

STATE INSTITUTE OF VOCATIONAL EDUCATION
O/o. Directorate of Intermediate Education
A.P. Hyderabad.

SHORT TERM VOCATIONAL CERTIFICATE COURSES
(3 MONTHS DURATION)

Sl. No.	Name of the Course	Duration	Eligibility
I.	Agriculture :	One Module	
1.	Bee Keeping (Apiculture)	Three Months	SSC Failed
2.	Mushroom Culture	Three Months	SSC Failed
II.	Engineering & Technology :		
1	Motor Driving	Three Months	SSC Failed
III.	Computer Science Courses		
1	Web Designing & Internet	Three Months	SSC Failed
2.	Computer Maintenance	Three Months	SSC Failed
3.	M.S. Office	Three Months	Inter
4.	Unix C & C++	Three Months	Inter
5.	V.B. & Oracle	Three Months	Inter
6.	VB & ASP	Three Months	Inter
7.	Oracle with D2K	Three Months	Inter
8.	Oracle with DBA	Three Months	Inter
9.	DTP	Three Months	Inter
10.	Auto CAD	Three Months	Inter
11.	Accounting Package	Three Months	Inter
IV.	Home Science Courses		
1	Apparel Construction	Three Months	SSC Failed
2.	Tie & Die, Block Batik, Screen Printing	Three Months	SSC Failed
3.	Computer based fashion designing	Three Months	SSC Failed
4.	Soft Toys & Flower Making	Three Months	SSC Failed
5.	Beautician Course	Three Months	SSC Failed
6.	Cookery	Three Months	SSC Failed
7.	Embroidary & Zig-Zag	Three Months	SSC Failed

SYLLABUS

I. AGRICULTURE

Bee Keeping (Apiculture)

Mushroom Culture

1. BEEKEEPING (APICULTURE)

Introduction :

Beekeeping industry is not a traditional industry like other village industries. Scientific and modern beekeeping is of recent origin in India. It not only generates employment and subsidiary income to the people but also protects the beneficiary insects like honey bees from destruction by bee hunters, urbanization and indiscriminate spray of insecticides in modern agriculture.

Objectives :

- | To train the students in basic aspects of Bee Keeping.
- | To train the students in Honey processing and Marketing.
- | Generation of Employment opportunities.

Skills to be provided

- | Seasonal management of honey bees.
- | Sugar feeding technique.
- | Rearing of queen bees by grafting.
- | Honey extraction technique.
- | To identify symptoms of disease & taking up preventive & control measures.
- | Royal jelly & Bee venom extraction.

Self employment

- | Commercial bee breeder/bee keeper.

Wage Employment

- | Bee Keeping Field Man

Collaborating institutions :

- | Non-Government organizations.
- | State and National research institutes :-
Central bee Research and Training Institute Pune. National Bee Board, New Delhi.
- | Horticulture Department

| Girijan co-operative corporation

| ITDA

Scheme of instruction / Examinations :

Modules	Theory		On-the-job training		Total	
	Hours	Weightage	Hours	Weightage	Hours	Weightage
Module - I	72	30	216	70	288	100
Total	72	30	216	70	288	100

Scheme of Instruction / Week

	Theory	On-the-job Training	Total
Module I	6	18	24 Hours

Syllabus for Module :

Theory : 72 hours

Hours allotted

1. Introduction to Apiculture - scope, importance 2 hrs.
2. Apiculture development in India - institutions involved 2 hrs.
3. Species of Honey bees - indigenous, exotic - basic concepts of morphology 4 hrs.
4. Honey - its medicinal properties - application in various fields - other valuable by products of honey bees. 6 hrs.
5. Marketing aspects of honey, royal jelly and bee venom. 3 hrs.
6. Rock bee honey - extraction of honey from wild colonies honey hunting. 3 hrs.
7. Life cycle of honey bees - seasonal management of colonies - swarming desertion - control measures. 7 hrs.
8. Bee keeping equipment - introduction to types of bee boxes - BIS standard Tools used in apiculture Bee breeding multiplication of colonies - Queen reaching technique. 10 hrs.
9. Bee flora - importance propagation - congenial conditions for starting up of apiculture. 6 hrs.
10. Migratory Bee Keeping - designing floral Calender 4 hrs.
11. Improved Agricultural practices - crop pollination - Pesticides impact on Honey bees. 6 hrs.
12. Honey extraction & handling - Quality control standards - Honey testing kit - Processing of honey. 6 hrs.
13. Bee venom & Royal jelly extraction. 5 hrs,
14. Diseases of Honey Bees - Preventive & Control measures-Sac brood virus, Thai sac brood virus, Nosema, American foul brood, European foul brood. 8 hrs.

On the Job Training 216 Hrs.

1. Capturing of colony and starting up of Apiary.
2. Identification of different species and classes of Honey bees.
3. Introduction of different stages in life cycle of Honey bees.
4. Bee keeping unit - Handling of frames with colonies.
5. Introduction of parts of Bee box - ISI 'A' type 'B' type & Tools used in Bee keeping.
6. Laying of C. F. sheet and G. I. Wires in a frame.
7. Colony inspection, maintenance - writing up of inspection report.
8. Identification of Queen cells, Drone cells & Brood.
9. Sugar feeding of colonies in scarcity period.
10. Identification of swarming tendency in a colony - Removal of Drone cells.
11. Identification of kinds of Queen cells.
12. Methods of Multiplication of Bee Colonies.
13. Steps for strengthening of colonies - Requeening technique.
14. Bee flora - Propagation of bee plants - Preparation of floral calender.
15. Migratory Bee Keeping - measures to be taken while transporting colonies-Mapping of areas for migration.
16. Water requirement of Honey bees.
17. Extraction of Honey using Honey extractor, moisture reduction, packing and storing of Honey.
18. Methods of Extraction of Bees wax, Royal Jelly and Bee venom.
19. Honey testing kit - Physical and chemical methods of analysis.
20. Fermentation and Granulation of Honey.
21. Disease management - Identification of symptoms of Nosema. Sac brood Virus, Thai sac brood virus, American foul brood and European foul brood diseases.
22. Preventive and control measures of the diseases.
23. Application of antibiotics to colonies - Destruction of diseased colonies and disinfection of frames.
24. Management of Apis melifers
Equipments, Procurement of Colonies, location and management during scarcity, Building up of the colonies, importance of drawn out combs, multiplication of colonies, Honey Flow management.
25. Management of colonies for different hive products.
26. Natural enemies and predators of Honey Bees - management involved.

On job training Sites :

Site - Agricultural Research Station, Vijayrai, West Godavari Field Station, K.V.K. Vinayashram, Kavuru, Guntur.

Syllabus - Starting up of Bee Keeping seasonal management, multiplication methods, rearing of Queen Bees, Grafting methods, Swarming and desertion control measures, Honey, Bees Wax, Royal Jelly and Bee Venom extraction, moisture reduction and packing of Honey.

Inputs for the Course :

Bee Keeping implements :

1.	Smoker	-	1
2.	Honey extractor	-	1
3.	Swarm net	-	1
4.	Bee Veil	-	1
5.	Queen cage	-	1
6.	Queen gate	-	1
7.	Uncapping knife	-	1
8.	Hive tool	-	1
9.	Queen cell protector	-	1
10.	Drone trap	-	1
11.	Queen excluder sheet	-	1
12.	Solar wax extractor	-	1
13.	Hand gloves - cotton only	-	1

Raw Materials

Consumables :

- Comb foundation sheet
- G.I. Wires
- Antibiotics
- Chemical reagents
- Polybags for raising seedlings

Qualification for Teaching faculty

M.Sc. (Entomology) theory

Khadi Village Industries Committee state office Gandhi Bhavan, Hyderabad. Practicals by Field Officer.

Reference Books

1. Prospectives in Indian Apiculture - R.C. Mishra
2. Rearing queen bees in India - M.C. Suryanarayana et al.
3. Bee Keeping in India - G. K. Ghosh
4. Technology and value addition of Honey - Dr. D. M. Wakhle and K. D. Kamble.
5. ABC & XYZ of Bee culture - A. I. Root
6. Indian Bee Journal - All India Bee Keeping Association
7. Asian Bee Journal

List of Participants

1. K. V. Vanajalatha
Horticulture Officer,
Apiculture,
O/o Director of Horticulture,
A. P. Hyderabad.
2. Sri V. S. Rao,
Supervisor, Beekeeping,
K. V. I. C. State Office,
Gandhi Bhavan,
Hyderabad.
3. M. Lakshman Rao,
Reader (SIVE)
O/o Commissioner of Intermediate Education, Hyderabad

2. MUSHROOM CULTURE

I. Introduction :

Mushrooms belong to a group of plant kingdom called fungi, because it lacks chlorophyll, It cannot prepare its own food material. It takes food from other living or non living organisms. Mushrooms are found in nature in many places on dry leaves, logs, straw etc. There are about 30000 varieties of mushrooms in nature. Among them about 2000 are edible. Scientists have identified methods of cultivation for 10 varieties. Because of its nutritional aspects and export potential, mushroom cultivation is becoming popular.

II. Objectives of the course :

To train the students in mushroom cultivation, not only for improving their economic standards but also for improving their nutritional standards.

Specific objectives

1. To train the students to scientifically maintain the mushroom laboratory.
2. To train the students maintain the oyster mushroom crop.
3. To train the students to take care of the pests and diseases on mushrooms.
4. To train the students about the nutritional aspects of mushrooms.
5. To train the students in low cost production and marketing of oyster mushrooms.

III. Skills to be provided

1. To prepare the pure culture stains.
2. To prepare the mother spawn.
3. To prepare the spawn.
4. Skill in handling equipment
5. Skills on maintaining oyster mushroom cropping room.
6. Skills in mushroom processing.

IV. Employment Opportunities

a. Wage :

1. Lab assistant in mushroom labs.
2. Mushroom marketer in a industry
3. Mushroom lab equipment operator in a lab.
4. Mushroom spawn producer in a lab.
5. Mushroom processor in a farm.

b. Self employment

1. Mushroom spawn produce
2. Mushroom grower (crop producer)
3. Mushroom marketer
4. Mushroom processor.

V. Scheme of instructions

Modules	Theory		On-the-job training		Total	
	Hours	Weightage	Hours	Weightage	Hours	Weightage
Module - I	72	30	216	70	288	100
Total	72	30	216	70	288	100

V. Scheme of instructions/Week

Module	Theory	On-the-job Training	Total
One	6 Hours	18 Hours	24 Hours

VI. Syllabus

A. Mushrooms, Nutritional and Spawn

Theory 35 hours.

1. Introduction of mushroom science 01 hrs.
2. Mushroom biology including edible and poisonous mushrooms 01 hrs.
3. Brief history of mushroom cultivation 02 hrs.
4. Importance of mushrooms, Nutritional and medicinal aspects. 02 hrs.
5. Preparation of spawn. 03 hrs.
6. Pure culture 04 hrs.
7. Mother spawn. 06 hrs.
8. Spawn 06 hrs.
9. Maintenance of Mushroom lab and equipment 03 hrs.
10. Design, equipment and register. 02 hrs.
11. Economics 01 hrs.

B. On the Job Training

107 Hrs.

1. Identification of edible and poisonous wild Mushrooms
2. Preparation of slants.
3. Collection of tissue.
4. Preparation of pure cultures
5. Incubation of pure cultures.
6. Disease identification in pure cultures.
7. Preparation of mother spawn.
8. Incubation of mother spawn.
9. Disease identification of mother spawn.
10. Storing the cultures and mother spawn

11. Preparation of spawn.
12. Boiling the grains
13. Sterilising the bottles
14. Inoculating the bottles
15. Incubating the bottles
16. Disease identification in spawn.
17. Preserving the spawn
18. Marketing
19. Lab maintenance
20. Equipment handling.
21. Visit to Mushroom lab.

B. Cultivation Theory (37 hours)

Other Mushroom Cultivation

- | | |
|--|--------|
| 1. Importance of Oyster Mushroom Cultivation | 1 hrs. |
| 2. Selection of Various substrates | 2 hrs. |
| 3. Sterilizing the Substrate | 3 hrs. |
| 4. Bag filling | 2 hrs. |
| 5. Spawning | 3 hrs. |
| 6. Incubating the beds | 3 hrs. |
| 7. Shifting to Cropping room | 3 hrs. |
| 8. Pests & Diseases | 3 hrs. |
| 9. Harvesting | 2 hrs. |
| 10. Processing | 3 hrs. |
| 11. Marketing | 3 hrs. |
| 12. Recipes | 3 hrs. |
| 13. Economics | 3 hrs. |
| 14. Cultivation of Paddy Straw and other Mushrooms | 2 hrs. |
| 15. Low cost Mushroom farm design & Production | 2 hrs. |

On the Job Training

109 Hrs.

1. Construction of Low Cost Mushroom rooms.
2. Construction of Incubation room
3. Cropping room conditions.
4. Selection of Material in Incubation & Cropping rooms
5. Hanging / Rack Systems
6. Substrate selection

7. Sterilization / Hygiene
8. Bed Preparation / Spawning /
9. Incubation - Study of conditions
10. Cropping - Study of Conditions
11. Disease identification in beds
12. Maintenance of Cropping room
13. Spraying of water on beds / in cropping room
14. Harvesting
15. Packing
16. Drying
17. Powdering
18. Packing & Labelling
19. Low cost production of Mushrooms
20. Preparation of Recipes
21. Bi-Products
22. Establishment of Mushroom fast food center
23. Mushroom recipe demonstration - organization
24. Marketing of Mushrooms.

