UNIVERSITY OF PUNE

Second Year Syllabi For The

Three-Year Integrated Bachelor of

Science (B.Sc.) In Home Science

Degree Course

To be introduced from Academic Year 2009-2010

UNIVERISTY OF PUNE

B.Sc.(Home Science)

Second Year –

Second year B.Sc. Home Science curricular includes two semesters.

Semester – III

Paper No.	Subject	Exam Scheme							
		Theory		Practical		Total		Exam.	
		Max. Marks	Min. Marks	Max. Marks	Min. Marks	Max. Marks	Min. Marks	At	By
11	Foods Science & Nutrition	100	40			100	40	The End of Sem.	Pune University
12	Home Management	100	40			100	40		
13	Extension Education	100	40			100	30		
14	Child Development / Human Development II	100	40			100	40		
Pract. V	Based on Paper No. 11 & 12	-	-	50	20	50	20	The End of Year	Pune University
Pract-VI	Based on Paper No. 13 & 14	-	-	50	20	50	20		
	Total	**400**	**160**	**100**	**40**	**500**	**200**		

Semester – IV

Paper No.	Subject	Exam Scheme							
		Theory		Practical		Total		Exam.	
		Max. Marks	Min. Marks	Max. Marks	Min. Marks	Max. Marks	Min. Marks	At	By
15	Textile Science & Care	100	40			100	40	The End of Sem.	Pune University
16	Home Science Extension and Communication Technology	100	40			100	40		

17	Basic Nutritional Biochemistry	100	40			100	40		
18	Introduction to Early Childhood Education	100	40			100	40		
Pract. VII	Based on Paper No. 15 & 16	-	-	50	20	50	20	The End of Year	Pune University
Pract. VIII	Based on Paper No. 17 & 18	-	-	50	20	50	20		
	Total	**400**	**160**	**100**	**40**	**500**	**200**		

Semester - III

Paper- 11 : Food Science & Nutrition

Theory - 4 lec/ week Theory-100 marks
Practical – 2 Practical-25 marks

Unit : I	**Concept of food science**	8
	▪ Definition ▪ Scope & application. -Industry -Community -Hospital -Catering units.	
Unit II	**Protein Foods**	10
	▪ Classification, composition, denaturation, non enzyme browning & other chemical changes. ▪ Milk & milk products. ▪ Dairy products. ▪ Eggs. ▪ Poultry & Meat	
Unit IIII	**Legumes & Pulses**	10
	• Structure • Composition • processing • Toxic contents.	
Unit IV	**Vegetables & Fruits**	10
Unit V	**Fats & Oils.**	10
Unit VI	**Other foods**	10
	▪ Condiments & spices ▪ Leavening & shortening agents ▪ Salt & substitutes.	

Practical Based on Subject 11) Food science and Nutrition

1. Effect of solutes on boiling point and freezing point of water. 1 x 3 hrs.
2. Effect of types of water on characteristics of cooked vegetables, pulses and cereals. 1 x 3 hrs.
3. Sugar and Jaggery Cookery – Relative sweetness, Solubility and size of sugars, stages of sugar cookery, caramelization, crystallization, factors affecting crystal formation. 2 x 3 hrs.
4. Leavened products – Fermentation- Use of Micro organisms (lactic acid, Yeast) steam as an agent, egg as an agent chemical agents. Leavening power of different leavening agents. 2 x 3 hrs.
5. Fish and Sea Food – effects of different cooking methods on various fish and sea foods. 2 x 3 hrs.

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2. Potter N. and Hotchkiss, J. H. (1999) : Food Science, fifth edition, CBS publishers and distributors, New Delhi.
3. Belitz, H. D. and Grosch, W. (1989) : Food chemistry (2nd edition), Springer, New York.
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13. Backer, P. (1965) ; Emulsions : Theory and practice, Rainhold, New York.
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18. Friberg. S. E. and Lasson, K. (editions) (1977) Food Emulsions, Marcel Dekker, New York.
19. Goldberg 1 (ed) (1994) Functional Foods Champan and Mall Inc., India.
20. O' Brien, L. O. Nabors and Gelardi, R. C. (1991) Alternative Sweeteners, Marcel Dekker, New York.
21. Risch, S. J. and Hotchkiss, J. H. (ed.) (1991) Food Packaging Interactions II ACS Symposium Series 473, American Chemical Society, Washington D. C.
22. Marwaha, S. S. and Arora, J. K. (2000) Food Processing Biotechnological Applications Asiatech Publishers, Inc, New Delhi.
23. Mahindra, S. N. (2000) Food Safety – A Techno- legal Analysis, Tata Mc Goraw Hills Publishing Co. Ltd.
24. Mahindru, S. N. (2000) Food Additives – Characteristics Detection and Estimation Tata Mc Graw Hill Publishing Co. Ltd.
25. Borwankar, R. P. and Shoemaker, C.E. (1992) Rhedogy of Foods. Elsevier Science Publisher, Ltd. England.
26. Charlambour, G. (1990) Flavour of flavour 8, Elsevier Science Publishers Ltd., P. O. Box 211, 1000 AE Amsterdam, The Netherlands.
27. Salunke, D. K. and Kadam S. S. (2001) : Handbook vegetable science and Technology, Marcel Dekker, Inc. 270, Madisen Avenue, New York, Ny , 100016
28. FAO Food and Nutrition Paper : Manual of Food Quality Control Parts 14/L (1979) to 14/8 (1986), FAO the United Nations Rome.

