UNIVERSITY OF MUMBAI

No.UG/ICC/2015-16/99 MUMBAI- 400 032 13rd October, 2015

The Principal, College of Home Science, Nirmala Naketan, 49, New Marine Line, **MUMBAI- 400 020.**

Madam,

I am to invited your attention to this office Circular No. UG/26 of 2015 dated 22nd July, 2015 and to inform you that the recommendation made by the Faculty of Science at its meeting held on 11th August, 2015 has been accepted by the Academic Council at its meeting held on 31st August, 2015 <u>vide</u> item No.4.17 and that in accordance therewith, the revised syllabus as per the Credit Based Semester & Grading System for F.Y. B.Sc. programe in Home Science (Sem. I & II), which is available on the University's web site (<u>www.mu.ac.in</u>) and that the same has been brought into force with effect from the academic year 2016-17.

Yours faithfully, REGISTRAR

A.C/4.17/31/08/2015.

No. UG/99-A of 2015-16 MUMBAI-400 032 43rd October, 2015 Copy forwarded with compliments for information to :-

3) The Dean, Faculty of Science.

4) The Chairperson, Ad-hoc Board of Studies in Home Science.

3) The Director, Board of Colleges and University Development,

4) The Co-Ordinator, University Computerization Centre,

5) The Controller of Examinations.

REGISTRAR

...РТО

AC 31/08/2015 Item No. 4.17

UNIVERSITY OF MUMBAI Revised Syllabus SEMESTER I & SEMESTER II Program: B.Sc. Course: Home Science (Credit Based Semester and Grading System with effect from the Academic Year 2016–2017)

PREAMBLE

Home Science is an interdisciplinary science, which offers holistic and socially-relevant educational programmes. Home Science has emerged as a full-fledged scientific course in which overall improvement in the quality of life of the individual, family, and community is sought. There is a prominent emphasis on professional competence and sensitivity to the needs of society. The degree courses are B.Sc. (Home Science), M.Sc. (Home Science) and Ph.D. (Home Science). The four main areas of specialization are as follows:

- 1. Foods, Nutrition and Dietetics
- 2. Human Development
- 3. Textile and Fashion Technology
- 4. Community Resource Management

The objectives of the Home Science curriculum are as follows:

- 1. To impart knowledge and facilitate the development of skills and techniques in the different areas of Home Science (namely 'Foods, Nutrition and Dietetics'; 'Human Development'; 'Textile and Fashion Technology'; and 'Community Resource Management') required for personal, professional and community advancement.
- 2. To inculcate in students, values and attitudes that enhance personal and family growth and to sensitize them to various social issues for the development of a humane society.
- 3. To promote in students a scientific temper and competencies in research to enable contributions to the national and international knowledge base in Home Science and allied fields.
- 4. In sum, to empower our women students such that they are able to effect positive changes at multiple levels.

COURSE CODE	TITLE OF THE COURSE	WORKLOAD		D NO. OF CREDITS	
		L	Р	Т	Р
USHS101	Foundation Course *Computer Applications (Value-Added)	3	-	2	-
USHS102	Food Science	3	-	3	-
USHS103	Child Development	3	-	3	-
USHS104	Fibre to Fabric	3	-	3	-
USHS105	Aesthetics in Interiors	3	-	3	-
USHSP101	Food Science	-	3	-	2
USHSP102	Pattern Making and Styling for Kidswear	-	3	-	2
USHSP103	Aesthetics in Interiors	-	2	-	2
				14	6

SEMESTER I

• Additional fee will be charged for the computer classes. Unless a student passes the Computer Examination, the student will not get the credits of the said paper.

Course Code	Title of the Course	Lectures / week	Marks allotted	Credits for the Course
USHS101	Foundation Course	3	100	2

- 1. To develop a basic understanding about issues related to diversity and disparity.
- 2. To gain an overview of the Indian Constitution and the political process.
- 3. To understand the growing social problems in India and the methods to combat it.

Unit	Торіс	No of periods
Ι	 Concept of diversity and disparity Concept of Diversity in India—cultural, population ,linguistic, regional and communal Disparity –causes and consequences Gender People with disabilities Caste system. Intergroup conflicts due to caste, communal, regionalism and linguistic differences.(causes and effects) 	15
II	 The Indian Constitution and Political Process. Philosophy Basic features Fundamental duties of the Indian citizen as crucial values in strengthening the social fabric of Indian Society(tolerance, peace and communal harmony) The party system in Indian Politics Local self government in urban and rural areas Role and significance of women in politics 	15
III	 Growing social problems in India(Project) Substance abuse HIV/AIDS Problems of elderly Issues of Child Labour and child abuse Issues related to gender disparity Role of youth in politics Public services-IAS/IPS/IFS Any other current social issue/problem as need arises. 	15

Suggested Readings

[Note: This is not an exhaustive or prescriptive list; it is merely suggested reading]

Unit 1 (Human Rights, Consumer Rights, Public Interest)

Shivananda, J. Human Rights. Alfa Publications, New Delhi, 2006 Rajawat, M. Human Rights and Dalits.Anmol Publications, New Delhi, 2005 Kaushal, R. Women & Human Rights in India; Kaveri Books, New Delhi, 2000

Bajpai, A. Child Rights in India; Oxford University Press; New Delhi; 2003
Biju, M.R. Human Rights in a Developing Society; Mittal Publications, New Delhi, 2005
Prakash Kumar & Rai, K. B. Right to Know; Vikas Publishing House, NOIDA, 2008
Naib, Sudhir The Right to Information Act,2005: A Handbook; OUP, New Delhi; 2011
Sathe, S. P. Judicial Activism in India; OUP; New Delhi, 2002

Unit 2 (Ecology, Health, Education, Urban-Rural Issues)

Satpathy, N. Sustainable Development (An Alternative Paradigm); Karnavati Publications, Ahmedabad, Pachauri R.K & 1998

Srivastava L. (eds.)Global Partners for Sustainable Development; Tata Energy Research Institute, New Delhi; 1994

Shiva, Vandana Ecology and the Politics of Survival: Conflict over Natural Resources in India; Sage Publications, California, 1991

Pereira, W Inhuman Rights: The Western System and Global Human Rights Abuse; Apex Press; 1997 Pereira, W & Asking the Earth: Farms, Forestry and Survival in India; Earthscan Seabrook J Publications; 1991

Goel, S.L. Encyclopedia of Disaster Management, Vol. I, II & III; Deep and Deep Publications Pvt. Ltd., New Delhi; 2006

Parasuraman S. & Unnikrishnan P.V: India Disasters Report; Oxford University Press, New Delhi, 2000