VII. List of Equipment / Machinery required for pure culture

Equipment :

1. Test tubes	-	50
2. Test tube holders	-	10
3. Measuring Jar	-	2
4. Kettle	-	1
5. Gas stove / Kerosene stove	-	1
6. Cooker (or) Autoclave	-	1
7. Laminar flow	-	1
8. Bunsen Burner / Spirit lamps	-	5
9. Forceps	-	5
10. Electric Weighing Machine	-	1 (0.1 gm to 1 kg)
11. Thermometer		
12. Hygrometer		
13. Glass rods		

14. BOD Incubator
15. Inoculation needle 1 loop

1. Equipment for spawn :

1. Gas stove/Kerosne	stove -1	
2. Autoclave		
3. Laminar flow	-	1
4. Bunsen burner / Spirit lamps	-	5
5. Forceps	-	5
6. Inoculation loops	-	10
7. Bottles	-	100
8. Aluminium sieve		
9. Weighing balance	-	1
10. Thermometer		
11. Hygrometer		
12. Vessels	-	2
13. Buckets	-	2
14. Sieve		
15. Sprayer		

Equipment for spawn production :

1. Gas Stove / Kerosene stove		
2. Auto clave	-	1
3. Laminar flow	-	1
4. Spirit lamps	-	5
5. Bottles	-	300
6. Aluminium sieve	-	1
7. small iron rod	-	1
8. Weighing balance	-	1
9. Thermometer		
10. Hygrometer		

Equipment for Cropping

1. Paddy straw chopper / motor
2. Drums (200 lts) - 2
3. Thermometer
4. Hygrometer
5. Hand sprayer

6. Gunny bags - 50
7. Humidifier

III. List of Raw Material for pure culture

Raw Material (Consumable)

1. Distilled water
2. Malt extract agar
3. Non absorbant cotton
4. Spirit
5. Tissue

Non Consumable

1. Spirit lamp
2. Inoculation Needle
3. Test Tubes

Raw Material for spawn :

Consumable

1. Jowar
2. Caco3 & Calcium Sulphate
3. Water
4. Culture tube
5. Spirit
6. Non-absorbent cotton
7. Empty Saline bottles

Non consumable

1. Sieve
2. Stove
3. Vessels
4. Spirit lamp
5. Laminar Flow

Material for Cropping :

1. Paddy straw
2. Bavistirel Bavistine
3. Formaldehyde
4. Malathion
5. Sand

6. Gunny bags
7. Potassium Permanganate
8. Racks / Hanging
9. Polythene covers for beds
10. Poly thene covers for packing
11. Vessels for Boiling
12. Stove / Firewood
13. Sprayers

Material for spawn production :

1. Jowar
2. Caco3
3. Non absorbant cotton
4. Spirit
5. Polythene cover 6" * 8" (Self locking)

VIV. Qualification for Teaching Faculty - B,Sc. (Ag.)/B.Sc. (Horticulture) with background of any Diploma in concerned course-plant Pathology / M.Sc. Mycology

X. List of Reference Books :

1. Handbook on Mushrooms by Nita Bahl Published by Oxford & IBH publishing Company.
2. Mushroom Cultivation by J.N. Kapoor published by ICAR, New Delhi.
3. A handbook of cultivated mushrooms by Dr. Ashok Ghanekar.
4. Handbook of Horticulture IARI, New Delhi.

XI. List of Participants

1. **Smt. Dr. Suhasini** Asst. Director,
Mushroom Lab, Horticulture Dept. Hyderabad.
2. **Sri N.P. Padmanabha**
Horticulture officer, Mushroom Lab, Horticulture Dept. Hyderabad.
3. **M. Lakshma Rao,**
Horticulture officer, Mushroom Lab, Horticulture Dept. Hyderabad.

II. ENGINEERING & TECHNOLOGY

Motor Driving

1. MOTOR DRIVING (THREE MONTHS)

Introduction

Driving vehicles is a common practice in every man's life. Some people drive their vehicles by themselves while others appoint drivers. Immaterial of who drives the vehicles the rules and regulations to be adopted are same to all. This course equips a person with the basic knowledge that is required to drive safely and live a long life.

Employment Opportunities :

Wage Employment

Can work as paid employee as driver

Self Employment

Can drive own vehicle (self-employment)

Take loan and drive on commercial basis.

Objective :

To become a four wheeler driver with basics in maintenance of vehicles.

Requirements

To train the candidates in motor driving the following infrastructure are required.

1. We should obtain "Motor Driving School" license from road transport authority by fulfilling their terms and conditions.
2. A driving instructor post should be available in the colleges in which training is offered.
3. A vehicle should be provided to the college for providing learning Practice.
4. That vehicle should be arranged with two sets of clutch, break and accelerator.

Therefore it may not be possible to run Motor driving (3 months) course in any of the junior college unless the serial number 1 to 4 are fulfilled.

V. Scheme of instructions

Modules	Theory		On-the-job training		Total	
	Hours	Weightage	Hours	Weightage	Hours	Weightage
Module - I	72	30	216	70	288	100
Total	72	30	216	70	288	100

V. Scheme of instructions/Week

Module I	Theory	On-the-job Training	Total
	6 Hours	18 Hours	24 Hours

Syllabus 18 Periods Week

S. No.	Week no.	OJT	Related instructions (theory)
1	One	Introduction Motor Driving course important of safety driving location of vehicle components locking and unlocking device manual and central locking. Manual electronic.	Motor vehicle Act, Road signs and signals brief description and function of each component.
2.	Two	Study the engine (petrol)	Types of engines. Two stroke Four Stroke
3.	Three	Skills to be imparted 1. Check the following before starting a) Check water level oil, break, fluid air on 4 wheels and spare wheel. 2. Cleaning vehicle a) body, wind screen, glasses flour and wheels. b) Wiping or dusting seat covers. c) Dash board. d) Check lights, horn, steering and its locking system. 3. Steering control on ground.	a) Cooling system, use of coolant/soft water. b) Checking hose pipes and its effect. c) (Lubrication systems type and grade. d) Common troubles and its remedies. e) Types of steering systems, common troubles and remedies.
4.	Four	a) Use and application of controls as accelerator, break, clutch, gear level. b) Driving with full controls on ground of engine. practice. c) Observing instruments on panel board as charging, temperature, oil pressure guage using signals.	a) How to increae or decrease torque without changing the r.p.m of engine. b) Selection of gears as per the speed

5.	Five	<ol style="list-style-type: none"> 1. Reverse driving on ground <ol style="list-style-type: none"> a) straight b) Bend road, 2. Constant and speed of vehicle. 	Precaution to be taken when driving in reverse approaching main road from by pass lane.
6.	Six	Driving in narrow lanes, congested roads, and market places. Parking in main and congested parking lots.	In congested roads safety precautions to be taken.
7.	Seven	Driving on national highways during day and night use of dipper	Knowledge to read road maps. Destination of mile stones in local language.
8.	Eight	Repairing vehicle for long distance tools to be taken along with the vehicle.	Distance of location of hospitals, petrol bunk, hotels, police station, signals for over taking, permit the vehicle to pass fundamental knowledge of first aid.
9.	Nine	Ghat driving: uphill and downhill U turn, hair pin drive.	Selection of gears while climbing signals and precaution while climbing and coming down on GHAT which vehicle should pass in opposite direction vehicle.
10.	Ten	Driving on loose Soil hardtop road, rubbled road, low and narrow bridge	Selection of gears, braking distance, speed of vehicle, how to stop opposite vehicle coming in opposite direction.
11.	Eleven	Practice of braking on hard top road and loose soil	Stopping distance as per, M.V act speed and distance.
12.	Twelve	Preventive maintenance and periodical maintenance's cleaning filters, cleaning spark plug, checking loose connection wire joints, hose pipe, fan belt, inflation, removing stones from tyre threads.	Revision and test.
13.	Thirteen	Testing and taking permanent license and R.T.A. Procedure	

List of training centers for practical (OJT)

1. E.M. E driving school and driving ground (Tirumala Giri)
2. Police transport organization (petlu burz)
3. H. E. H the Nizam and Alladdin technical training center boggulkunta, Hyderabad.
(Secunderabad model charts and audio are available at E.M.E. (Center))

Reference books :

1. Hand book on driving (Transport Dept.)
2. Central motor vehicle act rules (Alt publication)
3. Meeru me motor (Telugu) by Sri Subba Rao.

List of Participants

1. B. Sampatty (D.T.O. Retd.) I.T.I., Mallepally, Hyderabad.
2. B. Prabhakar Rao (D.T.O.), I.T.I., Mallepally, Hyderabad.

III. COMPUTER SCIENCE

- 1. Web Designing & Internet**
- 2. Computer Maintenance**
- 3. MS-Office**
- 4. Unix, C & C++**
- 5. Oracle and VB**
- 6. VB & ASP**
- 7. Oracle with D2K**
- 8. Oracle with DBA**
- 9. Desktop Publishing**
- 10. Auto Cad**
- 11. Accounting Packages**

1. WEB DESIGNING AND INTERNET

Introduction :

With the introduction of Advanced Supplementary Examinations and consequent abolition of Supplementary Examinations at SSC and Intermediate levels, unsuccessful candidates - running in to a few lakhs in number - have to lose one precious academic year. It has become a historical responsibility for the education department to channel these students into worthwhile activity, and short term certificate courses are introduced with this motive to train them in some skill so that they can take-up small service oriented occupations to earn their livelihood. These courses are open to youth, unemployed with pure academic background and house-wives as well

Since a decade, computers have made lasting impression on human civilization. We have come to a stage wherein we cannot imagine living without computers. They are extensively used in every walk of life such as household, offices, business, post offices, banks, bus & train reservations, insurance companies, hospitals, educational institutions, processing of results.

Use of Computers makes a number of tasks easier and faster. Computers are helpful in improving productivity and efficiency either at the office or at home. One need not be computer wizard to use computer. A little zeal to excel and a little will power to learn new things are sufficient to become a computer literate.

Internet is a network of networks that connects computers, all over the world which communicate with each other using the Internet Protocol. Freely accessible information is available on almost all topics - a kind of data and information bank which can be taken as a third eye. Web pages can be designed and Websites can be published in the internet through which others can share the information. Lot of business activity takes place through Websites and it is a revenue generating tool for industry and business firms. There is value in the market for those who master the technique of web designing.

Objectives :

- i. To generate web designers
- ii. To generate self and wage employment

Skills to be provided :

- i. Skills in handling various operating systems.
- ii. Skills in designing and hosting creative web sites
- iii. Skills in generating graphics and animation

Employment opportunities :

- Wage :
1. Web designers in software companies
 2. Web development
 3. Sales assistant in E-market.

- Self :
1. Web designing centers
 2. Web maintenance centres

Scheme of Instruction

Modules	Theory		On-the-job training		Total	
	Hours	Weightage	Hours	Weightage	Hours	Weightage
Module - I	72	30	216	70	288	100
Total	72	30	216	70	288	100

V. Scheme of instruction per Week

	Theory	On-the-job Training	Total
Module I	6 Hours	18 Hours	24 Hours

No.	Subject	Contents
1.	Introduction	Introduction, Characteristics of Computers, History of computers, Generation of Computers, Classification of Computers, Computer Applications, Architecture of Computers, Computer Architecture and I/O Devices, Basic Structure of Computers, Random Access Memory (RAM), Flow of Information, Memory Size, Input/Output Units, Description of Computer input Devices, Key to floppy data entry System, Floppy Disk input unit, Magnetic Hard Disk, Floppy Disk Drive familiarising various components & connections (3 Theory 6 OJT)
2.	DOS	DOS, What is OS, Getting started with Dos, and Important Terms. (3 Theory, 9 OJT) files, files extensions, Directory, subdirectories
3.	Windows	To Start a Program, To Start MS-Dos, Windows, To shutdown your Computer, To find a file or folder, To copy a file or folder, To move a file or folder, To delete a file or folder, To create a Folder, To Change the name of a file or folder, To print a document, browsing using Internet Explorer, To move an icon, Switching applications, To permanently display the taskbar. (2 Theory, 9 OJT other utilities available.
4.	Internet concepts	Introduction, what is Internet ? How does Internet Works, Domain Name System, How can I connect to Internet, Host Terminal Connections, Individual Computer TCP/IP Link, the Limitations of a SLIP or PPP account, Dialup or On-demand TCP/IP Link through LAN, dedicated Link Connection, Tools and Services on Internet, Electronic Mail on Internet, E-Mail auto response, Usenet and Newsgroups, What is FAQ ?, Browsing the Internet, What is Gopher ?, what is World Wide Web (WWW). Internet Tools : Introduction, Electronic Mail, what about privacy, E-mail addressing, The components of e-mail, Message Composition, FTP and Telnet, How to use FTP, Microsoft Internet Explorer, Building your Web Page, Creating a secure Website, Implementing Fire Walls, Forms of attack, Requirement of Secure fire Wall, Methods of restricting Access, IP Address, Domain Name System, TCP/IP Configuration. (10 Theory, 30 OJT)
5.	HTML & DHTML	Basic formatting tags, images, links, lists, tables, frames, forms, Style tag, Cascading Style Sheets. (6 Theory, 18 OJT)

- | | | |
|-----|-------------------|--|
| 6. | Java Script | Simple programs, conditions, loops, variables, scripting object, functions. (4 Theory, 12 OJT) |
| 7 | Front Page | Manipulating files, Defining navigational structure, Creating headers and footers, building themes, constructing pages, using cascading stylesheets, imaging, interaction with frontpage server, building a site, working with frames. (4 Theory, 8 Practicals) |
| 8. | Photoshop | Painting & editing : opening a file, working with palettes, using the layers palette, Using the painting editing tools, smudging a selection, saving palettes, Selections : Tool overview, selecting with the marquee tool, moving a selection, selecting with the magic wand tool, selecting with the lasso tool, saving & loading selections, transforming a selection, adding a text, cropping the image, Promotional piece : creating and viewing layers, rearranging layers, changing the mode of a layer, feathering a selection, defining & filling with a pattern, linking layers, adding a layer effect to a type layer, flattening and savings files, Using Paths : Drawing paths with pen tool, drawing straight paths, storing a path, drawing curved paths, filling a path, combining a straight and curved lines, making a path into a Selection, drawing a path around an artwork, transforming a path Channels & masks: working with masks & channels, using channels, and creating a quick mask. Editing a quick mask, saving a selection as a mask, loading a mask as a selection, and using the replace color command, creating a gradient mask, applying filters to mask, Advanced layer Techniques : Working with layer masks, & saturation, removing layer masks, save layerd files. Understanding color : Making colour corrections, using the Variations command, adjusting colour with the level command, adjusting color with the curves command, making selective color corrections, lightening, darkening & saturating areas. (10 Theory, 30 OJT) |
| 9. | Adobe illustrator | Basic concepts, Drawing, painting, transformations, using type, using graphs, printing documents. (6 Theory, 18 OJT) |
| 10. | 3d Max | Introduction, Working with all the commands, Building models, Objects (LOFTS), Creating character head, Basics of rendering materials, creating advanced 3d objects, Lighting and camera, applying animator, environmental effects, animation with inverse kinematic, Setting up a Scene with Light/Sun light, Material Mapping, Environment Settings, Processing Image Files, Using Image effects or greater images, deflector and un-deflector, Exploring max. (16 Theory, 48 OJT) |
| 11. | Flash5 | Toolbar, colors, framework, menus, pallettes, settings and preferences drawing, animation, symbols and instances, sound, actions and event handling, programming flash with action script, working with 3D graphics. (8 Theory, 24 OJT) |

Reference Books :

1. Teach yourself Windows (BPB) - Stevens
2. Internet the complete referene (TMA)
3. Flash Bible
4. Web Design - The complete reference (THM)
5. Front page (BPB)
6. Photoshop 7 (BPB) - Steve Romaniello

2. COMPUTER MAINTENANCE

Introduction :

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Now that computers are very widely used, and most of the younger generation being software bound there is growing need for hardware maintenance personnel. This course is meant for developing skills in hardware maintenance and system upgradation.

