terms Health, Nutrition and Nutrients B. Importance of Food – (Physiological, Psychological and Social function of food) in maintaining good health. C. Classification of nutrients	01	5%
02	ENERGY A. Definition of Energy and Units of its measurement (Kcal) B. Energy contribution from macronutrients (Carbohydrates, Proteins and Fat) C. Factors affecting energy requirements D. Concept of BMR, SDA, Thermodynamic action of food E. Dietary sources of energy F. Concept of energy balance and the health hazards associated with Underweight, Overweight	03	10%
03	MACRO NUTRIENTS <p style="text-align: center;">Carbohydrates</p> <ul style="list-style-type: none"> • Definition • Classification (mono, di and polysaccharides) • Dietary Sources • Functions • Significance of dietary fibre (Prevention/treatment of diseases) <p style="text-align: center;">Lipids</p> <ul style="list-style-type: none"> • Definition • Classification : Saturated and unsaturated fats • Dietary Sources • Functions • Significance of Fatty acids (PUFAs, MUFAs, SFAs, EFA) in maintaining health • Cholesterol – Dietary sources and the Concept of dietary and blood cholesterol <p style="text-align: center;">Proteins</p> <ul style="list-style-type: none"> • Definition • Classification based upon amino acid composition • Dietary sources • Functions • Methods of improving quality of protein in food (special emphasis on Soya proteins and whey proteins) 	04 04 04	10% 10% 10%
04	MACRO NUTRIENTS A. Vitamins <ul style="list-style-type: none"> • Definition and Classification (water and fats soluble vitamins) • Food Sources, function and significance of: <ol style="list-style-type: none"> 1. Fat soluble vitamins (Vitamin A, D, E, K) 2. Water soluble vitamins (Vitamin C, Thiamine, Riboflavin, Niacin, Cyanocobalamin Folic acid) B. MINERALS <ul style="list-style-type: none"> • Definition and Classification (major and minor) • Food Sources, functions and significance of : Calcium, Iron, Sodium, Iodine & Flourine 	05 03	15% 10%

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05	WATER <ul style="list-style-type: none"> • Definition • Dietary Sources (visible, invisible) • Functions of water • Role of water in maintaining health (water balance) 	01	5%
06	BALANCED DIET <ul style="list-style-type: none"> • Definition • Importance of balanced diet • RDA for various nutrients – age, gender, physiological state 	01	5%
07	MENU PLANNING <ul style="list-style-type: none"> • Planning of nutritionally balanced meals based upon the three food group system • Factors affecting meal planning • Critical evaluation of few meals served at the Institutes/Hotels based on the principle of meal planning. • Calculation of nutritive value of dishes/meals. 	02	10%
08	A. MASS FOOD PRODUCTION <ul style="list-style-type: none"> • Effect of cooking on nutritive value of food (QFP) 	01	5%
09	NEWER TRENDS IN FOOD SERVICE INDUSTRY IN RELEVANCE TO NUTRITION AND HEALTH <ul style="list-style-type: none"> • Need for introducing nutritionally balanced and health specific meals • Critical evaluation of fast foods • New products being launched in the market (nutritional evaluation) 	01	5%
TOTAL		30	100%