Azim Premji The Social Context of Education in India; 2004. Foundation www.azimpremjifoundation.org/; Higher Education in India; UGC Report; 2003

Chaterjee, C Health and Human Rights; Vulnerable Groups in India, CEHAT, Mumbai &Sheoran, Gunjan May 2007

Datta, Prabhat The Great Indian Divide; Frontline; Volume 21 - Issue 14, Jul. 03 - 16, 2004 Kundu, Amitabh Rural Urban Economic Disparities in India: Database and Trends; December 2010; <u>http://www.indiapolicyforum.org/node/21</u>

Unit 3 (Effective Communications Skills)

Covey, Stephen 7 Habits of Highly Effective People; Free Press, 2004 Iyer, Prakash The Habit of Winning; Penguin, India; 2011 Goldratt, Eliyahu The Goal; The Northriver Press; 3rd Edition; 2004 Goldratt, Eliyahu It's Not Luck; The Northriver Press; 1994

Course Code	Title of the Course	Lectures / week	Marks allotted	Credits for the Course
USHS102	Food Science	3	100	3

- 1. To acquire knowledge of various concepts of Food Science, its facts and principles.
- 2. To understand nutritional importance of various food groups.
- **3.** To develop the ability to select and apply the principles of Food Science to practical situations.

Unit	Course Content	Lectures
Ι	 Introduction to food science Concept of Food Science and Nutrition. Reasons for cooking foods. Cooking Methods-Dry heat methods and Moist heat methods. 	15
	Introduction to various food groups - Classification, structure, nutritive value, selection,, storage and elementary principles of cooking involved in the following food groups: a. Cereals b. Pulses & Legumes c. Nuts & Oilseed	
II	Introduction to various food groups - Classification, structure,Nutritive value, selection, storage and elementary principles of cooking involved in the following food groups: d. Fats & Oils e. Sugar & Jaggery f. Vegetables & Fruits	15
III	Introduction to various food groups - Classification, structure, nutritive value, selection, storage and elementary principles of cooking involved in the following food groups: g. Milk h. Eggs i. Flesh Foods-Fish, Meat & Poultry j. Spices & Condiments	15

References :

Arora K. (1993). Theory of Cookery. New Delhi: Frank Bros. and Co.

Bennion, M. (1975). Introductory Foods. New York: Mac Millan Publishing Co. Inc.

Manay, N.S. (1995). Food Facts and Principles. New Delhi: New Age International Macwilliam M. (1980). Food Fundamentals. New York: John Wiley & Sane. Srilakshmi. B. (1997) Food Science. New Delhi:New Age Swaminathan, M. (1991). Food Science & Experimental Foods. Madras: Ganesh & Co.

Course Code	Title of the Course	Lectures / week	Marks allotted	Credits for the Course
USHS103	Child Development	3	100	3

- 1. To introduce students to the scientific study of childhood and the principles of child development.
- 2. To help students learn about the key features of physical, motor, cognitive, language, social and emotional development in childhood, covering the period from conception to late childhood.
- 3. To create an awareness of the various factors that influence and stimulate growth and development during the prenatal period, infancy, toddlerhood, preschool years, and school years.

Unit	Course Content:	Lectures			
Ι	Introduction, Prenatal Development, and Infancy	15			
	(a) Importance of studying children; status of children in the world				
	and in India; methods of studying children				
	(b) Concept of development, principles and issues of development				
	(nature and nurture; continuity and discontinuity; early experience				
	versus later experience; stages or gradual development; role of				
	context/culture)				
	(c) Prenatal development				
	• Stages of prenatal development and mother's experience of				
	pregnancy				
	 Teratology and hazards to prenatal development 				
	• Prenatal care				
	 Cultural beliefs about pregnancy 				
	(d) Birth and the postpartum period				
	 Birth process and complications 				
	• Physical, emotional, & psychological adjustments in the				
	postpartum period				
	• Bonding				
	(e) Physical and motor development				
	• Growth patterns: cephalocaudal & proximodistal patterns				
	 Body growth and change in infancy, early childhood, and middle and late childhood 				
	• Early experience and the brain; development of the brain in childhood				
	 Reflexes, gross motor skills, and fine motor skills 				
П	Cognitive and Language Development in Childhood (a) Cognitive development	15			

		ír
	• The course of infant and toddler cognitive development	
	(Piaget's theory and extensions)	
	 Characteristics of preschooler's thought (Piaget's and 	
	Vygotsky's theories and extensions)	
	 Preschooler's attention and memory abilities 	
	 Social cognition in preschool years 	
	 Cognitive development in school years (Piaget's & 	
	Vygotsky's theories and extensions)	
	• Concept of intelligence; individual differences in	
	intelligence	
	(b) Language development	
	 Defining language 	
	• Language development in infancy, early childhood, and	
	middle and late childhood	
	 Multingualism: advantages and challenges 	
	• How parents and the family environment can facilitate	
	language development	
III	Social and Emotional Development in Childhood	15
	(a) Theoretical perspectives (Freud, Erikson, and extensions)	
	(b) Social and emotional development in infancy	
	 Origins of reciprocity 	
	• Attachment, stranger distress, separation anxiety	
	• Temperament	
	 Sensitive period hypothesis 	
	(c) Social and emotional development in toddlerhood	
	 Views of socialization 	
	 Growth of sociability 	
	• Awareness of self and others	
	• Parent-toddler relations	
	(d) Social developmental changes in early childhood	
	 Child's expanding world 	
	 Self-control and self-management 	
	• The developing self	
	(e) Social development in middle and late childhood	
	• Development of the self	
	• Peer relations	
	• Children in school	
	 Functions of play 	
	(f) Family influences	
	• Quality of care	
	 Parenting styles and their influences 	
	 Sibling relationships 	
	(g) Linkages between family and peer relations	
Referenc	٩٤،	•·

References:

DeHart, G. B., Sroufe, L. A., & Cooper, R. G. (2004). *Child development: Its nature and course* (5th ed.). NY: McGraw-Hill.
Santrock, J. W. (2013). *Child development* (14th ed.). NY: McGraw-Hill.

Sroufe, L. A., Cooper, R. G., & DeHart, G. B. (1992). *Child development: Its nature and course*. NY: McGraw-Hill.

Course Code	Title of the Course	Lectures / week	Marks allotted	Credits for the Course
USHS104	Fibre to Fabric	3	100	3

Objectives:

- 1. To introduce students to the basics of textile fibers, yarns and fabrics.
- 2. To give an insight into the new developments in textiles.
- 3. To equip students with the knowledge of the care and maintenance of textiles.