Objectives :

- i. To generate hardware experts
- ii. To generate self and wage employment

Skills to be provided :

- i. Skills in handling various operating systems
- ii. Skills in system maintenance and hardware maintenance
- iii. System upgradation.

Employment opportunities :

- Wage :**
1. Hardware assistants in software companies
 2. System In-charge
 3. Sales assistant in E-market

- Self :**
1. Information service centres
 2. Establishing hardware maintenance centres

Scheme of Instruction

Modules	Theory		On-the-job training		Total	
	Hours	Weightage	Hours	Weightage	Hours	Weightage
Module - I	72	30	216	70	288	100
Total	72	30	216	70	288	100

V. Scheme of instruction per Week

	Theory	On-the-job Training	Total
Module I	6 Hours	18 Hours	24 Hours

Syllabus :

1. Identifying computers and its components (2 Theory, 6 OJT)
2. Identifying different Mother Boards (2 Theory, 6 OJT)
3. Processors (1 Theory)
4. Assembling and dismantling (6 Theory, 18 OJT)
5. Different types of configuration and their usages (1 Theory, 3 OJT)
6. Hardware related DOS Commands (1 Theory, 3 OJT)
7. BIOS Settings
8. CMOS, HDD Jumper Settings (1 Theory, 3 OJT)
9. Hard disk partitioning, booting, loading, operating system. (10 Theory, 30 OJT)
10. Loading & running Windows 98 family (4 Theory, 12 OJT)
11. Loading Windows NT Server family (6 Theory, 18 OJT)
12. Loading Drivers (4 Theory, 12 OJT)
13. VJ Card, NIC Card - Trouble Shooting (2 Theory, 6 OJT)
14. CD Rom - Trouble Shooting (2 Theory, 6 OJT)
15. Sound Card, Modem - Trouble Shooting (2 Theory, 6 OJT)
16. Scanner and Printer-Installing, Trouble Shooting etc. (4 Theory, 12 OJT)
17. Anti Virus, Dial up Networking (2 Theory, 6 OJT)
18. Fundamentals of Lan (5 Theory, 10 OJT)
19. Trouble shooting

- a. Mother board b. Monitor c. Key board, mouse, Floppy drive & other accessories d. SMPS
20. Configuring a system according to user specifications (17 Theory, 20 OJT)

Reference Books :

1. Norton Utilities BPP
2. Computer Hardware, Govinda Rajulu

3. MS-OFFICE

Introduction :

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MS-Office is one of the most commonly used program useful for all ordinary computer applications; either household or a small office or a small business enterprise. It is a suite of integrated applications having a word processor, an electronic spreadsheet, a presentation software, relational database management system and a website creation tool. It can be termed as the basic course which every person must be proficient with, for all general purposes. With a little typing ability added to this, one can go as a data entry operator or can take up job work.

Objectives :

- i. To maintain office Stationery/files
- ii. To generate self and wage employment

Skills to be provided :

- i. Skills in handling various operating systems
- ii. Maintenance of Office/Files

Employment opportunities :

- Wage :
1. Data entry
 2. Office Maintenance
 3. DTP Work
- Self :
1. DTP Center
 2. File Management Contracts
 3. Private Project works

Scheme of Instruction

Modules	Theory		On-the-job training		Total	
	Hours	Weightage	Hours	Weightage	Hours	Weightage
Module - I	72	30	216	70	288	100
Total	72	30	216	70	288	100

V. Scheme of instruction per Week

	Theory	On-the-job Training	Total
Module I	6 Hours	18 Hours	24 Hours

Syllabus :

No.	Subject	Contents
1.	Introduction	Introduction, Characteristic of Computers, History of Computers, Generation of Computers, Classification of Computers, Computer Applications, Architecture of Computers, Computer Architecture and I/O Devices, Basic Structure of Computers, Random Access Memory (RAM), Flow Of Information, Memory Size, Input/Output Units, Description of Computer input Device, Key to floppy data entry System, Floppy Disk input unit, Magnetic Hard Disk, Floppy Disk Drive. Familiarising various components connections (3 Theory 6 OJT)
2.	DOS	What is OS, Getting Started With DOS, and Important Terms. File Entries, Directories & Sub directories, files etc (3 Theory, 4 OJT)
3.	Windows	To start a Program, To Start Ms-Dos, Windows, To shutdown your computer, To find a file or folder, To copy a file or folder, To move a file or folder, To delete a file or folder, To create a Folder, To change the name of a file or folder, To print a document, Browsing using Internet Explorer, To move an icon, Switching applications, To permanently display the taskbar. utilities available (2 Theory, 9 OJT)
4.	Ms-Office	<p>Microsoft Word : To create a new file, To create a new Document, To open a Created Document, Saving a document, To find a word in your Document, To correct spelling and grammar, to change the page margins, To count Words & Lines in a Document, To add a command or other item to a menu, Adding page numbers, Header and Footers, Mail-Merge, Using a header Source for a mail merge, Styles, Paragraph Spacing, Adding Borders. To keep Paragraph together, Set tabs stops with header Characters, Comment Mark Macro, Pictures, Create Hyperlink, Create Bookmark, Add a Bookmark, Sort, Formula, Insert Table, Project Document, Background Printing. (16 Theory, 48 OJT)</p> <p>Power Point : Auto content Wizard, Design Templates, To make a new Slide, Move, Copy or Duplicate slide, To Change the layout, Adding text, Adding text by using text Book Tool, To insert and edit Picture, Add a clip from clip gallery. Windows Media Folder Clip Gallery Live, Add Transitions to a slide show, Printing. (8 Theory, 24 OJT)</p> <p>MS-Excel : Introduction to spreadsheet, Excel as Spreadsheet, To create a new work book, To open a workbook automatically when you start excel, About workbook</p>

and worksheet, Move and scroll through a worksheet, Switch to another sheet in a workbook, select sheet in a workbooks, Manipulating data in cells, Printing, Functions, PMT, To apply an autoformat to a range, To apply an existing style, To create a new style, To hide a workbook, To create a scenario, To create links to connect to data and files, To create a hyperlink from cell text, To create a pivot Table, what is pivot Table, Filter, Auditing, Hide Windows Documents. Excel graphs (16 Theory,48 OJT)

MS-Access : Database concepts, creating tables, Inserting & updating data into tables, Linking tables, Querries generation (different types), Designing forms, Inserting data into tables using forms, creating sub-forms, creating reports based on tables & based on querries, Security features of Ms-Access, Database Utilities. (20 Theory, 60 OJT)

MS-Front Page : Manipulating files, Defining navigation, structure, creating headers & footers, building themes, constructing pages, using cascading ... imaging, interaction with frontpage Server, buildup a site, working with frames. (4 Theory, 12 OJT)

Reference Books :

1. Fundamentals of Ms-Office (BPB)
2. Introduction to Computers with MSss-Office 2000 (TMH)
- Delxis Leon, Mathews Leon

UNIX, C & C++

Introduction

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Computers are dumb machines. Instruction sets other wise known as operating systems bring them to life. Unix is a very popular multi user operating system. It is not effected by virus programs and security is built in. System administrators in networking environment have a very responsible job and share respect on par with programmes. Languages are the interface between user and the machine and are useful in development of applications or packages to solve problems. C language is a general purpose structured programming language and some of the applications developed in C would be difficult if not impossible to develop in other languages. C and C++ give the programmer necessary maneuverability in programming power.

Objectives :

- i. To generate efficient programmers
- ii. To generate self and wage employment

Skills to be provided :

- i. Skills in handling various operating systems
- ii. Skills in developing programmes with OOPS concept
- iii. Skills in handling computer system, working on Unix operating system

Employment opportunities :

- | | |
|--------|--------------------------------------|
| Wage : | 1. Unix system administrators |
| | 2. Programmers in software firms |
| Self : | 1. Setup a software development firm |

Scheme of Instruction

Modules	Theory		On-the-job training		Total	
	Hours	Weightage	Hours	Weightage	Hours	Weightage
Module - I	72	30	216	70	288	100
Total	72	30	216	70	288	100

V. Scheme of instruction per Week

	Theory	On-the-job Training	Total
Module I	6 Hours	18 Hours	24 Hours

Syllabus :

No	Subject	Contents
1	Unix	Concepts of Unix Operating system, File structure, Memory management, commands like "Who", passwd, Ls, and grep. Creating logins, handling files, printing, rearranging, sorting, and splitting files, editors and their usage. (14 hrs.Theory, 42 hrs. OJT) Multi..... ronment & Networking
2	C language	Programming Concepts, Introduction and History of C, elements of C Language : Data types Operators, loops, arrays, multi dimensional arrays, arrays strings, functions, pointers, structures, Unions file handling (text files and binary files) (34 Theory, 102 hrs. OJT)
3	C++ language	Disadvantages of Structured Programming languages, moving from C to C++, Introduction and history of C++, Data types and operators, inline functions and memory management, operator constant and static member functions, pointer to members, overloading concepts, overloading operators, overloading functions, type conversions, more class features, special pointer 'this' function changing, static class data members, static class member functions, abstract classes, virtual base class, class inheritance. Polymorphism, stream output/ input, file input/output, function templates, class templates, exception handling. (24 Theory, 72 Hrs. OJT)

Reference Books :

1. Let us "C" - Yashwant Kanetkar
2. Programming in C - Stephen G Kochan.
3. Programming in C++ - Balaguru Swamy
4. Unix - Yashwant P. Kanetkar

5. ORACLE AND VISUAL BASIC

Introduction :

With the introduction of Advanced Supplementary Examinations and subsequent abolition of Supplementary Examinations at SSC and Intermediate levels, unsuccessful candidates - running in to a few lakhs in number - have to lose one precious academic year. It has become a historical responsibility for the education department to channel these students into worthwhile activity, and short term certificate courses are introduced with this motive to train in some skill so that they can take-up small service oriented occupations to earn their livelihood. These courses are open to youth, unemployed with pure academic background and house-wives as well.

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A database is a collection of related items arranged in a specific structure such as telephone directory. Oracle database accounts for 80% of RDBM Systems used world wide. Oracle 8i is a ORDBMS (Object Relational Database Management System) which allows multiple users to store, access, process data in to useful information. Visual Basic is a simple yet powerful language which has evolved into a major development environment that covers every aspect of programming. It is an office automation tool. It can be used to develop project as a front end with Oracle database and the backend. There are opportunities in the computer filed for project developers.

Objectives :

- i. To generate in VB applications for managing office process
- ii. To generate self and wage employment

Skills to be provided :

- i. Skills in designing and maintaining databases.
- ii. Skills to develop database applications in Visual Basic.
- iii. Skills to develop advanced programs in Visual Basic using active controls.