Paper – 12: - Home Management

Theory - 4 lec/ week — Theory-100 marks
Practical – 2 — Practical-25 marks

Unit I **Introduction to Art and design** 10

- Art meaning, definition, objectives, elements & principles
- Design – Meaning, definition & types
- Interior designing.

Unit II **Colours** 10

- Colours – importance
- Dimensions of colour – Hue value & Intensity.
- Classification of colours.
- Colour schemes.
- Application of colour scheme.

Unit III **Flower Arrangement** 11

- Importance of flower Arrangement
- Materials required for flower Arrangement
- Different types of flower Arrangement.
- Flower arrangement for different occasions.

Unit IV **Family Housing** 10

- Needs – Protective, economic, officinal, social, standard of living, housing goals style, function occupation.
- Factors affecting selection & purchase of site.
- Housing Schemes.

Unit V **Residential Furnishing** 10

- Selection of furniture
- Arrangement of furniture for living, Bedroom, dining & multipurpose room.
- Furnishing fabrics – floor, covering, draperies, certain, table, bed,
- Accessories.

Reference :-

1- vk/kqfud x`gO;oLFkkiu & olq egktu] fdrkc egy] ukxiwj

2- vk/kqfud x`gdyk MkW- {kek fye;s

3- Art in every day life – Goldstein & Goldstein.

4- Home furnishing

5- Foundation of Art & Design, Lakhani Book Depot. Bombay.

6- Inside todays Home – Favlkner Richart

7- Introduction to Home furnishing state Macmillan

8- 16. A text book of applied arts Dr. Sunita Barkar.

Practical Base on Subject 12) Home Management ***24***

1)	Preparation of colour wheel & Dimension of colour	2 x 3 hrs.
2)	Colour schemes on paper Rangoli flower arrangement.	2 x 3 hrs.
3)	Illustration of element of design and principles of design line, farm, textre space, pattern, proportion, balance, rhythm, emphasis Harmony.	2 x 3 hrs.
4)	Development of designs and construction of floor covering, contains, cushions, picture frame etc.	1 x 3 hrs.
5)	Visit to residential House.	1 x 3 hrs.

Paper – 13 : Extension Education

Theory - 4 lec/ week
Practical – 2

Theory-100 marks
Practical-25 marks

Unit I	**Extension Teaching**	10
	▪ Meaning and principles of Teaching ▪ Steps in Extension Teaching ▪ Difference between formal and extension teaching. ▪ Classification of Extension Teaching methods and techniques ▪ Selection and uses of various teaching methods in combination for effective extension teaching.	
Unit II	**Communication Process**	10
	▪ Meaning and definitions of communication process. ▪ Need and Importance of communication in extension. ▪ Elements of communication process. ▪ Models of communication process. ▪ Barriers in communication process and their solutions. ▪ Verbal and non verbal communication.	
Unit III	**Communication Methods**	11
	▪ Group communication methods. ▪ Classification of Group communication methods. ▪ Information cantered methods. ▪ Behaviour centered methods. ▪ Advantages and limitation of group communication methods. ▪ Concept ad purpose of mass communication. ▪ Classification of mass communication methods as written, spoken and Audio visuals. ▪ Advantages and limitations of mass communication methods.	
Unit IV	**Appropriate Technology in Home Science**	10
	▪ Meaning and significance of appropriate technologies. ▪ Need and Importance of appropriate technologies used in Home. ▪ Appropriate technologies in different areas of Home Science. ▪ Application of technologies in Home and Agriculture.	

Unit V	Vocationalisation in Home Science	10
	▪ Need and significance of vocationalisation in Home Science. ▪ Introduction of various vocational courses and job opportunities in different areas of Home Science.	