Unit	Course Content	Lectures
Ι	Fibers: a. Introduction to textile fibers b. Introduction to polymerization and molecular arrangement of fibers c. Classification of fibers d. Brief study of the cultivation/manufacturing processes, properties and uses of the following major fibers: Cotton, Jute, Linen, Wool, Silk Viscose Rayon Nylon, Polyester, Acrylic e. Study of blends – blending and its advantages, common blends and end uses f. Brief study of minor fibers: source, properties and end uses Natural (cellulosic): Hemp, Pina, Kapok, Banana Natural (proteinic): Mohair Synthetic: Elastomeric, Metallic, Glass, Carbon g. Recent Developments h. Sourcing of different fabrics i. Companies/centres/clusters, for fibre manufacture/cultivation j. Recent Trends and Future Trend Forecast of Fibres in the Textile &	15
II	 Fashion Industry Yarns: a. Introduction to yarns b. Yarn formation: Brief history of spinning (hand and mechanical spinning) c. Spinning: i.Yarn twist: Definition, Directions and Types of twist ii.Spun yarn: Ring spinning and Open-end spinning iii.Filament yarn: Monofilament, Smooth filament, Tape and network yarns, Bulk continuous filament yarn d. Classification of yarns: single, complex, composite e. Recent Developments f. Sourcing for Yarns g. Companies/centres/clusters, for yarns h. Recent Trends and Future Trend Forecast of Yarns in the Textile & Fashion Industry 	15
III	Fabrics: Woven: Yarn preparatory stages, parts of the loom, steps in weaving and basic weaves (plain, satin, sateen and twill)	15

Knitted: Introduction to knitting, Weft knitting (flat and circular) Warp (tricot and raschel), properties and uses	
Non–woven: Definition, manufacture, properties and uses d. Care labels	
e. Recent Developments	
f. Sourcing for Fabrics	
g. Companies/centres/clusters, for Fabrics	
h. Recent Trends and Future Trend Forecast of Fabrics in the Textile &	
Fashion Industry	

References:

Ajgaonkar, D. B. (1998). Knitting Technology. Mumbai: Universal Pub. Corporation

Brannon, Evelyn L. (2010) Fashion Forecasting. 3d ed. New York: Fairchild.

Corbman, B. P. (1985). *Textiles: Fibre to Fabric*. (6th Ed.).New York: Gregg Division/McGraw Hill

Collier, B. J. and Phyllis, G. T. (2001). Understanding Textiles. New Jersey: Prentice Hall.

Cook. J.G (2001) Handbook of Textile fibers- Vol I Woodhead Publishing Ltd.Cambridge

D'Souza, N. (1998). Fabric Care. India: New Age International.

Gohl, L.P.G And Velinsky L.D(2005) *Textile Science* (2nd Ed.) CBS Publishers and Distributors, New Delhi

Gokerneshan, N (2004), Fabric Structure and Analysis, New age International Publishers, New Delhi

Gong, R. H. and Wright, R. M, (2002) Fancy Yarns: Their manufacture and application, Woodhead Publishing Ltd, Cambridge

Hollen, N., Saddler, J., Langford, A.L. & Kadolf, S.J. (1988). *Textiles*. (6th Ed). New York: Macmillan.

Joseph, M. L. (1972). *Introductory Textile Science*. (2nd Ed.). New York: Holt, Rinehart and Winston.

Joseph, M.L. (1975). Essentials of Textiles. New York: Holt, Rinehart and Winston.

Kerr, Hillary. (2009) *Who What Wear: Celebrity and Runway Style for Real Life*. New York: Abrams.

Kim, Eundeok. (2011) Fashion Trends: Analysis and Forecasting. Oxford; New York: Berg.

Martin, Raymond. (2010) The Trend Forecaster's Handbook. London: Laurence King, 2010.

McKelvey, Kathryn. (2008) Fashion Forecasting. Chichester, U.K.; Ames, IA: Wiley-Blackwell.

Mishra, S.P. (2000) A Text Book of Fibre Science and Technology, New age International Publishers, New Delhi

Needles, H. L (2011), Textile Fibers, Dyes, Finishes and Processes, A Concise Guide, Noyes Publications, New Jersey

Rousso, Chelsea. (2012) *Fashion Forward: a Guide to Fashion Forecasting.* New York: Fairchild.

Sekhri, S. (2011). Fabric Science, PHI Learning Private Ltd. New Delhi

Shenai, V. A. (1991). Technology of Textile Processing. Vol. 1.(3rd Ed.). India: Sevak.

Sinclair, R. (2015), Textiles and Fashion Materials, Design and Technology, Woodhead Publishing Cambridge

Tortora, P.G. (1978). Understanding Textiles. New York: Macmillan.

Wynne, A. (1997). Textiles – The Motivate Series. London: Macmillan Education.

Udale Jenny (2008), Textile and Fashion, AVA publishing, Switzerland\

Vidyasagar, P.V ((1998), Handbook of Textiles, Mittal Publications, New Delhi

Course Code	Title of the Course	Lectures / week	Marks allotted	Credits for the Course
USHS105	Aesthetics in Interiors	3	100	3

- 1. To help students understand the basic terminology of art and design.
- 2. To develop skills, abilities, knowledge and attitudes that will enable artistic production and creative problem solving.
- 3. To enable students to apply concepts of art and design to create aesthetically pleasing interiors.
- 4. To impart knowledge and skills for aesthetic appreciation and evaluation.

Unit	Course Content	Lectures
Ι	 Basics of Design Composition a) Objectives of Design b) Types of Design : Structural and Decorative c) Elements of Design : Line, Form, Colour, Texture, Space ,Light and Pattern d) Design Principles: Balance, Rhythm, Emphasis, Proportion, Harmony. e) Applications in Interior Design 	15
Π	 Interior Space Planning a) Factors to be considered while designing of a house: Orientation, Circulation, Privacy, Grouping of rooms, Economy b) Ventilation c) Lighting d) Services e) Colour planning f) Introduction of concepts of Plan and Elevation. 	15
III	 Interior Furnishing a) Furniture b) Wall and Wall Finishes c) Doors and Door Types d) Window and Window Treatments e) Accessories for Home Decor f) Floor and Floor Finishes g) Man as a consumer of design, qualities and role of a good Interior Designer, Designing VS Decoration, Interior design as a career option h) Ethics for Professional Practice 	15

References:

Allen. P. S. (1985). Beginnings of Interior Environment (5th Ed), Macmillan Publishing Co. London.

Bhatt. P. & Goenka S. (2001); Foundation of Art & Design (2nd Ed). Lakhani Book Depot. Mumbai

Cliffton C., Mogg & Paine. M. (1988). The Curtain Book. Reed International Books. New York.

Craig. H. T. (1987). Homes with Character. Glencoe Publishing Co. Inc. U.S.A.