Employment opportunities :

- Wage :
1. Database Management
 2. Application development in Visual Basic
 3. Programmers in software firms

- Self :
1. Setup a software development firm
 2. Private Project Handling - Consultancy

Scheme of Instruction

Modules	Theory		On-the-job training		Total	
	Hours	Weightage	Hours	Weightage	Hours	Weightage
Module - I	72	30	216	70	288	100
Total	72	30	216	70	288	100

V. Scheme of instruction per Week

	Theory	On-the-job Training	Total
Module I	6 Hours	18 Hours	24 Hours

Syllabus :

No.	Subject	Contents
1	Oracle	<p>Introduction, Types of DBMS, RDBMS, Coded's Rules, Normalization, Relational Database System Object Relational Model. Introduction to Oracle : Data Types, Data Definition Language, Data Manipulation Language, Transaction Control Language, and Data Control Language; Operators : Arithmetic Operators, Comparison Operators. Logical Operators, Set-Operators. Functions : Single Row, Date, Character, Trim, Numeric, Mod, Sign, Conversion, Miscellaneous, Group Functions Temporary Tables, Joins and Sub queries, Table Aliases, Sub Queries Multiple Sub Queries, Correlated Sub Queries. Constraints : Primary Key, Foreign key, Not Null, Unique, Check, Locks and Table Partitions, Concept of Locking : Types of Locks, Row level locks, Table level lock, No wait, Dead lock, Table Partitions, Advantages of Table Partitions Database Objects : Synonym, Sequences, Alter Sequence, View, Index, Clusters. OOP Concepts : Objects, Class, Attributes, Methods Database Objects : Synonym, Sequences, Alter Sequence, View, Index, Clusters. (24 Theory, 72 Hrs. OJT)</p> <p>PL/SQL : Introduction to PL/SQL, Advantages of PL/SQL, Data Types and their Usage, LOB Types, Attributes, Logical comparison, Control Structures, Concept of Error Handling, Exceptions and Cursor Management. Exceptions : User-defined Exceptions, Pre defined Exception, The Exception_INIT Pragma, Raise_application_error, Cursor Management : Static Cursors, Explicit Cursors, Implicit Cursor, Cursor for loop, Subprograms and Packages, Sub Programs, Procedures, In Parameter, Out Parameter, In Out Parameter, Functions, Packages, Package body, Advantages of Packages, Database Triggers and Build - in Packages. Database Triggers : Syntax for Creating Triggers, Parts of trigger, Trigger Statement Trigger body, Trigger Restriction, Types of Triggers, Before/ After Options, For each Row/Statement, Instead of Triggers, Built-in packages, Collections, Member Functions and Procedures (16 Theory, 32 48 Hrs. OJT)</p>
2	VB 6	<p>Introduction to VB 6.0, What is VB 6.0, Equations in VB6.0, Programming Concepts, Environment of VB6, New Features of VB6.0, Features of VB.Net, Programming Fundamentals, Code Editor, Code Basics, Variables, Constants</p>

and Data Types, Declaring Variables, Scope of Variables, Data Types, Naming Conventions, Control Structures, Loops, Structures, Procedures, Sub Procedures, Function Procedures, Scope of Procedures, Calling Procedures, Calling Functions, Passing Arguments, Using Standard Controls, Creating User Interface, SDI, MDI, Popup Menus, Built in Active x Controls, Tool Bar, Menu Bar, Status Bar, DT Picks Month View, Data Repeater, Common Dialog Control, Rich Textbox, Field Validations Error Handling. Introduction, Trapping Run Time Errors, The Err Object, Creating Error Handlers, Database Connectivity Access of Oracle, Access of Access, Access of Excel, Accessing data Using VB6.0 Data Control, DB Grid Control, DB Combo & DB List, Data Access Object (DAO), Introduction, Advantages, DML With DAO, Remote Data Object, Features, Advantages, DAO Vs RDO, Using, MSR DC, Creating Restrict Flexi grid, Active x Data Objects (ADO), Universal Data Access, OLEDB, OLEDB Process, Advantages, ADO Model, Data Environment Designer, Designing Data Environment Object

Connection Object, Command Object, Hierarchical Flexi Grid, Data Reports, Crystal Reports, Introduction to COM, Active x Controls, Active x DLL, Active x Exe., DHTML Applications, IIS Applications. (32 Theory,96 Hrs. OJT)

Reference Books :

1. Mastering Visual Basic (BPB) Evangelos Petroustos
2. VB6 Bible
3. Complete Reference to Oracle 8i Scott Urman
4. Teach yourself SQL PL/SQL using Oracle (BPB)

6. VB & ASP

Active Server Pages

Introduction :

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Visual Basic is a simple yet powerful language which has evolved into a major development environment that covers every aspect of programming from educational applications to databases, and from financial applications to Internet components. ASP (Active Server Pages) help in hosting dynamic database linkage to users without gaining access to change the database. With the help of ASP the need to uploading the entire database in the server is avoided, it allows the record selected by the user to be displayed in the specific format through internet. There are opportunities in the computer field for those who are experienced in developing applications for office automation and for web based systems.

Objectives : VB applications for managing office processes
design & develop web based systems using Microsoft tools.

Skills to be provided :

Skills to write VB Programs.

Skills to develop database applications in VB

Skills to develop advanced programs in VB using active controls.

Skills to handle & manage websites.

Skills to develop web based applications using ASP & MS (15 server)

Employment Opportunities :

- Wage :
1. Web Site Designing
 2. Data Base Maintenance on the Web
 3. Sales assistant in E-market

- Self :
1. Establish Website Designing Centres
 2. Establishing Website maintenance Centres
 3. Consultancy in VB & Web System design & development

Scheme of Instruction

Modules	Theory		On-the-job training		Total	
	Hours	Weightage	Hours	Weightage	Hours	Weightage
Module - I	72	30	216	70	288	100
Total	72	30	216	70	288	100

V. Scheme of instruction per Week

	Theory	On-the-job Training	Total
Module I	6 Hours	18 Hours	24 Hours

Syllabus :

No.	Subject	Contents
1	VB6	Introduction to VB 6.0, What is VB 6.0, Equations in VB 6.0 Programming Concepts, Environment of VB6.0, New Features of VB6.0, Features of VB.Net, Programing Fundamentals, Code Editor, Code Basics, Variables, Constants and Data Types, Declaring Variables, Scope of Variables, Data Types. Naming Conventions, Control Structures, Loops, Structures, Procedures, Sub Procedures, Function Procedures, Scope of Procedures, Calling Procedures, Calling Functions, Passing Arguments, Using Standard Controls, Creating User Interface, SDI, MDI, Popup Menus, Built in Active x Controls, tool Bar, Menu Bar, Status Bar, DT Picks Month View, Data Repeater, Common Dialog Control, Rich Textbox, Field Validations Error Handling. Introduction, Trapping Run Time Errors, The Err Object, Creating Error Handlers, Database Connectivity Access of Oracle, Access of Access, Access of Excel, Accessing Data Using VB6.0 Data Control, DB Grid Control, DB Combo & DB List, Data Access Object (DAO), Introduction, Advantages DML With DAO, Remote Data Object, Features, Advantages, DAO Vs RDO, Using MSR DC, creating Restrict Flexi grid, Active x Data Objects (ADO), Universal Data Access, OLEDB, OLEDB Process, Advantages, ADO Model, Data Environment Designer, Designing Data Environment object, Connection Object, Command Object, Hierarchical Flexi Grid, Data Reports, Crystal Reports, Introduction to COM, Active x Controls, Active x DLL, Active x Exe., DHTML Applications, IIS Applications. (24 Theory,72 Hrs. OJT)
2	ASP	Introduction to internet, HTTP protocol, TCP/IP, HTML forms Get/Post Methods Html, Dhtml, Vb Script, JavaScript, Front Page, Visual Inter Dev. (24 Theory, 72 Hrs. OJT)

Introduction to ASP, ASP Object Model, Request Object, Response Object, Session Object, Application Object, Server Object, Object Context Object, Error object, file system object, Serverside includes Global as :Cookies, Active X Data objects Connection object, command object, Record set object. Components : AdRotator, File System Object, My Info, Browser Capabilities, CDO NTS, Miler Component, next link, MTS, MSMQ, Index Server. (24 Theory, 72 Hrs. OJT)

Reference Books :

1. Mstering Visual Basic (BPB) Brangelos, Getrutosos
2. V B Bible
3. ASP Unleashed (BPB)

7. ORACLE WITH D2K

Introduction :

With the introduction of Advanced Supplementary Examinations and subsequent abolition of Supplementary Examinations at SSC and Intermediate levels, unsuccessful candidates - running in to a few lakhs in number - have to lose one precious academic year. It has become a historical responsibility for the education department to channel these students into worthwhile activity, and short term certificate courses are introduced with this motive to train in some skill so that they can take-up small service oriented occupations to earn their livelihood. These courses are open to youth, unemployed with pure academic background and house-wives as well.

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Objectives :

1. To generate efficient programmers
2. To generate self and wage employment

Skills to be provided :

1. Skills in handling Oracle database
2. Skills in Front and design
3. Skills in developing applications.

Employment Opportunities :

- Wage :
1. Database Management
 2. Frontend designing
 3. Programmers in software firms

- Self :
1. Setup a software development firm
 2. Private Proejct Handling - Consultancy

Scheme of Instruction

Modules	Theory		On-the-job training		Total	
	Hours	Weightage	Hours	Weightage	Hours	Weightage
Module - I	72	30	216	70	288	100
Total	72	30	216	70	288	100

V. Scheme of instruction per Week

	Theory	On-the-job Training	Total
Module I	6 Hours	18 Hours	24 Hours

Syllabus :

No.	Subject	Contents
1	Oracle	<p>Introduction, Types of DBMS, RDBMS, Codd's Rules, Normalization, Relational Database System Object Relational Model. Introduction to Oracle : Data Types, Data Definition Language, Data Manipulation Language, Transaction Control Language, and Data Control Language. Operators : Arithmetic Operators, Comparison Operators, Logical Operators, Set-Operators. Functions : Single Row, Date, Character, Trim, Numeric, Mod, Sign, Conversion, Miscellaneous, Group Functions, Temporary Tables, Joins and Sub queries, Table Aliases, Sub Queries, Multiple Sub Queries, Correlated Sub Queries. Constraints: Primary Key, Foreign key, Not Null, Unique, Check, Locks and Table Partitions, Concept of Locking : Types of Locks, Row level locks, Table level lock, No wait, Dead lock, Table Partitions, Advantages of Table Partitions, Database Objects : Synonym, Sequences, Alter Sequence, View, Index, Clusters, OOP Concepts : Objects, Class, Attributes, Methods Database Objects : Synonym, Sequences, Alter Sequence, View, Index, Clusters. (24 Theory, 72 Hrs. OJT)</p> <p>PL/SQL : Introduction to PL/SQL, Advantages of PL/SQL Data types and their Usage, LOB Types, Attributes, Logical comparison Control Structures, Concept of Error Handling, Exceptions and Cursor Management Exceptions : User-defined Exceptions, Pre defined Exception, The EXCEPTION_INIT Pragma, Raise_application_error, Cursor Management : Static Cursors, Explicit Cursors, Implicit Cursor, Cursor For loop, Subprograms and Packages, Sub Programs, Procedures, In Parameter, Out Parameter, In Out Parameter, Functions, Packages, Package body, Advantages of Packages, Database Triggers and Built - in Packages. Database Triggers : Syntax for Creating Triggers, Parts of trigger, Trigger Statement Trigger body, Trigger Restriction, Types of Triggers, Before/After Options, For each Row/Statement, INSTEAD OF Triggers, Built- in packages, Collections, Member Functions and Procedures. (24 Theory, 72 Hrs. OJT)</p>
2	D2K	Forms 6i introduction to frontend, forms server, running form builder

environment, creating basic form modules, working with datablock, text items, lovs, triggers, alerts, validation, navigation, menu, data sources, working with record groups, Reports, running reports, report wizard, report storage methods, queries, layout model. (24 Theory, 72 Hrs. OJT)

Reference Books :

1. Complete Reference to Oracle 8i Scott Urman
2. Developer 2000 (BPB)

8. ORACLE WITH DBA

Introduction :

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Oracle is a software which permits the user to design huge databases. A database is a collection of related items arranged in a specific structure such as telephone directory. Oracle database accounts for 80% of RDBM systems used world wide. Oracle 8i is an ORDBMS (Object Relational Database Management System) which allows multiple users to store, access, process data into useful information. Database Administrator allows the user to maintain the database. Skill in using Oracle in database design and development and subsequent database administration hold good job potential.

Objectives :

- 1 To generate efficient programmers
- 2 To generate database administrators
- 3 To generate self and wage employment.

Skills to be provided :

1. Skills in handling Oracle
2. Skills in Database management
3. Skills in Backup and Recovery
4. Skills in Database Management System

Employment opportunities :

- Wage :
1. Database Management
 2. Frontend designing
 3. Programmers in software firms

- Self :
1. Setup a software development firm
 2. Private Project Handling/Consultancy

Scheme of Instruction

Modules	Theory		On-the-job training		Total	
	Hours	Weightage	Hours	Weightage	Hours	Weightage
Module - I	72	30	216	70	288	100
Total	72	30	216	70	288	100

V. Scheme of instruction per Week

	Theory	On-the-job Training	Total
Module I	6 Hours	18 Hours	24 Hours

Syllabus :

No	Subject	Contents
1	Oracle	<p>Introduction, Types of DBMS, ORDBMS, Codd's Rules, Normalization, Relational Database System Object Relational Model. Introduction to Oracle : Data Types, Data Definition Language, Data Manipulation Language, Transaction Control Language, and Data Control Language. Operators : Arithmetic Operators, Comparison Operators, Logical Operators, Set-Operators. Functions : Single Row, Date, Character, Trim, Numeric, Mod, Sign, Conversion, Miscellaneous, Group Functions Temporary Tables, Joins and Sub queries, Table Aliases, Sub Queries Multiple Sub Queries, Correlated Sub Queries. Constraints : Primary Key, Foreign key, Not Null, Unique, Check, Locks and Table Particions Concept of Locking : Types of Locks, Row level locks, Table level lock, No wait, Dead lock, Table Partitions, Advantages of Table Partitions Database Objects : Synonym, Sequences, Alter Sequence, View, Index, Clusters, OOP Concepts : Objects, Class, Attributes, Methods Database Objects : Synonym, Sequences, Alter Sequence, View, Index, Clusters. (24 Theory, 72 Hrs. OJT)</p> <p>PL/SQL : Introduction to PL/SQL, Advantages of PL/SQL Data types and their Usage, LOB Types, Attributes, Logical comparison Control Structures, Concept of Error Handling, Ecxeptions and Cursor Management Exceptions : User-defined Exceptions, Pre defined Exception, The EXCETION_INIT Pragma, Raise_application_error, Cursor Management : Static Cursors, Explicit, Cursors, Implicit Cursor, Cursor For loop, Subprograms and Packages, Sub Programs, Procedures, In Parameter, Out Parameter, In Out Parameter, Functions, Packages, Package body, Advantages of Packages, Database Triggers and Built - in Packages. Database Triggers : " Syntax for Creating Triggers, Parts of trigger, Trigger Statement Trigger body, Trigger Restriction, Types of Triggers, Before/After Options, For each Row/Statement, INSTEAD OF Triggers, Built-in packages, Collections, Member Functions and Procedures. (24 Theory,72 Hrs. OJT)</p>

- 2 DBA Database Creation, Creating Storage Structures and Objects, Partitioning tables with list option, Automatic Segment space management, Rollback segments, undo table space, enabling and working with flashback query, roles, users, extends, invalid objects, resumable spaces, configuring oracle net services, working with dblinks, materilized views. (24 Theory, 72 Hrs. OJT)

Reference Books :

Complete Reference to Oracle 8i, Scott Urman

9. DESKTOP PUBLISHING

Introduction :

With the introduction of Advanced Supplementary Examinations and subsequent abolition of Supplementary Examinations at SSC and Intermediate levels, unsuccessful candidates - running in to a few lakhs in number - have to lose one precious academic year. It has become a historical responsibility for the education department to channel these students into worthwhile activity, and short term certificate courses are introduced with this motive to train in some skill so that they can take-up small service oriented occupations to earn their livelihood. These courses are open to youth, unemployed with pure academic background and house-wives as well.