Reference :-

1) Introduction to Home Science – Dr. Arvindo Chandra
2) Text Books of Home Science – Dr. R. P. Devdas
3) Hand Book of A. V. Aids - Mohanty B. B., Kitab Mahal
4) Extension and communication for development, O. P. Dahama and Bhatnagar
5) Non formal education for all Arvinda Chandra and Anupana Shah, sterling publishers Pvt. Ltd. New Delhi.
6) Non formal education – An alternative approach – R. P. Singh sterling publication Pvt. Ltd. New Delhi.
7) Communication and social development in India, B. Kuppuswarmy, sterling publication Pvt. Ltd. New Delhi.
8) Extension education in community development, Directorate of extension ministry of food and agriculture govt. of India New Delhi.
9) An introduction to extension education Dr. S. V. Supe.
10) Sky is the limit practical guidelines on effective career planner, Singh R. H., Chandra Publication, Bombay 5.

Practical Based on Subject 13) Extension Education ***24***

1)	Study of existing communication tools for message courage and cost and impact.	3 x 3 hrs.
2)	Preparation of suitable communication tools for mass Communication charts, posters, flash cards etc.	3 x 3 hrs.
3)	Planning and implementation of a project on appropriate Technologies in Home Science.	2 x 3 hrs.

Paper No. 14 : Child Development / Human Development II

Theory - 4 lec/ week — Theory-100 marks
Practical – 2 — Practical-25 marks

Objectives :

To introduce / create awareness of important aspects development from adulthood to old age.

Unit I	**Puberty stage (11 to 14yrs)**	(10)
	• Characteristics • Physical, emotional, physiological changes • Growth spurt • Primary and secondary sex characteristics.	
Unit II	**Adolescence (12 to 18 yrs)**	(10)
	• View of storm and stress • Characteristics • developmental task • Emotional, social, moral, cognitive development during adolescence. • Identity crisis, counselling for educational and vocational. • Visit to civil hospital.	

Unit III :	**Young adulthood (21 to 40 years)**	(8)
	• Characteristics • Developmental task. • Responsibilities & adjustments by adult.	
Unit IV :	**Middle adulthood (40 to 60 years)**	(10)
	• Characteristics • Developmental task. • Physical changes • Menopause. • Effect on psychological behaviour. • Adjustments.	
Unit V :	**Late Adulthood/ Old age. (51 onwards)**	(10)
	• Characteristics, physical & psychological changes. • Health problems, cognitive & memory changes. • Psychological changes. • Adjustment by old people & with old people. • Retirement –its effects. • Issues – attitude towards aged, loneliness, old aged home illness. (Prolonged) • Death. • Visit to old age home.	

Semester IV

Paper –15: Textile Science and Care

Theory - 4 lec/ week
Practical – 2

Theory-100 marks
Practical-25 marks

Unit I	**Yarn**	10
	▪ Type, yarn twist, yarn count, yarn cringe and strength, yarn manufacturing process. ▪ Methods of fabric construction – Primitives and modern methods felting, weaving, knitting, braiding	
Unit II	**Classification of finishing process**	11
	• Personal finish, durable finish, temporary finish, renewable finish ▪ Finishing Process – Mercerising, sanforisng, sizing Tentering, crease, resistant, waterproof, shearing, creping, embossing, moistening, napping, fire proof, beetling, Brushing, Glazing, calendaring.	
Unit III	**Essentials of Designs**	11
	▪ Elements of Design – Colour systems and schemes – principles and design. ▪ Classification of design – structural and decorative realistic, absent, stylized and geometric. ▪ Layout in design – repeal. ▪ To create a successful textile design for reproduction by different methods.	
Unit IV	**Methods of Printing**	11
	▪ Fundamentals of printing study of dyes and pigments for printing. ▪ Hand printing painting, stencil, Block, Spray, flock ▪ Heat transfer, photo, lacquers.	
Unit V	**Weaving**.	11
	• Principles and basic weaves • Introduction to basic hand embroidery stitches, knitting, principles and classification, knitting machines their nomenclature and uses.	