Gilliat M. (1986). The Decorating Book. Library of Congress Cataloguing Publications, Great Britain.

Lewis E. L. (1980). Housing Decisions, The Good Heart, Willcox Co. Inc. Great Britain.

Seetharaman. P. & Pannu. P. (2005). Interior Design & Decoration. First Edition, CBS Publishers & Distributors. New Delhi.

Course Code	Title of the Course	Periods / week	Marks allotted	Credits for the Course
USHSP101	Food Science	3	50	2

Objectives:

To familiarize the students with:

- 1. Common ingredients, devices and equipments and their functionality available for food preparation.
- 2. Different cooking methods and techniques used while food preparation.
- 3. Principles involved in the preparation of different foods and their application
- 4. Concept of food quality.

Unit	Course Content		Periods
Ι	 Experimental Cookery Introduction to different terms, equipments and methods used in cookery Sugar cookery Stages of sugar cookery Crystalline and Non-crystalline sugar candies Role of fats in cookery Factors affecting fat absorption 	15	
II	Starch CookeryGluten formationEffect of moist heat	15	
III	 Pectin Gel formation Jams, Jellies, Marmalades Cooking of Protein Foods Protein gelation, denaturation and coagulation Effect of heat, acid and enzymes on protein Role of egg in cookery 	15	

References:

Jamesen, K. (1998). Food Science laboratory manual New Jersey. Prentice Hall. Inc. Mcwilliams, M. (1984). Experimental foods laboratory manual. New Delhi: Surjeet Publication. Mcwilliams, M. (1997). Foods experimental perspective. (3rd Ed.) New Jersey. Merill/Prentice Hall.

Sethi, M and Rao, S.E. (2001). Food science experiments and applications. New Delhi. CBS Publishers and Distributors

Course Code	Title of the Course	Periods / week	Marks allotted	Credits for the Course
USHSP102	Pattern Making and Styling for Kidswear	3	50	2

Objectives:

- 1. To introduce basic styling and pattern drafting.
- 2. To create interest in the subject by application of fundamentals of clothing.
- 3. To introduce the basic techniques of clothing construction.

Unit	Course Content	Periods
Ι	Introduction:	15
	Pattern cutting tools	
	• Sewing equipment: its use and care	
	Fundamentals:	
	 Preparing woven fabrics for cutting: straightening and blocking of fabrics 	
	• Hand sewing techniques (Bastings/Slip stitch and Hemming)	
	• Seams (Plain, Run and fell, French, Lapped, Double sewn, Pinked)	
	• Fasteners (Press button, Button and buttonhole, Pant hook and bar, Velcro, Hook and eye)	
	• Piping, Bias Facing and Fitted Facing (Concave/Convex/Inner corner/Outer corner)	
	• Edge finishing (Groove and Edge, Edging with laces)	
	Basic Blocks and Sleeve based on Armstrong method	
II	Surface embellishment	15
	Embroidery	
	Fabric painting	
	Stencil printing	
	Making of embellished accessory for example bag/pouch	
	Wardrobe Styling	
	Exploring types of garments in kids' wardrobe learning to coordinate	
	mix-n-match and style attire to create different looks by accessorizing	
	with suitable footwear/head-gears/scarves/ties/belts/bows/sashes/hair-	
	dos/jewelry, etc.	
	Dressing up for specific occasion for example	
	sports/picnics/casual/playwear as per kids body types and lifestyles	
III	Basic Clothing Concepts	15
	Introducing body measurements	
	• Reading design drawings and patterns with various yokes/	
	pleats/gathers/necklines/sleeves/garment openings.	
	Basic drawing and planning garment details	
	• Understanding and selecting fabrics	
	Adaptation of basic blocks to draft patterns for kidswear namely	
	Shirt, Shorts, Frock and Knickers	

The course includes:

- Planning and styling of garments with different garment details and adorning with different embellishing techniques (after having browsed through pattern books and Internet).
- Basic sketching for comprehending garment patterns.
- Flat pattern down-scaled for the journal sheets.
- Pattern constructions full scale.
- Journal as a compilation of drawings, patterns and swatches with colorful photographic presentations.
- Basic concepts of clothing to be incorporated in the garments or may be taught in the form of samples.
- Some instructional classes may be used as make-up periods and for conducting examinations as per predetermined schedules.

References:

Cunningham G. (1969). Singers Sewing Book, New York: Singer Co. Ltd.

- Gardiner, W. (2003). Encyclopedia of Sewing Techniques, Kent: Search Presshold.
- Jewel, R. (2000). *Encyclopedia of Dress Making*. (1st Ed.) New Delhi: A.P.H. Publishing Corporation.
- McCall's. (1964). Sewing in Colour. London: The Hamlyn Publishing Group Ltd.
- Reader's Digest (1993). Step by Step Guide: Sewing and Knitting, Auckland: Reader's Digest.
- Zarapkar, T. (1981). Zarapkar System of Cutting, Mumbai: Zarapkar Tailoring College.
- Buckley, C. and McAssey J., (2011). Basic Fashion Design 08 styling, Bloomsbury: London.
- Marian L Davis, (1996). Visual Design and Dress, Third Edition, Prentice Hall: New Jersey.
- Suzanne G Marshall, Hazel O Jackson (2000). *Individuality in Clothing and Personal Appearance*, Prentice Hall, New Jersey.
- Caroline Tatham and Julian Seaman, (2003). *Fashion Designing and Drawing Course*, London: Thames and Hudson Publishers.
- Harold Carr, (1992). Fashion Design and Product Development, John Wiley and Son Inc.: NewYork.

Course Code	Title of the Course	Periods / week	Marks allotted	Credits for the Course
USHSP103	Aesthetics in Interiors	2	50	2

- 1. To help learn the relationships that characterizes art and design practice.
- 2. To enable students to explore theories and apply principles of aesthetics and art criticism to theorize your own artwork.
- 3. To encourage experimentation with traditional and contemporary materials, technical processes and methods.
- 4. To impart knowledge and skills for aesthetic appreciation and evaluation.

Unit	Course Content	Periods
Ι	 Concept of Colour: a. Dimensions of colours b. Colour systems :Prang and Itten's Star c. Planning Colour Harmonies : Related and Complimentary d. Application of Colour Harmonies in Interior and Exterior design 	10
II	 Presentation techniques a. Material, Media & tools: Water Colours, Pen, Ink, Charcoal, Pencil, Brushes. b. Effect of lines to represent textures. c. Rendering with Pen & Ink. d. Rendering of various materials: signs and symbols 	10
III	 Drafting and Presentation of Drawings a. Drafting tools & medium b. Lines c. Lettering d. Dimensions e. Drafting a single room - Plan and Elevation f. Understanding Architectural Drawings 	10

References:

Craig. H. T. (1987). Homes with Character. Glencoe Publishing Co. Inc. U.S.A.