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Desk-Top Publishing otherwise known as DTP has brought revolutionary changes in the publishing and design industry. It has given ordinary users the power to produce professional quality documents, enables a single person to perform all the tasks of design layout, typesetting, placements of graphic and printing the document. DTP software produce complex, multicolor, printer readydocuments reducing the dependency and involvement of many people. Skilled persons in DTP have good employment opportunities in the offices, newspaper and printing industry. Youth and women can take up DTP as job work in their leisure hours.

Objectives :

1. To generate data processing experts
2. To generate data entry operators
3. To generate self and wage employment

Skills to be provided :

Skills in handling various operating systems

Skills in system maintenance and data processing maintenance

Processing and output designing

Employment opportunities :

- Wage :
1. Data processing assistants in software companies
 2. Data processing In-charge
 3. Sales assistant in E-market

- Self :
1. Information service centres
 2. Establishing Data entry firms
 3. Establishing DTP centres

Scheme of Instruction

Modules	Theory		On-the-job training		Total	
	Hours	Weightage	Hours	Weightage	Hours	Weightage
Module - I	72	30	216	70	288	100
Total	72	30	216	70	288	100

V. Scheme of instruction per Week

	Theory	On-the-job Training	Total
Module I	6 Hours	18 Hours	24 Hours

Syllabus :

No.	Subject	Contents
1.	Introduction	Introduction, Characteristics of Computers, History of Computers, Generations of Computers, Classification of Computers, Computer Applications, Architecture of Computers, Computer Architecture and I/O Devices, Basic Structure of Computers, Random Access Memory (RAM), Flow Of Information, Memory Size, Input/Output Units, Description of Computer input Device, Key to floppy data entry System, Floppy Disk input unit, Magnetic Hard Disk, Floppy Disk Drive. (3 Theory 6 hrs. OJT) familiarisation of various components & connections.
2.	DOS	What is OS, Getting Started With DOS, and Important Terms. (3Theory, 9 hrs. OJT) files, file extension directories sub directories.
3.	Windows	To Start a Program, To Start Ms-DOS, Windows, To shutdown your Computer, To find a file or folder, To copy a file or folder, To move a file or folder, To delete a file or folder, To create a Folder, To Change the name of a file or folder, To print a document, Browsing using Internet Explorer, To move an icon, Switching applications, To permanently display the taskbar. (2 Theory, 9 hrs. OJT) other utilities.
4.	Ms-Office	Microsoft Word : To create a new file, To create a new Document, To open a Document, Saving a document, To find a word in the Document, To correct spelling and grammar, to change the page margins, To count Words & Lines in a Document, To add a command or other item to a menu, Adding page numbers, Header and Footers, Mail-merge, Using a header Source for a mail merge, Styles, Paragraph Spacing, Adding Borders, To keep Paragraph together, Set tabs stops with header Characters, Comment Mark Macro, Pictures, Create Hyperlink, Create Bookmark, Add a Bookmark, Sort, Formula, Insrt Table, Protect Document, Background, Printing. (6 Theory, 18 Hrs. OJT)
5.	Pagemaker	Introduction to PageMaker adjustment of paper settings, create layout,

Explanation about tool box, Selection of paper size, create index, show index, table of contents. Utilities : add continue line, balance columns, create key line, bullets & numbering, Group ungroup, lock unlock, run script, create page numbers, create color library, Spell check, links, links info. Format : auto leading, set width, alignment, create custom font, and create custom colors, Elements : create round corners, image control, control palette, color palette, table-Editor. (10 Theory, 30 Hrs. OJT)

6. Corel Draw Introduction to Corel draw, features of Corel draw, tool box, text format, fit text to path, blend effects, envelope rollup, presets, create symbols, create arrows, create colors, node edit, background settings, wire frame, import file, special preferences. (24 Theory, 72 Hrs. OJT)
7. Photoshop Painting & editing : opening a file, working with palettes, using the layers palette, Using the painting editing tools, smudging a selection, saving palettes. Selections : Tool overview, selecting with the marquee tool, moving a selection, selecting with the magic wand tool, selecting with the lasso tool, saving & loading selections, transforming a selection, adding a text, cropping the image. Promotional piece: creating and viewing layers, rearranging layers, changing the mode of a layer, feathering a selection, defining and filling with a pattern, linking layers, adding a layer effect to a type layer, flattening and savings files. Using Paths : Drawing paths with pen tool, storing a path, drawing curved paths, filling a path, combining straight and curved lines, making a path into a Selection, drawing a path around an artwork, transforming a path Channels & masks : working with masks & channels, using channels, and creating a quick mask. Editing a quick mask, saving a selection as a mask, loading a mask as a selection, and using the replace color command, creating a gradient mask, applying filters to mask. Advanced layer Techniques : Working with layer masks, creating a clipping group, Adding adjustment layers, adjusting hue & saturation, removing layer masks, save layered files, Understanding color : Making color corrections, using the variations command, adjusting color with the level command, adjusting color with the curves command, making selective color corrections, lightening, darkening & saturating areas. (20 Theory, 60 Hrs. OJT)
- Any multilingual Software (4 Theory, 12 Hrs. OJT)

Reference Books :

1. Fundamentals of Ms-office (BPB)
2. Mastering Page Maker - (BPB)
3. Corel draw - BPB
4. Photoshop - 7 (BPB) - Steve Romanello

10. AUTO CAD

Introduction :

With the introduction of Advanced Supplementary Examinations and subsequent abolition of Supplementary Examinations at SSC and Intermediate levels, unsuccessful candidates - running in to a few lakhs in number - have to lose one precious academic year. It has become a historical responsibility for the education department to channel these students into worthwhile activity, and short term certificate courses are introduced with this motive to train in some skill so that they can take-up small service oriented occupations to earn their livelihood. These courses are open to youth, unemployed with pure academic background and house-wives as well.

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Auto CAD is a drafting and designing tool meant for people in construction and design profession such as architects and contractors. Auto CAD increases their efficiency and ability to produce state-of-the-art computerized production of drawings & designs. It enhances their skill in designing 2D & 3D engineering models. It is useful to the college and high school students too as design assistants under architects and contractors.

Objectives :

1. To generate efficient Designers
2. To generate self and wage employment

Skills to be provided :

1. Skills in Design
2. Skills in drawing
3. Skills in Computer 2D & 3D Engineering Modelling.

Employment Opportunities :

- | | |
|--------|---|
| Wage : | 1. AutoCAD Designing |
| | 2. CAD Engineers |
| | 3. CAD Designers software firms |
| Self : | 1. Setup a software development firm |
| | 2. Private Project Handling/consultancy |
| | 3. Enter into Designing Field independently |

Scheme of Instruction

Modules	Theory		On-the-job training		Total	
	Hours	Weightage	Hours	Weightage	Hours	Weightage
Module - I	72	30	216	70	288	100
Total	72	30	216	70	288	100

V. Scheme of instruction per Week

	Theory	On-the-job Training	Total
Module I	6 Hours	18 Hours	24 Hours

Syllabus :

No.	Subject	Contents
1.	AutoCAD	Introduction to AutoCAD 2000, Starting a Drawing in AutoCAD, Controlling the AutoCAD Drawing, Organizing Drawing with Layers, Using Line type and Line Width effectively, Creating and editing Layers, Accuracy in creating Drawing, Creating Elementary Objects, Creating Polylines and SP Lines, Understanding the Query Features in AutoCAD 2000, Advanced Dimensioning, Papers & Page layouts, Productive Plotting. Introduction to 3D, Drawing 3D in Auto CAD, Surfacing in 3D, Solid Modeling, Rendering in 3D. (72 Theory, 216 Practicals)

Reference Books :

1. Inside Auto CAD 2000, Techmedia
2. Auto CAD - (BPB) - David -Fray

11. ACCOUNTING PACKAGES

Introduction :

With the introduction of Advanced Supplementary Examinations and subsequent abolition of Supplementary Examinations at SSC and Intermediate levels, unsuccessful candidates - running in to a few lakhs in number - have to lose one precious academic year. It has become a historical responsibility for the education department to channel these students into worthwhile activity, and short term certificate courses are introduced with this motive to train in some skill so that they can take-up small service oriented occupations to earn their livelihood. These courses are open to youth, unemployed with pure academic background and house-wives as well.

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"Accounting" has become a specialized field of activity. To suite the needs of the trading companies, industry & business world, special packages in accounting have been developed -a good knowledge and working skills in software have potential to generate employment.

Objectives :

1. To prepare efficient Accountants
2. To generate self employment in the field of Accountancy

Skills to be provided :

1. Computerized Accounting
2. Balance Sheet Maintenance

Employment opportunities :

- | | |
|--------|-----------------------------------|
| Wage : | 1. Accountant |
| | 2. Book Keeping |
| Self : | 1. Finance Consultancy |
| | 2. Private Works for book keeping |

Scheme of Instruction

Modules	Theory		On-the-job training		Total	
	Hours	Weightage	Hours	Weightage	Hours	Weightage
Module - I	72	30	216	70	288	100
Total	72	30	216	70	288	100

V. Scheme of instruction per Week

	Theory	On-the-job Training	Total
Module I	6 Hours	18 Hours	24 Hours

Syllabus :

No	Subject	Contents
1.	Tally 6.3	Accounts information - groups creation, ledgers, alteration of ledgers etc. Inventory information, Stock group creation, Stock items creation, unit of measures creation, multiple godowns, stock categories etc., Voucher entry, contra, payment, receipt, journal, sales, purchase, memo, financial statements profit & loss A/c, Balance sheet, daily accounts/weekly/fortnightly/monthly/quarterly/yearly account maintenance, ratio analysis, display of various reports, group summary. (34 Theory, 102 Hrs. OJT)
2.	Ex-Next Generation	Creation of chart of accounts, items, charges, narration, custom fields etc. folders supplier, customer, item, activities entering different types of documents & transactions. Reports, balance sheets, profit & loss A/c, Customer list, supplier list, tax books, budget variance. (20 Theory, 60 Hrs OJT)
3.	Wings	Creation of Accounts, master, product master, tax registers cash entry, receipts, cash payment, bank receipts, sales, stock entries, journals. (18 Theory, 54 Hrs. OJT)

Reference Books :

1. Manuals with the software
2. Implementing Tally (BPB) - A.K. Nadhami & K.K. Nadhani

IV. HOME SCIENCE

Module Courses

- 1. Apparel Construction**
- 2. Tie & Dye, Batik, Block Printing and Screen Printing**
- 3. Computer Based Fashion Designing**
- 4. Soft Toys and Flower Making**
- 5. Beautician**
- 6. Cookery**
- 7. Embroidery & Zig Zag**

1. APPAREL CONSTRUCTION

1. Introduction

Social and Economic changes resulted in development of Garment Making and Designing with Fashion Consciousness. The growth of garment organisations and Boutiques enable the people to stitch their own garments according to people to stitch their own garments according to the prevailing style. This led to fashion consciousness and also being well dressed receives a great deal of Importance and appreciation in social life. So the derth of learning Apparel construction has a wide demand. Hence this course will be useful for the pupil who are interested in developing their skills and to establish their own unit as self employment in apparel construction.

2. Objective

To be trained in apparel construction to enable the student to start a garment unit under self employment.

3. Skills to be Imparted

To impart the knowledge of clothing construction Drafting, Cutting and Sewing of Children and Women's garments.

4. Employment Opportunities

- a. Wage Employment
To work in a garment Industry as pattern maker and designer
 - b. Self employment
- i. Running of classes for garment making.
 - ii. To establish Boutique.6. Apparel Construction - 3 Months

7. List of Training Centre for on the Job training

- a. The Practical Class should have linkage with a garment unit or a tailoring firm.
- b. Visits to be arranged to garment unit for practical exposure to understand its working.