References

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2. Gohl EPG and Vilensky L. D. "Textile Science" CBS Publishers and Distributors, Delhi.
3. Majory L. Josheph 'Essentials of Textile.
4. Shenai V. A. Technology of Textile finishing.
5. Grosiki Wastons 'Textile Design and Colour'
6. Shenai V. A. Technology of Printing, Sevak Publications.
7. Clark W, An Introduction textile printing, Butter worth and company.
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9. Gazettes of India.
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11. Faulkner Ray and Faulkner Sarah (1975) – Inside Today's Home, 5th Edition Holt, Reinhart and Winston.
12. Cocketl B. R. (1964) – Dyeing and Printing London, Sir Issac Pitaman and sons Ltd.
13. Grossicki, Watsons (1975) – Textile Design and colour, Butterworth and company.
14. Pandit Savitri and Patel Saroj (1970) – Tie and Dye and Batik Techniques for all, Baroda Faculty of Home Science.
15. Shenai, V. A. (1977) – Terminology of Dyeing, Technology of Textile processing, Vol. VI,
16. Shehnai, V.A. (1973) Chemistry of Dyes and Principles of Dyeing, Ahamabad, textile Book Sellers and Publishers.
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22. Chattopadhyay and Kamala Devi (1875) – Handicrafts of India, New Delhi, Indian Council of Cultural Relations.
23. Dongerkery, S. (1975) – The Romance of Indian Embroidery, Bombay Thacker, Company Ltd.
24. Marg – Embroidery
25. Calico – Embroidery
26. Bane, A. (1974) – Tailoring , Mc Goraw Hill.
27. Bane, A. (1979) – Flat Pattern design, Mc Goraw Hill.
28. Bray Natalie (1978) – Dress Pattern Designing London, Crossby, Lock wood and staples.
29. Litman Connie (1977) – Pattern making Design, Litton Educational Publishing Inc.
30. Clothing for family – By Tale and clission.

Practical Based on Subject 15) Textile Science & Care	**24**
1. Study of yarn types, yarn size, thread count, bow, shewness.	1 x 3 hrs.
2. Study of common fabrics available in the market, removal of common stains from different fabrics.	1 x 3 hrs.
3. Demonstration of on laundry equipments, washing, finishing and storage of following textile articles cotton, silk, wool, synthetic, other special articles – Zari, embroidered fabric, lace, designing and scoring of yarn and fabric, bleaching of cotton.	3 x 3 hrs.
4. Visit to processing unit and Report writing.	1 x 3 hrs.
5. Preparation of an album in the regional embroidery.	1 x 3 hrs.
6. Preparation of fabrics for dyeing; tie and dye, block printing.	1 x 3 hrs.

Paper – 16 : Home Science Extension and Communication Technology

Theory	-5 Hrs./Week	Theory	-	100 Marks
Practical	-1 Hrs./Week	Practical	-	25 Marks

Objectives :

1) To know the meaning and importance of programme planning and evaluation.
2) To understand the role of communication and technology in process of communication.
3) To create an awareness regarding varied technology and its role in communication.
4) To develop awareness regarding the status of women.
5) To help the student to develop awareness regarding population problems.

Unit I	**Programme planning**	10
	• Meaning,definition, • objectives and principles of programme planning. **Process of programme planning steps** • Study of the situation • Identification of the problem • Formulation of the objectives • Plan of work • Executive of the plan • Evaluation • Reconsideration **Evaluation** • Meaning and importance of evaluation • Types of evaluation and steps of evaluation • Data collection – types and methods of data collection • Analysis of data	
Unit II	**Population education**	10
	• Meaning, definition, need of population education. • Objectives of population education • Population growth in India, its rate and reason • Concept related to population – birthrate, death rate, growth rate, sex ratio, fertility • Effect of population explosion – on economic development, education, health, housing status etc. • Women contribution to check population	

Unit III	**Women education**	10
	• National organization dealing with issues of women • Social welfare board – organizational services • SEWA • Rehabilitation centre • Legal and family counseling • Profile of urban and rural, tribal hill and slum women • Role of women – as a mother, wife, in laws, grand mother **Factors affecting status of women in family** • Types of family • Religion • Marriage • Values • Education • Economic	
Unit IV	**History of technology development**	10
	Evolution of communication technology from smoke signals to satellites, from wall newspaper to information and communication technology (ICT), analog to digital mode of transmission and preservation etc.	
Unit V	**Use of technology**	10
	Use of technology for individual, group and mass communication **Individual** – telephone, fax, internet, book etc **Group** – video, theatre, puppets, aids for groups communication like OPH, notice board etc. **Mass** – radio, television, film, print media etc. Impact of each technology on nature of communication.	