Damhorst. M. L., Miller. K. A. & Michelman. S. O. (2001). The meaning of Dress. Fairchild Publishing . New York.

Diane. T. & Cassidy T. (2005). Colour Forecasting. Blackwell Publishing Co. Great Britain.

Gill. R. W. (1994). Rendering with Pen & Ink. Thames & Hudson Ltd. London.

Hauser. P. W. (1994). Greeting Card & Gift Wrap. North Light Books, Ohio.

Hendy J. (1997). Balconies & Roof Gardens. New Holland Publishers (UK) Ltd. U.K.

Hiney. I. M. (1998). Fabric Covered Boxes. Sterling Publishing Co. Inc. New York.

Lehri. R. M. (1999) Folk Designs & Motifs from India. Dover Publications Inc. New York.

Sheen. J. (1992). Flower Crafts. Salamander Books Ltd. New York.

Wilson. J. (2005). Handbook of Textile Design – Principles, Processes & Practice. Woodhead Publishing Ltd. England.

SEMESTER II

COURSE CODE	TITLE OF THE COURSE	WORK	WORKLOAD		OF DITS
		L	Р	Т	Р
USHS201	Foundation Course	3	-	2	-
USHS202	Basic Nutrition	3	-	3	-
USHS203	Adolescent Development	3	-	3	-
USHS204	Psychology of Clothing	3	-	3	-
USHS205	Introduction to Tourism and Hospitality Industry	3	-	3	-
USHSP201	Introductory Food Analysis and Biochemistry	-	3	-	2
USHSP202	Pattern Making, Garment Construction and Styling for Kidswear	-	3	-	2
USHSP203	Skills for the Hospitality Industry	-	2		2
				14	6

Course Code	Title of the Course	Lectures / week	Marks allotted	Credits for the Course
USHS201	Foundation Course	3	100	2

• To develop a basic understanding about issues related to human rights and sustainable development

- To gain an insight into the process of stress management and conflict resolution
 To understand the growing social problems in India and the methods to combat it.

Unit	Торіс	No of periods
Ι	 Human Rights and sustainable development Concept of Human Rights ,origin and evolution of the concept The Universal Declaration of Human Rights Human rights with special reference to the fundamental rights stated in the constitution Significance of environment in development ,as a natural capital and its connection to quality of life Environmental degradation ,causes and impact ,concept of sustainable development 	15
II	 Stress management and conflict resolution Stress-causes and classification Stress management and use of coping mechanisms for managing individual stress Significance of values ,ethics and prejudices in the development of the individual Causes and conflicts of stress in society: stereotyping ,prejudice, aggression and violence Different methods of responding to conflicts in society Conflict resolution and efforts towards building peace and harmony in society Conflict resolution and efforts towards building peace and harmony in society. 	15
III	Contemporary societal concerns Issues of urbanization Effect of changing lifestyles on health Effect of media on societal transformation Corruption Social media and changing communication Integrating physical activity into daily lives Any other current social issue/problem as need arises.	15

Suggested Readings

[Note: This is not an exhaustive or prescriptive list; it is merely suggested reading]

Unit 1 (Human Rights, Consumer Rights, Public Interest)

Shivananda, J. Human Rights. Alfa Publications, New Delhi., 2006 Rajawat, M. Human Rights and Dalits. Anmol Publications, New Delhi, 2005 Women & Human Rights in India; Kaveri Books, New Delhi, 2000 Kaushal, R. Bajpai, A. Child Rights in India; Oxford University Press; New Delhi; 2003 Delhi, 2005 Biju. M.R. Human Rights in a Developing Society; Mittal Publications, New Prakash Kumar & Rai, K. B. Right to Know; Vikas Publishing House, NOIDA, 2008 The Right to Information Act,2005: A Handbook; OUP, New Delhi; Naib, Sudhir 2011 Judicial Activism in India; OUP; New Delhi, 2002 Sathe, S. P.

Unit 2 (Ecology, Health, Education, Urban-Rural Issues)

Satpathy, N. Sustainable Development (An Alternative Paradigm); Karnavati Publications, Ahmedabad, Pachauri R.K & 1998

Srivastava L. (eds.)Global Partners for Sustainable Development; Tata Energy Research Institute, New Delhi; 1994

Shiva, Vandana Ecology and the Politics of Survival: Conflict over Natural Resources in India; Sage Publications, California, 1991

Pereira, W Inhuman Rights: The Western System and Global Human Rights Abuse; Apex Press; 1997 Pereira, W & Asking the Earth: Farms, Forestry and Survival in India; Earthscan Seabrook J Publications; 1991

Goel, S.L. Encyclopedia of Disaster Management, Vol. I, II & III; Deep and Deep Publications Pvt. Ltd., New Delhi; 2006

Parasuraman S. & Unnikrishnan P.V: India Disasters Report; Oxford University Press, New Delhi, 2000

Azim Premji The Social Context of Education in India; 2004. Foundation www.azimpremjifoundation.org/; Higher Education in India; UGC Report; 2003

Chaterjee, C Health and Human Rights; Vulnerable Groups in India, CEHAT, Mumbai &Sheoran, Gunjan May 2007

Datta, Prabhat The Great Indian Divide; Frontline; Volume 21 - Issue 14, Jul. 03 - 16, 2004 Kundu, Amitabh Rural Urban Economic Disparities in India: Database and Trends; December 2010; <u>http://www.indiapolicyforum.org/node/21</u>

Unit 3 (Effective Communications Skills)

Covey, Stephen 7 Habits of Highly Effective People; Free Press, 2004 Iyer, Prakash The Habit of Winning; Penguin, India; 2011 Goldratt, Eliyahu The Goal; The Northriver Press; 3rd Edition; 2004 Goldratt, Eliyahu It's Not Luck; The Northriver Press; 1994

Course Code	Title of the Course	Lectures / week	Marks allotted	Credits for the Course
USHS202	Basic Nutrition	3	100	3

- 1. To enable students to understand the relation of nutrition to health.
- 2. To enable students to understand functions, sources, requirements and effects of deficiency of macronutrients.
- 3. To enable students to understand digestion, absorption and metabolism of Macronutrients.