8. List of Equipments

- a. Non Consumable

1. Sewing Machines tailor Model - 20 Nos.
2. Zig Zag and embroidery Machine - 4 Nos.
3. Fashion maker - 4 Nos.
Module
4. Button hole making machine - 1 Nos.
5. Overlock Machine - 2 Nos.
6. Mass Cutting Machine - 1 Nos.
7. Mass Cutting table - 2 big size
8. Measuring tapes - 25 (Consumable)
9. Cutting & Drafting tables - 05
6 x 4 ft. x height 2 1/2 feet
10. Full mirror - 01
11. Black Board - 01
12. Instructors Table - 01
13. Instructors Chair - 01

9. Qualifications : Any related Certificate

1. The students, who have completed Intermediate Vocational Course in Commercial garment designing & making or Fashion & garment can teach 3 months certificate programme.
14. Steel Almarah for Instructor's use - 01
15. Stools for machines - 01
16. Stools for Tables - 01

9. List of Reference Books.

1. How would you look and dress - By Tracarson
2. The standard hand book of Textiles - A.J. Hail
3. Fashion and Fabrics - Rathboya - Tarpley
4. Dress Pattern designing - N. Bray
5. Clothing for Moderns - Erwin and Kichener
6. Practical clothing construction Part - II - Mary Mathews (Designing drafting and tailoring)
7. Commercial method of cutting - V.B. Juvokar

List of Equipment

Consumable

1. Measuring tapes - 25
2. Bobbins - 50
3. Bobbin Cases - 20
4. L. Scale - 20
5. Long ruler - 20
6. Plastic ruler - 20
7. Cloth Cutting Shears - 20
8. Tailors chinks - 10 Packets
9. Hand needles (Afforted) - 25 Boxes
10. Carbon paper - 2 Boxes

List of Participants

Miss Geeth. P.M.
Head of Department of GMT,
Polytechnic College for Women,
Hyderabad.

Mrs. R. Manjula Vani
Asst. Professor (Textile & Clothing),
Govt. Mahaboobia Jr. College for girls,
Hyderabad.

Mrs. SK Mymoon
Junior Lecturer in CGDM,
Govt. Junior College for girls,

Nizamabad.
Co-Ordinator

Smt. K. Nageshwari Bhaskar,
Reader
State Institute of Vocational Education
O/o commissioner & Director of Intermediate Education,
Andhra Pradesh, Hyderabad

10 hrs.

Scheme of evaluation for on job training

Records, Developing designs, samples, Performance, punctuality in daily work.

Syllabus for Module

Theory

- | | |
|---|---------|
| 1. Selection of materials suitable for tie & dye, block, batik and screen printing. | 3 hrs. |
| 2. Development of design suitable for various techniques. | 3 hrs. |
| 3. Preparation of materials for block, tie & dye. screen and batik | 8 hrs. |
| 4. Introduction about colour and dyes | 8 hrs. |
| 5. Classification of dyes | 5 hrs. |
| 6. Introduction to colour fastness | 5 hrs. |
| 7. Method of dyeing - vat, direct, naphthol | 10 hrs. |
| 8. Method of printing - pigment printing, rapid printing | 10 hrs. |
| 9. Technique in tie and dye | 5 hrs. |
| 10. Technique involved in batik | 5 hrs. |
| 11. Technique of screen printing | 5 hrs. |
| 12. Technique of block printing | 5 hrs. |

OJT :2 weeks at the end of the Course

On the Job Training

- | | |
|--|--------|
| 1. Design development for tie and dye | 5 hrs. |
| 2. Preparation of material for tie and dye | 5 hrs. |

2. TIE & DYE, BATIK, BLOCK PRINTING AND SCREEN PRINTING

INTRODUCTION

The art of tie & dye, batik, block printing and screen printing is easier and costs less to learn than most of the other arts. It does demand special training like screen preparation, techniques of dyeing and printing involved in new fashions according to market trend.

In recent years dyeing and printing has developed enormously. Personal selling of designed textiles now-a-days is widely accepted as one of the important marketing activities in most of the boutiques.

The students who undergo this course will be able to start their own units effectively and earn their livelihood. A thorough knowledge about selection, designing, and making dyed and printed textiles will enable the students to design special garments and sell them effectively in the market. The students apart from starting his/her own unit will also be able to work in textile industry successfully on the basis of such analysis. A thoroughly revised and structured course of study has been prepared with particular stress on imparting practical skills. It is hoped that present exercise will prove useful in making the course job oriented and would help in achieving its objectives.

2. Specific Objectives of the course

1. To know different types of dyes available in the market, their characteristics and use.
2. To know the use of various dye auxiliaries used in dyeing and printing.
3. To develop shade cards.
4. To impart skills in tie & dye, block, batik and screen printing.
5. To train students as entrepreneurial

3. SKILLS TO BE PROVIDED

Selection & Preparation of material

1. Selection and developing designs for various end uses suitable for different printings.
2. Techniques of tie and dye
3. Skills in block printing
4. Skills in making screens for screen-printing
5. Skills in waxing for batik.

. Cost estimation of printing.

4. Job Opportunities

1. It has vast self-employment potential.
2. Can operate a boutique.
3. As a dye master
4. Can work as a dye cum printing master in dyeing and printing units.
5. Can contribute printing designs or also take up orders for printing.

3. Techniques of tying	10 hrs.
4. Methods of producing mono and multi colours	15 hrs.
5. Method of direct dyeing and after treatments	15 hrs.
6. Method of vat dyeing.	15 hrs.
7. Method of naphthol dyeing	15 hrs.
8. Project work - Preparation of any two articles using 4 to 5 tying techniques.	15 hrs.
9. Techniques of waxing for batik	5 hrs.
10. Method of dyeing	5 hrs.
11. Methods of removing wax	5 hrs.
12. Project work - Preparation of wall panel or dress material using the batik technique	10 hrs.

13.	Project work - Preparation of any article using combination of batik and tie & dye techniques	10 hrs.
14.	Preparation of pigment printing paste	10 hrs.
15.	Preparation of printing paste with rapid colours	10 hrs.
16.	Method of block printing with mono and multicolours	10 hrs.
17.	Technique of printing spot, all over, and border designs	10 hrs.
18.	After treatment given for rapid colours	10 hrs.
19.	Project - Preparation of any two articles using combination of tie & dye and block printing	5 hrs.
20.	Development designs for screen printing	5 hrs.
21.	Preparation of screens of different sizes	5 hrs.
22.	Techniques of screen printing	5 hrs.
23.	Project - Preparation of any two articles using the screen printing technique	8 hrs.
		216 hrs.

List of Equipment / Machinery Required

Nonconsumables for Batik, Block, Screen Printing and tie & Dye

1. Wooden Blocks
2. Printing table
3. Trolley for Dye paste
4. Motar and pestal
5. Wooden mallets
6. Electric Stirrer
7. Steel vessels of small and big size
8. Plastic buckets
9. Mugs
10. Spoons
11. Wooden Ladder
12. Plastic tubs
13. Gas Stove
14. Iron box
15. Ironing Board
16. Electric T-jantings

17. Brushes of different Numbers
18. Wooden frames of different sizes
19. Screen Printing table
20. Screens of different designs
21. Developing cabinet
22. Squeezer
23. Nylon Blot

Consumables for Batik, Block, Screen Printing and tie & Dye

1. Fabric of Lawn, Cambric, Poplin, 2/2, and 2/1
2. Paraffin wax and bees wax
3. Rosin
4. Sewing threads, Wax thread, Suthili, Needle, Rubber Gloves, Beads
5. Napthol, Vat, and Direct and pigment colors
6. PVA, Caustic Soda, Common salt, Hydrose, Turkey Red Oil, HCL, Turpentoil, Sodium Nitrite, Alum, Copper Sulphate, Fixer, Thickner. Urea, Starch, Soaps and Surf.
7. Foam, Hesian Fabric, Rexin sheet, Nylon net

10. List of Reference Books

1. Hand Woven Fabrics of India by Jasleen Dhamija & Jyotindra Jain, Mapin publishing Pvt. Ltd., Ahmedabad.
2. Cotton Shade Card by Weavers Service Center, Development Commissioner for Handlooms.
3. Tie and Dye & Batik Techniques For All. Saribei Pandit and Saroj Patel.
4. 'Batik' A Do It Yourself Book by Chitragada Krishna Hind Pocket Books Pvt. Ltd., G.T. Road, Delhi-110 032.
5. Indian Printed Textiles, by All Indian Handicrafts Board, Govt. of India.
6. Indian Handicrafts, by DR. R.V. Rao, Book Lovers Pvt. Ltd. Hyderabad.
7. Tie Dyeing & Batik by Fay Anderson.
8. Essentials of Textiles by Marjory L. Joseph.
9. Manual of Dyeing and Printing by Dr. Mary Jacob. Dr. A. Sharada Devi and Dr. A. Padma.
10. Fundamentals of Textiles and their care, by Shusheela Dantyagi.
11. Textile Science by E.P.G. Gohl and L.D. Wilensky.
12. An Introduction to Textile Printing by W. Charke.

13. Fiber to Fabric by B.P. Corbman.
14. Textiles by Norma Hollen and Jane Saddler.

Qualification for Teaching Staff

1. Vocational Lecturers (Full time) / M.Sc. (Home Science (Textiles and Clothing))
2. Vocational Lecturers (Part time) / B.Sc. (H.Sc.)
3. Lab Assistant 10th Class

List of Training Centres for Practicals

(In the order of preference)

1. College of Home Science. Hyderabad and Bapatla
2. Weavers Service Centre, APCO Building, Near Rehman Park, Vijayawada.
3. Weavers Service Centre. Cheneta Bhavan, Nampally, Hyderabad.
4. Dye and Printing Units at Chirala, Mangalgiri, Venkatagiri, Pochampalli, Repalle, Paturu, Bobbili, Uppada, Guntur, Machilipatnam, Kalahasti and etc.
5. K V K A.N.G.R.A.U. Amudalavalasa
6. Telugu Bala, Mahila Paragathi Pragnanams in AP
7. Commercial dyeing and printing units

List of Participants

1. Dr. Alapati Padma
Asst. Prof. Dept. of APTX.
College of Home Science
2. Mrs. D. Anitha
Asst. Prof. Dept. of APTX,
College of Home Science
3. Mrs. Geetha Sampath
M.Sc. (H.Sc.) Dept. of Textiles
College of Home Science
4. Smt. K. Nageswari Bhaskar,
Coordinator & Reader,
State Institute of Vocational Education,
O/o Commissioner & Director of Intermediate Education, A.P., Hyd

3. COMUTER BASED FASHION DESIGNING

Introduction

The candidates who have passed S.S.C. and also failed are eliible to join this Course. The syllabus is framed to cater to the needs of even non-computerate students rising from (fundamentals) foundation to self-sufficiency.

The present course is woven in to the "Commercial Garment Making" of Vocational Intermediate Education (CGDM) This comprises a section of Instruction and introduction of Computer Education.

Objectives

The Chief purpose of including Computer Instruction as a part of CGDM is to acquaint the students of all categories with fundamentals of computers.

The module intends to make the students of CGDM equipped with garment designing with the help of comuter and therefore extending a greater scope of efficiency and creativity.

The course design is income generative and self-employed as it helps (enables) the student to make himself/herself begin an independent unit.

The introduction of computer designing and creative course training upgrades the standard of vocational CGDM on par with other mainstream fashion designing courses.

Skills to be imparted

Fundamentals of computer operation - with supportive theoretical and practical knowledge.

Compulsory inclusion of "Windows" (chapter) section offers necessary skills to lead further.

Advanced skills of "Paint Brush" "Word Pad" are introductory software.

"Coral Draw" is a higher level of computer skill aimed at creative art and imaginative designing.

"Adobe Photoshop" is a challenging skill which brings out the individual creative potential in combining "Coral Draw" with hoto images matching colour screen background.

Employment Opportunities

The inclusion of computer skills with CGDM offers two kinds of employment opportunities to the learners.

1. After the completion of the course the student will be an adept artisan and can find himself/herself successfully employed with any Garment making unit.
2. The student with greater creative confidence level may work individually by supplying on order of

business, or to a large market.

Syllabus for Module

Theory

		Theory hrs.	On the training Job
Chapter	- I Fundamentals	5	
Chapter	- II Windows	7	20
Chapter	- III Paint, Word Pad	10	40
Chapter	- IV Corel Draw	30	100
Chapter	- V Photoshop	20	56
		72	216

On the Job Training

- Windows : Using windows operating system most techniques, Desktop, Windows Explorer
- Corel Draw : Drawings and Designing
- Photoshop : Dealing with Photographs, Drawings, Colours etc.

List of Training Centres for Practicals

- 2 CMC - ATC
- 2 ICSS Computers
- 2 Setwin Computers
- 2 Local Computer Institutes

OJT

- 1. Fasion Makers
- 2) Fashion Designers

List of equipments / machinery required

- 1. Non Consumables
Computer system with High Configuration like Pentium Celeron, Pentium-III, Pentium-IV.
- 2. Consumables
Print Catridges and papers

Teaching Qualifications

- 1. Any DCA with Degree
- 2. BCA or Higher Qualification

Reference Magazines

- 2 Computer Vignanam (Telugu - Monthly)
- 2 Computer for - U
- 2 Computer to day
- 2 Computer Prapancham

List of Participants

1. **Smt. K. Nageswari Bhaskar**, M.Sc.
Reader SIVe
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O/o Commissioner and Director of Intermediate education
A.P., Hyderabad.
2. **Mrs. S. Shakeela** M.Sc. M.Phil. (Ph.D)
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4. **Md. Taslam Fazil**
Field worker
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Hyderabad

5. **K.Y. Vikram**
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4. SOFT TOYS AND FLOWER MAKING

1. Introduction

Toys play an important role in children's lives and development. However there has been a real dearth of good and inexpensive toys in the market. Most of them are too expensive, beyond the reach of the children generally Soft toys in this market are able to reduce their dearth and are reachable to all types community groups at low cost. Teachers, parents and care givers can therefore set into make their own Soft toys with low cost materials, with little imagination on their part. Soft toys should be designed in such a way so as to provide scope for emotional security, physical growth and mental development of the child.

Flower making is a creative art which can be utilised for the preparation of different varieties with low cost indigenous material. If proper knowledge and skills of the students are enriched, they can become the best entrepreneurs with a little amount of investment and going for higher profits.

2. Objectives

- a. To train the students to improve their knowledge on the importance of play and play materials.
- b. To enhance their skills in preparation of soft toys and flower making.
- c. To train the students in preparing the soft toys and flowers on profit basis.
- d. To enrich them to start their own industry under selfemployment scheme.

3. Skills

- a. To improve the skills of the students in the preparation of soft toys and flower making.
- b. To enrich their knowledge in planning the project.
- c. To impart knowledge on applying loans under self employment schemes.
- d. To improve their marketing skills on profitable basis.

4. Employment opportunities

Wage employment

- a. Drafting the soft toys on wage basis.
- b. Working as craft teachers in Mahila Mandals, Schools, Mahila programs etc.
- c. Working as Managers in toy shops.

5. sSelf employment

Scheme of Instruction

Modules	Theory		On-the-job training		Total	
	Hours	Weightage	Hours	Weightage	Hours	Weightage
Module - I	72	30	216	70	288	100
Total	72	30	216	70	288	100

V. Scheme of instruction per Week

	Theory	On-the-job Training	Total
Module I	6 Hours	18 Hours	24 Hours

- a. Can set-up their own soft toys and flower making industry.
5. The Proposed scheme for Examination of the Certificate Course is as follows

6. Syllabus for the Module

Soft Toys and Flower Making

Theory Paper - 1

- | | |
|--|---------|
| 1. Need and importance of play. | 6 hrs. |
| 2. Characteristics of children's play. | 10 hrs. |
| 3. Principles in the selection and Preparation of play material and toys for young children. | 10 hrs. |
| 4. Economy in production | 10 hrs. |
| 5. Marketing - Meaning - Types of marketing factors associated with marketing. | 15 hrs. |
| 6. Advantages of Soft toys. | 5 hrs. |
| 7. Need and importance of flower making. | 6 hrs. |
| 8. Selection of materials & colours to make flowers. | 10 hrs. |
| | 72 hrs. |

On the Job Training

- | | |
|---|---------|
| 1. Visit to local flower toy manufacturing units and popular toy emporiums/centres. | |
| 2. Preparation of soft toys and flowers | 46 hrs. |
| Toys large size - 1 | 30 hrs. |
| Toys medium size - 1 | 30 hrs. |

Toys small size - 1

50 hrs.

The above said Toys must be submitted.

3. Maintaining a on the Job Record

a. For Soft toys

25 hrs.

b. For Flower making

25 hrs.

on the Job training (one week)

30 hrs.

216 hrs.

4. **Preparation of Flowers (10 varieties)**

Proforma for the preparation of soft toys and flower making :

a. Introduction

b. Name of Toy / Doll

c. Tools required

d. Materials used for toys

e. Procedure

f. Cost of the Toy

g. Selling price

h. Profit

7. List of training centres for practicals

a. Vocational schools and colleges.

b. SETWIN

c. Government and Private Craft Institutions.

8. List of equipment / Machinery required

For Soft Toys (Tools)

a. Scissors

b. Pencils

c. Adhessive

d. Brown papers

e. Carbon papers

f. Sketch pencils

g. Tracing papers

h. Threads

- i. Needles
- j. Sewing machines

Material used for toys

- a. Fur material (Long, Medium and Short)
- b. Felt material
- c. Cotton material (Printed and Plain)
- d. Eyes, nose, mouth of different sizes and colours
- e. Filling material - stuffing cotton (Nylon material)
- f. Card boards.

For flower making (Tools)

Zig Zag scissors

Ordinary scissors of different sizes

Materials used for flower making

Organdi cloth of different colours

Velvate cloth of different colours

Flannel cloth

Plastic

Saline bottles

Straws

Ribbons

Grass

Scrapes of wood

Wires (Plastic, Nylon, Wool)

Tape (green)

Binding wire

Stocking wire

Golden and Silver wire

Stocking Cloth

Solar wood paper

Broom sticks

Adhensive material

Stapler

Thermocol

Balls and blocks

Chart papers

Boque boxes

Baskets

pots

Matching threads

Poolans (Pollens)

Cotton

Golden lace and paper

Stems

9. Qualification for Teaching Staff :

Any related certificate holders from Setwin/Woman Welfare Department / Jana Sikshana Samsthan / Intermediate (Vocational) with creche & Pre-School Management Course.

10. List of Reference Books

1. Fun with Art and craft by Romila Bhatnagar, Dept. of Pre-School and elementary Education, NCERT - New Delhi, 1993

List of participants

1. Dr. O. Ramasubhamma Radha Krishna
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5. BEAUTICIAN

1. Introduction

In modern times, beauty culture has emerged as an important occupation with much commercial potential. The influence of cinema TV and advertisements has effected the living times of modern date and the growing number of working women who can afford to spend money on their personal appearance has also contributed to the popularity of beauty culture. The increase in competitiveness within profession has further given a boost to the service offered by beauty saloon/parlor.

Consequently, in the past few years, while beauty saloons/parlors have mushroomed in the 4 metropolitan and other large cities of India, they have also sprung up in great or matter number, in smaller cities and towns. The beauty saloons/parlors have this become a very popular business and the occupation of beautician has emerged as a much demanded, paying and satisfying profession

with wide potential for self-employment and comparatively lower investment.

The course has designed within an aim of developing professional in students with minimum education and made available to all the people in need. Since health is an important component of beauty, health care has also been included in the culture. Here is golden opportunity for an individual to learn and earn in a short period with minimum investment.

2. Specific objections of the course :

1. To develop necessary knowledge and understanding of the different dimensions and component of health care and beauty culture.
2. To develop familiarity with latest trends in beauty culture and hairdressing.
3. To develop a good understanding of indigeneous herbal preparation and their application in beauty culture and hair dressing.
4. To develop necessary attitudes and abilities for planning, establishing, running and supervising a beauty saloon/parlor independently.
5. To develop work ethics and habits essential for carrying out work of a highly personal nature in beauty culture.

3. Skills to be provided to students :

1. Selecting equipment, tools and accessories for various activities.
2. Selecting and purchasing cosmetics and materials for preparing beauty aids.
3. Handling using, cleaning and maintaining the equipment.
4. Applying make up to heighten beauty.
5. Properly doing manicure and pedicure.
6. Removing/camouflaging surface gluons hair.
7. Cutting or setting hair in different styles.
8. Formulating/preparing a variety of herbal and chemical cosmetics for different purposes.
9. Ensuring maximum utilization of available resources.
10. Carrying out safe and correct beautification practices.

4. Job Opportunities :

Wage employment :

- As beautician
- As Hairdresser/designer
- As Makeup artist
- Mehendi artist
- Measseurs / massager
- Assistant trainer in a beauty parlor
- Yoga teacher / demonstrator.
- Assistant in health club/nature cure centre.
- Beauty Lab assistant/technician
- Sales promoter
- Model for beauty products
- Consultant on beauty, diet, exercise, manager.

- Owner / Manager cum Salesman in cosmetic/health Self-employment :
- Beautician
- Hair dresser/designer
- Makeup artist
- Mehendi artist
- Massager/measseurs
- Consultant on beauty, diet, exercise, massage
- Owner/Manager cum sales man in Cosmetic/health

6. Health care and Beauty Culture : 3 months

VI. Syllabus for Module

Theory 72 hours Practicals : 216

I.	1.	Structure of Human body and care of various parts	1 hr
	2.	Hair - Structure and care	2 hrs.
II.	1.	Definition of health and nutrition - Importance and functions of food.	2 hrs.
	2.	Nutrients in food - Functions and source of availability (Carbohydrates, proteins, fats, vitamins, minerals and water)	3 hrs.
	3.	Basic food group (cereals & pulses, vegetables, fats & oils, nuts & seeds, milk and milk products, meat & meat products) balanced diet and its significance in health.	3 hrs.
	4.	Food and nutrients specially related to beauty of skin, nails, hair etc.,	3 hrs.
	5.	Different types of body tone - Overweight (obesity) - causes and precautionary measure.	3 hrs.
III.	1.	Skin care, facial.	3 hrs.
	2.	Cleaning	1 hr.
	3.	Massage	1 hrs.
	4.	Different strokes for facial	4 hrs.
	5.	Facial problems and their treatment	4 hrs.
	6.	Bleaching	2 hrs.
	7.	Removal of unwanted hair	1 hr.
	8.	Latest body and beauty care equipment	4 hrs.
IV.	1.	Yoga and its importance,	3 hrs.
	2.	Asanas and meditation	2 hrs.
V.	1.	Hair care - Importance and identification	3 hrs.
	2.	Oil massage for hair	4 hrs.
	3.	Colouring of hair	4 hrs.
	4.	Conditioning of hair	4 hrs.
	5.	Haircuts, hairstyles	4 hrs.

VI.	1.	General use of cosmetics & use	
	1.	Water	1 hr.
	2.	Creams	2 hrs.
	3.	Lotions	2 hrs.
VII.		Saloon management :	
		Budget planning	3 hrs.
		Maintenance of stock records & clients	3 hrs.
		Planning for publicity	3 hrs.
			199 hrs.

On the Job Training

1.	Planning of balanced diet using all food groups.	6 hrs.
2.	Identification of foods rich in various nutrients (carbohydrates, fats, proteins, minerals, vitamins, water)	6 hrs.
3.	Preparing the client for facial.	5 hrs.
4.	Equipment and ingredients required for facial	9 hrs.
5.	Facial - different types	12 hrs.
6.	Facial problems - their treatment	8 hrs.
7.	Bleaching	5 hrs.
8.	Removal of unwanted hair	10 hrs.
9.	Equipment available in market	12 hrs.

10. Practicing asanas, mudras.	13 hrs.
11. Practicing meditation	11 hrs.
12. Inspection of hair and identification	9 hrs.
13. Oil massage for hair - materials and equipment	15 hrs.
14. Conditioning of hair - herbal and chemical	13 hrs.
15. Colour of hair - herbal, chemical, latest trends	13 hrs.
16. Haircuts - Suitability, handling, types	8 hrs.
17. Hairstyles - natural, electrical equipment, chemicals	15 hrs.
18. Budget planning	9 hrs.
19. Cosmetics usage - lotions, Cream (application)	13 hrs.
20. Planning for publicity	11 hrs.
21. Maintenance of Stock records	13 hrs.
	216 hrs.

7. Required qualification for staff :

1. Any graduate - Preferably Home Science
2. Any graduate with diploma / certificate in beauty culture/hair dressing with practical experience of working in a beauty parlor/hairstyling saloon.

VII. List of Training Centres for Practicals :

1. Beauty Parlor / Hair dressing Saloon in hotels/health resorts/commercial residential areas.
2. Health Clubs.
3. Yoga Centres
4. Vocational Institutions offering a course in beauty culture and hairstyling.
5. Yoga/Physical education institutions running a course in Yoga/Physical education.
6. Nature cure centres for massage, bath and diet.
7. Home Science colleges/Food catering Institution/Universities where food and Nutrition is taught.
8. Hospitals and other institutions where Nutrition and dietetics are practiced.

VIII. List of equipment / machinery required :

Non-consumable / consumable

- Medicine sized rollers
- Ringlet rollers
- Perm rollers
- Warier clips
- Tail combs
- Hair combs brush (for blow-drying)
- Spam and water bottles
- Eye liner and lip brushes
- Blucher brushes
- Black head remover
- Hair dye comb and brushes
- Facial streamer

- Hair dryer
- Hood hair dryer
- Massager (vibrator)
- Epigone
- High frequency equipment
- Thinning
- Cutting scissors
- Straightening rollers
- Facial bed
- Facial screen
- Cupboards
- Facial bolus
- Medium sized towels
- Test tubes
- Wooden scrapper
- Test tubes holder
- Book case
- Fridge with chowk
- Transformer
- Weighing machine
- Hair razor
- Black head remover
- Tangic comb
- Head bands
- Hair cutting cape
- Switch stand
- Foot mounting
- Pillow
- Small looking glens
- Geyser
- Sance pan
- Waxing knife
- Foot scalpel

Non consumables :

- Full plate
- Quarter plate
- Soup plate
- Dongha
- Sancer
- Small curry bowl
- Glasses
- Cups

- Grater
- Measuring jars
- Glass bowl
- Plate
- Karchi
- Wooden spoon
- Strainer
- Egg beater
- Rice tray
- Serving spoon
- Lemon squeezer
- Table spoon
- Forks
- Tea spoons
- Serving knife
- Kitchen knife
- Pooler
- Rice spoon
- Dongha
- Cake tie
- Jelly mould
- Parat
- Thali
- Partials with lid
- Steel bowl
- Rolling board and pin
- Tawa
- Foraging pan
- Cooker
- Karachi
- Chopping board
- Masala box

IX. Required Qualification for Staff :

1. Any graduage - Preferably Home Science.
2. Any graduate - with diploma / certificate in beauty culture / hair dressing with Practical experience of working in a beauty parlor / hair dressing saloon.

X. List of Reference Books :

1. Anatomy and Physiology of the Human body for Nurses - in villain parasols.
2. How do you look and dress - Byta capson
3. Latest Hair Style Album - Dehati pustak Bhandar
4. Ladies Beauties Guide - Parimala Mehra
5. The Complete beauty - Lucinda Lidell

6. Hair care - Pot spires
7. Text Book of Cosmetology - Hutton Olive P. Scott
8. Book of Massage - Lucinda Lidell
9. Our Book - M. Swaminathan
10. Nutrition vale of Indian Foods - Gopalan
11. Yoga for health - Swami Shivanan
12. Yoga Parichaya - Dr. Pitamba Jha

XI. List of Participants

1. Dr. V. Vijaya Lakshmi
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5. Smt. K. Nageswari Bhaskar
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6. COOKERY

I. Introduction

The knowledge of nature of our foods, what they are made of and where they came from, how they are transformed by cooking is essential for any one who wants to experience cooking. The application of science to cooking now only explains how the traditional techniques work but also offers few new techniques, readers too much of dependence on following other's directions. The three months cookery course is most suitable for such type of learning cookery.

In the recent days, depending on ready to eat outside food is increasing not only among the households where women are employed, but also in those families where members are busy in several other activities. They are more dependent on hotels, canteens, fast food corners and catering

organisation for day to day food requirement as well as for special foods during family or social celebrations.