Unit	Course Content	Lectures
I	 Introductory Nutrition: Important terminologies and concepts in Nutrition such as: Balanced diet, Food guide pyramids, Food plate concept, Macro & micro nutrients, Malnutrition Energy: Forms of Energy Energy expenditure Components of energy expenditure – BMR, TEF and Physical activity Factors influencing & Requirements of energy expenditure Requirements of energy 	15
II	Functions, classification, sources, basic structures, tests for identification, metabolism and RDA Macronutrients: • Carbohydrates • Lipids • Proteins	15
III	Functions, classification, sources, basic structures, tests for identification, metabolism and RDA Micronutrients:	15

 Vitamins –Fat soluble and water soluble vitamins Minerals – Macro, Micro & Trace Minerals
WaterFunctions & Imbalances

References:

Srilakshmi, B., (2003), Nutrition Science, New Age International Ltd.

Gopalan, C et al (2004), Nutritive value of Indian Foods, NIN, ICMR, Hyderabad

- ICMR(2010)Nutrient requirements and Recommended Dietary Allowances for Indians-A report of the expert group of the ICMR, NIN, Hyderabad.
- Swaminathan, M., (1998), Essentials of Food and Nutrition.2nd edition, volume I&II, Printing & Publishing, Banglore

Ramarao A.V.S.S., (1998), A textbook of Medical Biochemistry, New Delhi:UBS Publications Guthrie, H., (1986), Introductory Nutrition, 6th edition Times Mirror/Mosby college Publication.

Bamji, M., Praihad Rao, N., and Reddy, V., (1996), Textbook of Human Nutrition. Oxford and TBH Publishing Co, Pvt, Ltd.

Course	Title of the Course	Lectures /	Marks	Credits for
Code		week	allotted	the Course
USHS203	Adolescent Development	3	100	3

- 1. To introduce students to the scientific study of adolescence.
- 2. To help students learn about key areas of adolescent development: puberty, health, cognitive and moral development, self, identity, emotions, gender, personality, and sexuality.
- 3. To have students understand the contexts which influence adolescent development: family/parents/siblings, peers/friends, school, and culture.
- 4. To sensitize students to the common challenges during adolescence.
- 5. To acquaint students with the various ways in which one can create well-being in adolescence.

Unit	Course Content	Lectures					
Ι	Introduction, History, and Biological Development	15					
	(a) Historical perspective of the study of adolescence: adolescence as a						
	new stage in human development, stereotyping of adolescents,						
	positive youth development theory						
	(b) Importance of studying adolescents; status of adolescents in the world and in India						
	(c) Puberty: determinants, growth spurt, sexual maturation, secular						
	trends in puberty, pubertal timings and health care, psychological dimensions						
	(d) Adolescent health as a critical juncture: nutrition, exercise and sports, sleep, leading causes of death						
	Cognitive and Moral Development						
	(a) Experience-dependent plasticity of the brain in adolescence.						
	(b) The cognitive development view: Piaget's and Vygotsky's theories and extensions						
	(c) The information processing view: characteristics of the						
	information-processing view, attention, memory, executive						
	functioning (decision-making, reasoning, critical thinking, creative						
	thinking)						
	(d) Moral development: Piaget, Kohlberg, Gilligan and extensions						
	Religion and spirituality						
II	Self, Identity, and Emotions	15					
	 (a) Self: what is the self, multidimensionality, self-concept vs. self- esteem, theories (James, Cooley, Harter), characteristics of an adolescent's self 						
	(b) Identity: Erikson's identity vs. role diffusion, psychosocial moratorium, identity crisis, Marcia's four statuses of identity, current perspective on identity development						
	(c) Emotions: definition, relationship with self-esteem, adolescence as						
	a period of storm and stress, hormones and emotions, social aspects						
	and emotions, emotional competence						
	Personality, Gender, and Sexuality						
	(a) Personality: different conceptions of personality, the Big Five						

	-	1
	 model of personality, person vs. situation as determinants of behavior (b) Gender : femininity, masculinity, gender classifications, androgyny as a healthy option, role of culture in gender development, sex vs. gender, gender differences (activities and interests, personal-social attributes, social relationships, styles and symbols) (c) Sexuality: sex vs. sexuality, importance of sexuality in adolescence, challenges related to sexuality 	
III	Contexts of Adolescent Development	15
	(a) Reciprocal socialization and the family as a system.	
	(b) Parents: developmental changes in parents and adolescents,	
	changing parent-adolescent relationships, parents as managers,	
	parenting styles, parent-adolescent conflict, autonomy and attachment	
	(c) Siblings: sibling roles	
	(d) Peer relations: peer group functions, family-peer linkages, peer	
	conformity, peer statuses, friendship, dating and romantic	
	relationships	
	(e) Schools; adolescence as a critical juncture in achievement;	
	technology	
	(f) Role of culture; youth in poverty	
	Challenges, Problems and Wellbeing in Adolescence	
	(a) Teen suicide: statistics, common situations in which adolescents	
	commit suicide, symptoms of depression, prevention and intervention	
	(b) Academic stress: statistics/profile of adolescents in India related to	
	academic stress, reasons, strategies for coping	
	(c) Bullying, ragging, aggression/violence, and juvenile delinquency:	
	statistics/profile of adolescents in India, prevention and intervention	
	(d) Substance abuse: smoking, alcohol and drugs; influence of peers;	
	prevention and intervention	
	(e) Strategies for creating well-being in adolescence	

References:

Dolgin, K. G. (2010). The adolescent: Development, relationships, and culture (13th ed.). NY: Pearson.

Garrod, A., Smulyan, L., & Powers, S. I. (2011). Adolescent protraits: Identity, relationships, and challenges (7th ed.). NY: Pearson.
Santrock, J. W. (2013). Adolescence (15th ed.). NY: McGraw-Hill.

Course	Title of the Course	Lectures	Marks	Credits for
Code		/ week	allotted	the Course
USHS204	Psychology of Clothing	3	100	3

- 1. To understand the psychology of clothing.
- To give an insight into the relationship between clothing, fashion and body types.
 To understand the various factors affecting clothing behavior in relation to personality and roles.

Uni	t Course Content Leo	ctures
I	Origin and Theories of Dress and Adornment • Early Interest / Use • Purpose for Dress – Modesty, Adornment, Protection and Utility Clothing and Physical Self: • Body Image and Social Ideals • Bodily Traits and Social Influences • Physical Attractiveness • Physical Disabilities and Appropriate Clothing • Selection of fabrics for various age groups and end uses with self – help features	15
Π	Clothing, Socialization and Concept of Self • Stages in Self-concept formation • Social feedback • Self-comparison / perception / esteem • Clothing in groups and organizations • Social constraints in clothing • Clothing society and self • Socio-cultural variations in clothing • Impact of mass media on clothing	15
III	Clothing, Fashion, Personality and Roles Symbolic interactive theory Role theory Role acquisition / conflict / embracement Dramaturgy Clothing and personality Fashion Theory Process Recent developments 	15

References:

Kaiser S. B. (1985). The Social Psychology of Clothing. New York: MacMillan

Course	Title of the Course	Lectures	Marks	Credits for
Code		/ week	allotted	the Course
USHS205	Introduction to Tourism and Hospitality Industry	3	100	3

- 1. To enable students to understand the meaning, concept, origin and development of the hospitality industry.
- To provide technical, analytical and conceptual skills appropriate for the hospitality industry.
 To develop young women into professional experts, to manage hospitality industry in general and hotels in particular.