Thus food management as an occupation is fetching lots of profit and fame to those involved in it. However, it is essential that people involved in food management need to require sufficient knowledge of food science, skills of practical cookery, food hygiene and safety. In this content, the introduction of "Cookery" as a vocational course for school dropouts or at +2 level is very useful.

II. Objectives :

1. To impart knowledge of various foods and the application of food science in food preparation.
2. To impart skills in preparation of variety of food items with foods from each food group.
3. To impart skills in proper menu planning for South Indian or North Indian or Chinese type of menu's.
4. To provide an employment potential in food management hi hotels, canteens, catering organisation etc.

III. Skills to be provided :

1. Identifying the foods and places of their availability.
2. Preparation of food items suitable for breakfast, meal, snack, beverage of Indian or North Indian or Chinese tastes.
3. Skills in planning menu mean plans for canteens, hotels, restaurants, or hostels.
4. Skills in handling and processing foods more hygienically.
5. Skills in proper methods of storage of uncooked and cooked foods.
6. Skill in arranging the foods on the plate and on the table.

IV. Employment Opportunities :

A. Wage employment :

1. In canteens
2. Hotels
3. Restaurants
4. Fast food centers.
5. Dhabas.
6. Catering organisation.
7. Mobile group of cooks.
8. Mithai bhandars.
9. School/College/Working peoples hostels.
10. Guest houses.

11. Corporate hospital canteens.

B. Self employment :

1. Own tea/Tiffin shops
2. Mobile breakfast/Tea/Snake vendors.
3. Supply of Sweets, Savouries etc to mithai bhandars.
4. Raw fast food corners.
5. Out door catering.
6. Mobile catering
7. As cooks in big/small families
8. As cooks with tourist groups.
9. Have their own hotels.

VI. Syllabus for Module

Theory :-

1. Characteristics of different food materials used in cookery - their selection - preparation of foods for cooking - 3 hrs.
2. Methods of cooking - objectives, principles various cooking appliances, equipment, machinery etc. - 4 hrs.
3. Cereal & Millet Cookery - types of cereals & millets, selection processing - storage - changes during cooking - products of different cereals & millets - Baking. -5 hrs.
4. Pulses & legumes - types - selection - processing - storage - changes during cooking - different pulse & dhal preparations. -4 hrs.
5. Oil seeds & oil - types - selection - preparation of spoilage rancidity - uses in food preparation - care of used oils. - 4 hrs.
6. Milk & milk products - types - selection uses of milk care of milk - milk products & their usage -4 hrs.
7. Beverages - types - functions - methods of preparation of various beverages. - 4 hrs.
8. Meat, fish, poultry - structure - types - selection slaughtering cleaning & processing - factors contributing to good quality of meat - tenderization of meat - cooking methods suitable for meat, fish & poultry - traditional & modern products of meat & fish - 4 hrs.
9. Eggs - structure - fresh & aged - grading properties storage - uses in food preparations 3 hrs
10. Vegetables - classification - varieties - selection & care storage - cooking methods suitable to each group - various food preparations incorporating vegetables - use of dried and canned vegetables. - 4 hrs.

- | | |
|---|----------|
| 11. Fruits - classification - fresh & dried - composition - changes during ripening - selection & care - prevention of browning - storage - preparation | - 4 hrs. |
| 12. Soups & appetizers - types - major differences | - 4 hrs. |
| 13. Sugar & Jaggery - types - sources - uses in cookery | - 4 hrs. |
| 14. Spices & Condiments - types - Sources - uses in cookery / wet & dry spice mixes, powders. | |
| 15. Components of Kitchen management & organisation Kitchen equipment & maintenance | - 3 hrs. |
| 16. Nutrient composition of foods - Balanced diets | - 4 hrs. |
| 17. Planning of menus - South Indian - North Indian, chinese etc. | - 4 hrs. |
| 18. Management of Budget - accounting | - 6 hrs. |

Syllabus for OJT

Practicals. No. of hrs.

1. Grossary of foods 10 hrs.
2. Demonstration & Practice of Selection & Preparation of foods - 10 hrs.
3. Use of various cooking appliances & cooking methods - 5 hrs.
4. Preparation of foods with wheat & wheat products - different Rotis - sandwiches - vermicelli & Samolina preparations / baked foods - Snack items. 10
5. Preparation of foods with rice - dry heat - moist heat preparations - rice plain, seasoned, fried, biryani etc. fermented rice products like idli, dosa etc. other breakfast, heal & snack item. 10 hrs.
6. Pulses & dhals - cookies of various types, sambar, use of whole gram in curries (rajmah / channa, moong, peals etc.) breakfast items - vada - pesarattu etc - snack items - 10 hrs.
7. Milk preparations - beverages - use of milk products in various preparations - milk sweets - milk snacks - ice- creams. - 10 hrs.
8. Selection of fish/meat/poultry - changing & processing preparation of curries, fries, Manchurias, & other several variations. Preparations suitable for meals & as individual snack items 10 hrs.
9. Egg preparation - curries, snacks, egg fried rice etc. - 10 hrs.
10. Variety of green leafy Vegetables - cleaning - methods of chopping - preprations - curries, chutneys,

prickles. incorporation in other food preparations - 10 hrs.

11. Root vegetables - use of a variety of root vegetables - preparation of accompanying dishes, snack items etc. 10 hrs.
12. Other vegetable varieties - Preparation of several accompanying dishes - incorporation in Sambar, fried rice, dhal preparations etc, & chutneys, prickels etc. 10 hrs.
13. Soups, Salads, appetisers - preparations & display methods - 10 hrs.
14. Fruits - Salads, Juices, Squashes - 10 hrs.
15. Confectionery - food items - sweets of several varieties - 10 hrs.
16. Spice & condiment powders & pastes - suitable for meal preparation, accompanying dishes etc. - 10 hrs.
17. Planning meals - Showing the entire course of meals - preparation & serving of the same - 6 hrs.
South Indian - 4 to 6 exercises 10 hrs.
North Indian 4 to 6 exercises 10 hrs.
Budget planning - expenditure - Profit particulars submission 10 hrs
18. Planning & Preparation of chinese foods of demand 2 to 4 excercises 41 hrs.

216

Staff visiting OJT - 6 to 9 hrs.

VII. List of Training Centres for Practicals :

1. Big hotels.
2. Canteens attached to big organisations.
3. Restaurants.
4. Govt. hostels.
5. Canteens of corporate offices/Hospitals.

VIII. List of Equipment/Machinery required :

(A) Large equipment :

1. Stoves-fired by gas, Electricity, Solid fuel or oil.
2. Ovens.
3. Steamers.
4. Boiling pans/Steam-jacket kettle.
5. Deep fat fryers/fritures.
6. Hot cupboard.
7. Grills and Salamander

8. Contact grills
9. Fry plates, griddle plate.
10. Sinks
11. Tables.
12. Butchers block
13. Storage racks

(B) Mechanical Equipment :

1. Potato peelers
2. Refrigerators
3. Food mixers and grinders
4. Food slicers and choppers
5. Water boiling appliances for tea and coffee making
6. Dish washer

(C) Utensils and Small Equipment :

1. Cooking utensils (big)
2. Pans-deep, shallow & dosa pan
3. Whisly
4. Bowls-serving bowls, plates, tumblers.
5. Spoons-for stirring, serving, table setting.
6. Knives of different types.
7. Graters.

IX. Qualification for Teaching :

1. Experienced M.Sc. Nutritionist
2. Graduate of Hotel Management course
3. Senior Cooks of hotels

X. Reference Books :

- | Krishna Arora "Theory of cookery", Frank brocomp thangam Philips, "Modern cookery".
- | Potttern food science CBS
- | Srilakshmi, B food science, New age publications.
- | Shankuntala, foods, facts and principles, New age publications.
- | Cook books, practical cookbooks of south Indian dishes - North Indian dishes special reciepe books on soups, beverages, salads etc.

XI. List of Participants :

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Smt. K. Nageshwari Bhaskar
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7. EMBROIDERY & ZIG ZAG

1. Introduction

Embroidery is known from ages for its colour. and delicate intricate designs used for fabric enrichment with needle and thread by skilled persons. It is also known as Traditional Embroidery which is, from several years, popular according to the place it has originated as Rajasthani Embroidery, Kashmiri embroirdery and so on. Today with vast improvement of communications people have access to know, to learn and to appreciate this delicate unique embroidery. Hence it has its own importance, even in this fast moving world, where hand technique is involved.

The development of embroidery machines, made the task easy to decorate the garments with machine embroidry with unique colours and designs.

2. Objective

- a. To create perfect skill of hand embroidery and Machine embroidery.

- b. To make the pupil suitable for selfemployment.
- c. To know about various techniques and combinations in hand and machine embroidery.
- d. To develop the techniques to be used in embroidery at appropriate places in Apparels to enrich its apperance.

3. Skills to be Imparted

- a. To draw and develop embroidery designs.
- b. To enable to impart the knowledge of hand and machine embroidery.
- c. To develop various techniques of hand embroidery, applique, Quilting and Zigzag machine embroidery.

4. Employment opportunities

- a. Wage employment
As an assistant for embroidery design supervisors in a garment unit.
- b. Self employment
 - i. To setup a Botique
 - ii. To run Sewing Classes
 - iii. Embroidery - Hand and Zig Zag Unit.

5a. Qualifications

The students who have completed Intermediate Vocational Course in commercial Garment designing and making or fashion and garment making can teach 3 months certificate programme.

- b. They should also have experience for 6 months in tailoring and embroidery producing records.

6. Syllabus for the Module

Theory : 72 Hours

- i. Importance of embroidery 5 3
- ii. Importance of colour combination in embroidery 10 6
- iii. Methods of Transferring a design 10 10
- iv. Care of embroidery 10 5
- v. Tools and Materials used for embroidery 5 5
- vi. Hand Embroidery - Introduction, objectives, material required and method of working the following stitches. 10 30

a. Running Stitche	1	3
b. Satin Stitch		
c. Back stitch		
d. Long and Short Stitch	1	3
e. Eyelets	1	3
f. Stem stitch	1	3
g. Chain stitch -	1	3
h. Laisy Daisy -	1	3
i. Herring bone stitch	1	3
k. French knot		
l. Bulllion knot		
m. Fish bone stitch		

VII. Applique Work

Patch work on cushions, curtains with button hole stitch, with machine stitch.

Quiting - Small cushion

	Theory	Practicals
VIII. Zig Zag embroidery - Machine embroidery	12	90
a. Satin stitch	2	20
b. Running	2	20
c. Cording	2	20
d. Cut work	2	20
e. Eyelet work	6	20
f. Applque work	6	26
	72	216

On the Job Training

The above mentioned stitches should be prepared in sample size for a record.

7. List of training centres for practicals

- The practical classes should have linkage with hand embroidery and machine embroidery units.
 - Regular visits to be made to embroidery units to know the techniques and trends in vogue.
8. List of Equipments

Consumable :

1.	Embroidery Hoop (Ring)	-	25 Nos.
2.	Wooden Frame	-	25 Nos.
3.	Embroidery yarn bundle (Skeins)	-	30 bundles
4.	Machine Embroidery thread	-	50 Mts.
5.	Embroidery thread	-	10 Pkts.
6.	Ruler	-	25
7.	Pencil	-	25
8.	Thimble	-	25
9.	Poker	-	10
10.	Bodkin	-	10
11.	Seamripper	-	10
12.	Typestry Needle	-	5 Doz.
13.	Round Eye Needle	-	5 Doz.
14.	Ling Eye Needle	-	5 Doz.
15.	Pinkin Scissors	-	5 Doz.
16.	Pointed Scissors	-	25 Nos.
17.	Embroidery Scissors - (Small Pointed Scissors)	-	25 Nos.
18.	Dress maker Scissor	-	25 Nos.
19.	Cloth		As per requirement
20.	Bobbins	-	20 Nos.
21.	Bobbin Cases	-	20 Nos.
22.	Cloth cutting sheans	-	25 Nos.
23.	Tracing paper	-	30 Bundles
24.	Hand Needles (Assorted types)	-	25 Boxes
25.	Carbon papers	-	2 Boxes

Non - Consumable

1.	Zig-Zag Sewing machine - (Machine Embroidery)	-	5 Nos.
2.	Wonder Stitch	-	2 Nos.
3.	Flora	-	5 Nos.
4.	Sew Machine (Ordinary tailor model)	-	5 Nos.
5.	Table for working	-	5 Nos.
6.	Black Board 6 ft. x 4 ft.	-	1 Nos.
7.	Instructor Table	-	1 Nos.
8.	Instructor Chair	-	1 Nos.
9.	Steel Almariah	-	1 Nos.
10.	Stools for tables	-	35 Nos.
11.	Stools for machines	-	15 Nos.
12.	Wooden frames (Embroidery)	-	10 Nos.

Reference Books :

1. Modern needle craft - practical guide by Davide. C. Minter - The Gresham Publishing company Ltd. London.
2. 32 Embroidery stitches Book-1 - by Anchor embroidery stitches
3. The Pictorial Guide to modern home needle craft odhams press Ltd. London.
4. Unit method of sewing - Iowa Home Economics Association Iowa.
5. Complete Guide to needle work - Reader's digest
6. Mac calls of Needle work.
7. Big book of Needle work
8. ONDORI Embroidery pattern books.
9. A Manual of machine embroidery

Magazines :

- a. Embroidery books
- b. Vogue
- c. Local magazines for design

Teaching Pattern

1. B.Sc, H.Sc.
2. B.Sc, H.Sc, Diploma in Embroidery
3. Diploma in Fashion Design
4. Intermediate (VOC) with CGDM,FGM courses

5. Intermediate (VOC) with CGDM.FGM courses and Diploma in Embroidery and Fashion Design.

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