Unit	Course Content	Lectures
Ι	Overview of the Tourism and Hospitality Industry	15
	History:	
	a. Travel :International / Domestic	
	b. History of Hotels and Motels	
	c. History of Travel Agency & Tour Operations	
	d. Origin of Food Service Industry	
	e. Growth of Air Travel	
	Careers in the Industry	
	a. Career paths and career goals	
	b. Professionalism and etiquette	
	c. Social responsibility in the business	
	d. Careers in Travel and Tourism; Managed services, Restaurants	
	and Lodging, Club management, MICE, Recreation, Leisure,	
	Amusement, Theme parks etc	
	Customer Service	
	a. Definition and Importance	
	b. Types of customers: External and Internal	
	c. Customer Relations Management	
	d. Customer services : before, during and after sale	
	e. Challenges encountered in providing service	
	f. Customer Service and Technology	
II	The Hotel Industry	15
	Introduction	
	a. Definition	
	b. Categorizations of Hotels	
	c. Hotel brands in India	
	Organization of the Hotel	
	a. Organizational Structure of Hotel : Small and Large Hotel	
	b. Departments /Divisions in Hotel	
	i. Revenue and Non - revenue departments	
	ii. Front office and Back office departments	
	Hotel Guestrooms	
	Types of guests:	
	Types of Food service facilities: Commercial and	
	Institutional food facilities	

	Future trends in Hospitality	
III	The Tourism Industry	15
111	Introduction and Role of Tourism	15
	Factors Influencing growth of Tourism	
	a. Religion and Spirituality	
	b. Leisure	
	c. Sight seeing	
	d. Culture	
	e. Adventure	
	f. Other Tourism Activities	
	Tour Operators and Travel Agents	
	a. Role of Travel Agent and Tour Operators	
	b. E- Trade	
	c. Web – Marketing	
	Tourist Organizations: Indian and International organizations	
	Future Tourism Trends	

References:

Agarwal. A. and Agarwal. M. (2000). Careers in Hotel Management. Vision Books Pvt. Ltd, New Delhi.

- Alan. T. S. andWortman. J. F. (2006). Hotel and Lodging Management An Introduction. John Wiley and Sons.
- New Jersey.
- Andrews. S. (1982). Hotel Front Office Training manual. Tata McGraw Hill Publishing Co. Ltd. New Delhi.
- Andrews. S. (2003). Hotel Housekeeping Training manual. Tata McGraw Hill Publishing Co. Ltd. New Delhi.
- Branson J. and Lennox M. (1992). Hotel, Hostel and Hospital Housekeeping. Hodderand Stoughton Educational
- Press, Great Britain.

Brown G. and Hepner. K. (1996). The Waiter's Handbook. Hospitality Press Pty Ltd, Australia Casado. M. A. (2000). Housekeeping Management. John Wiley. New York.

Ford. R. C. and Heaton. C. P. (2000). Managing the Guest Experience in Hospitality. Delmar Thomson Learning.

New York.

- Hurst. R. (1983). Housekeeping Management for Hotels and Residential Establishments. Heinemann, London.
- O' Shannessy. V and Haby. S. Richmond (2001). Accommodation Services. Prentice Hall, Australia
- Raghubalan. G. and Raghubalan. S. (2007). Hotel Housekeeping Operations and Management. Oxford University

Press. New Delhi

Walker. J. R. (2005). Introduction to Hospitality Management. Pearson Education Pvt. Ltd, Delhi.

Course	Title of the Course			Periods /	Marks	Credits for	
Code				week	allotted	the Course	
USHSP201	Introductory Biochemistry	Food	Analysis	&	3	50	2

To familiarize the students with

- 1. Basic techniques of food analysis.
- 2. Techniques of identifying food adulteration.
- 3. Concept of food quality.

Unit	Course Content	Periods
I	 Introductory Food Analysis Standardization of acids and alkalies Proteins: Colour reactions of Amino acids-Biuret Method, Ninhydrin test, Xanthoproteic test, etc. Precipitatory reactions of proteins 	15
II	 Carbohydrates: Qualitative analysis Benedicts's test, Molisch test, Iodine test, etc. Quantitative analysis - Cole's Method, Benedicts quantitative test. Analysis of dietary fibre 	15
III	 Lipids Qualitative tests for lipids Determination of Acid value Vitamins Estimation of Vitamin C- DCIP method Pigments Effect of heat, acid & alkali on vegetable & fruit pigments (Chlorophyll, carotenoids & anthocyanins) 	15

References:

Jamesen, K. (1998). Food science laboratory manual New Jersey. Prentice Hall. Mcwilliams, M. (1984). Experimental foods laboratory manual. New Delhi: Surjeet Publication.

Course Code	Title of the Course	Periods / week	Marks allotted	Credits for the Course
USHSP202	Pattern Making, Garment Construction and Styling for Kidswear	3	50	2

- 1. To apply the basics of styling and garment construction techniques.
- 2. To plan and stitch garments that are aesthetically and functionally designed for kids.
- 3. To apply the basic techniques of clothing construction in garment making.

Unit	Course Content	Periods	
Ι	Apron	15	
	Wardrobe Styling		
	Exploring types of garments in kids' wardrobe learning to coordinate mix-		
	n-match and style attire to create different looks by accessorizing with		
	suitable footwear/head-gears/scarves/ties/belts/bows/sashes/hair-		
	dos/jewelry, etc.		
	Dressing up for specific occasion for example formal/birthday		
	party/traditional occasions as per kids body types and lifestyles		
II	Girls:	15	
	A-line Frock		
	Knickers		
III	Boys:	15	
	Shirt		
	Shorts		

The course includes:

- Planning and styling of garments with different garment details and adorning with different embellishing techniques (after having browsed through pattern books and Internet).
- Sourcing and selecting suitable fabrics (preferably cotton) and other trimmings and findings.
- Folding of fabrics, placement of drafts considering fabric consumption and minimum wastage, pinning, cutting and marking methods
- Stitching of the planned garments using suitable seams, neckline, armhole and edge finishes.
- Journal as a compilation of drawings, patterns and swatches with colorful photographic presentations.
- Some instructional classes may be used as make-up periods and for conducting examinations as per predetermined schedules.

References:

Cunningham G. (1969). Singers Sewing Book, New York: Singer Co. Ltd.

Gardiner, W. (2003). Encyclopedia of Sewing Techniques, Kent: Search Presshold.

Jewel, R. (2000). *Encyclopedia of Dress Making*. (1st Ed.) New Delhi: A.P.H. Publishing Corporation.

McCall's. (1964). Sewing in Colour. London: The Hamlyn Publishing Group Ltd.

Reader's Digest (1993). Step by Step Guide: Sewing and Knitting, Auckland: Reader's Digest.

Zarapkar, T. (1981). Zarapkar System of Cutting, Mumbai: Zarapkar Tailoring College.

Buckley, C. and McAssey J., (2011). Basic Fashion Design 08 styling, Bloomsbury: London.

Marian L Davis, (1996). Visual Design and Dress, Third Edition, Prentice Hall: New Jersey.

- Suzanne G Marshall, Hazel O Jackson (2000). *Individuality in Clothing and Personal Appearance*, Prentice Hall, New Jersey.
- Caroline Tatham and Julian Seaman, (2003). *Fashion Designing and Drawing Course*, London: Thames and Hudson Publishers.
- Harold Carr, (1992). Fashion Design and Product Development, John Wiley and Son Inc.: NewYork.

Course Code	Title of the Course	Periods / week	Marks allotted	Credits for the Course
USHSP203	Skills for the Hospitality Industry	2	50	2

- 1. To inculcate professional competence and confidence among the students.
- 2. To provide students with basic technical and practical skills appropriate for the hospitality industry

Unit	Course Content	Periods	
Ι	Illustrating the Organizational structure of		
	a. Large hotel		
	b. Small hotel		
	Categorization of hotels according to		
	a. Size		
	b. Star rating		
	c. Location		
	d. Clientele / Guests		
	Ownership /Affiliation		
	Hotel departments- classification and introduction to		
	a. Front Office		
	b. House keeping		
	c. Food & Beverages		
	d. Food & Beverage service equipment – Laying of a table, laying		
	of a cover		
II	Hotel Guest rooms	10	
	a. Types		
	b. Sample layouts		
	c. Supplies and Amenities		
	Hotel Brochures and pricing:		
	a. Room rates		
	b. Pricing		
	c. Marketing through advertisements - Sales promotion materials		
	for hospitality and tourism promotion		
III	Tourism product of Maharashtra	10	
	a. Cultural Heritage		
	b. World Heritage monuments		
	c. Adventure tourism		
	d. Hill Resorts		
	e. Beaches		
	f. Tourism festivals		
	g. Pilgrimage Centre's		
	h. Arts and Crafts		
	i. Performing Arts		
	Tourist Transport – An Overview		
	a. Air travel		

b	b. Surface transport
с	2. Rail transport
	i. Major railway of world - British railway, Euro rail,
	Japanese rail, Amtrak Onent Express, Tibetan Rail
	ii. Indian railways
d	l. Water transport
	i. Cruise ship
	ii. Ferries
	iii. Hovercrafts & Boats

References:

Agarwal A. and Agarwal M, (2000). Careers in Hotel Management. Vision Books Pvt Ltd, New Delhi

Andrews, S. (1982). Hotel Front Office – Training Manual. Tata McGraw Hill Publishing Co. Ltd., New Delhi.

Andrews S. (2003). Hotel Housekeeping – Training Manual. Tata McGraw Hill Publishing Co. Ltd., New Delhi.

Brown G.andHepner, K.. The Waiter's Handbook. Hospitality Press Pty Ltd, Australia

Ford, R.C. and Heaton, C. P, (2000). Managing the Guest Experience in Hospitality. Delmar Thomson Learning,

New York.

Lockwood A. (1996). Quality Management in Hospitality: Best Practice in Action. Cassell Publishing House,

London.

O' Shannessy, V., Haby, S. and Richmond, P. (2001). Accommodation Services. Prentice Hall, Australia

Raghubalan G. and Raghubalan S. (2007). Hotel Housekeeping Operations and Management. Oxford University

Press, New Delhi

Van Der Wagen, L. (2006). Professional Hospitality Core Competencies. Hospitality Press Pvt Ltd, Australia

Scheme of Examination

All theory subjects of F. Y. B. Sc., S. Y. B. Sc, T. Y. B.Sc. Home Science to be marked out of 100 Marks so as to abide by the University Ordinance (Amended <u>R8435</u> AC 7/4/2014. Item 4.36). 75% Semester End and 25% Internal Assessment. The same to be implemented to all Semesters i.e. Semester I to Semester VI to all Undergraduate programmes, simultaneously from the academic year 2014 - 2015.

Internal Assessment

Sr. No.	Evaluation type	Marks
1.	One class Test*	20
	Active participation in routine class instructional deliveries overall conduct as a responsible student, manners, skill in articulation, leadership qualities demonstrated through organizing co-curricular activities, etc	05
	Total	25

Internal Assessment: Question Paper Pattern for Periodical Class Test for Courses at UG Programmes Written Class Test (20 Marks)

S.No.	Type of Question	Marks	
			Total Marks
1.	Match the Column / Fill in the Blanks / Multiple Choice Questions	(½ Marks each)	05
2.	Answer in One or Two Lines (Concept based Questions)	(1 Mark each)	05
3.	Answer in Brief (Attempt Any Two of the Three)	(5 Marks each)	10
			20

Question Paper Pattern for Semester End Examination

Semester End Examination: Question paper pattern (75 marks) for Three Units Course:

Question 1.	Unit I	20 Marks
Question 2.	Unit II	20 Marks
Question 3.	Unit III	20 Marks
Question 4.	Mixed	15 marks

- i. Duration: 21/2 Hours for 75 marks paper
- ii. There shall be four questions.
- iii. On each unit there will be one question & fourth question will be based onentire syllabus.
- iv. Question number 1,2 and 3 will be of 20 marks each (40 marks with internal options), while Question 4 will be of 15 marks (30 marks withinternal options).
- v. All questions shall be compulsory with internal choice within thequestions.
- vi. Questions may be sub divided into sub questions as a, b, c, d & e, etc & theallocation of marks depends on the weightage of the topic.

All **Practical** courses out of 50 marks with no internal assessment for all levels of undergraduate courses.

The learners to pass a course shall have to obtain a minimum of 40% marks in aggregate for each course where the course consists of Internal Assessment andSemester End Examination. The learners shall obtain minimum of 40% marks (i.e.10 out of 25) in the Internal Assessment and 40% marks in Semester End Examination (i.e. 30 out of 75) separately, to pass the course.

Note – It is noted that the same be implemented to all Semesters i.e. Semester I to Semester VI to all Undergraduate programmes, simultaneously from the academic year 2014 – 2015.