Practical based on paper 16 –Extension education

1) Preparation of different educational aids. (02)

2) Demonstration on any topic (Subject) (02)

3) Make an album – picture of a Home Science area. (02)

4) A device for success – (02)
   a) Pilot survey of women problem
   b) Mudra
   c) Medication
   d) Tips of mental and emotional health

5) Role play in a group for the Home Science Extension activity. (02)

Distribution of Practical marks

- Viva	-	05 Marks
- Internal	-	10 Marks
- Records	-	03 Marks
- Demonstration	-	02 Marks
- Album	-	02 Marks
- Education Material	-	03 Marks

Total	-	**25 Marks**

References :

1) J¥h{dkmZ àgma {ejm, H$_boe e_m©, _m`m d_m©, gm{hË` àH$meZ, AmJam
2) àgma {ejm, S>m°. eob ~§gb, {edm àH$meZ, lr JUoe _m H}$Q>, IOwar ~mOma, BÝXm¡a
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8) Extension education – Adive Reddy
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11) New Gathering, 2nd edition – Ken Motzlev Prentice Hall Inc. (1968)
12) Radio and T.V. Journalism – K. M. Shrivastava, Sterling Publishers Pvt. Ltd. (1989)
13) Manekar, D. R. (1979) : Media and third world, Indian Institute of Mass Communication, New Delhi.
14) Mc. Dowell S. D. (1977) : Globalisation and policy choice : Television and audio-visual services in India : Media, Culture and Society, Vol. 19, P – 151-172.
15) DECU (2000) : The Journey – 25 years of satellite broadcasting in India, Development and education communication unit, ISRO, Ahamedabad.
16) Reports and Papers in Mass Communication VNESCO, Government of India (1998) : A reference manual, Ministry of Information and Broadcasting, New Delhi.

Paper – 17 :- Basic Nutritional Biochemistry

Theory - 4 lec/ week — Theory-100 marks
Practical – 2 — Practical-25 marks

Unit I	**Biochemistry**	11
	▪ Introduction, Definition, objectives, scope and inter relationship between Biochemistry and nutrition. ▪ Metaboliism – Diigestion & Absorption of different nutrients in the human system.	
Unit II	**Carbohydrates**	11
	▪ Structure & Function. ▪ Classification, Properties (physical & chemical) ▪ Metabolism of carbohydrates- Glycolysis, TCA cycle, glycogen metabolism, HMP shunt, ATP production . ▪ Energy Metabolism – BMR, heat regulation in the body, Bioloogical oxidation, reduction, Electron transport chain. ▪ Altered energy metabolism in different conditions of overnutrition & undernutrition	
Unit III	**Proteins**	11
	▪ Structure & Function. ▪ Classification ▪ Metabolism of proteins – Tranamination, deamination, oxidative decarboxylation, urea cycle. ▪ Changes in protin metabolism in different disease studies.	
Unit IV	**Fats**	10
	▪ Structure & Function. ▪ Classification of fatty acids & its significance in health and disease. ▪ Beta oxidation of fats. ▪ Ketone bodies & their significance.	
Unit V	**Enzymes & Hormones**	11

	▪ Defination, Nomenclature & classification. ▪ Mecanism of enzyme action. ▪ Factors affecting enzymes. ▪ Enzyme inhibition. ▪ Types & role of coenzymes.	

Reference

1. Swaminathan, M. 1985, Advanced text book on food Nutrition vol I & II Bapcco, Banglore.
2. Hawk P. B., Oser, B.K. and Summerson, W. H. 1965, Practical Physiological Biochemistry. T ata McGraw Hill Publishing Co. Ltd., New Delhi.
3. Okoye, Z.S.C., 1992, Biochemical Aspects of Nutrition Prentice Hall of India, New Delhi.
4. A. O. A. C. 1996. Official Methods of Analysis Association of official Agricultural Chemistry, Washington.
5. Ranganna, S. 1964 Hand Book of Analysis and Quality Control for Fruit and Vegetable Products Tata McGraw Hill Publishing Co. Ltd. New Delhi.
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7. Passmore, R. Eastwood, M. A. 1986. Human Nutrition and Dietetics ELBs Pub.
8. Oser, B. L. (1965) 14th Ed. Hawk's Physiological Chemistry. McGraw Hill Book Co.
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11. West E. S., Todd W. R., Mason H. S. and Van Bruggen J. T. (1994) 4th Ed. Textbook of biochemistry, Amerind Publishing Co. Pvt. Ltd.
12. White A., Handlar P., Smith E.L., Sletter D. W. (1959), 2nd Ed. Principles of Biochemistry, large Medical Book.
13. Murray, R. K. , Goranner D. K., Mayes P. A. and Rodwell V. W. (1993) 23rd Ed. Harper's Biochemistry, Large Medical Book.
14. Lehniger A. L., Nelson D. L. and Core M. M. (1993), 2nd Ed. Principles of Biochemistry, CBS Publishers and distributors.
15. Devlin T. M. (1986) 2nd Ed. Text Book of Biochemistry with clinical correction, John Wiley and Sons.
16. Stryles L. (1995) : Biochemistry Freeman WH and Co.

Practical based on subject 17) Basic Nutritional Biochemistry 24

1. Qualitative and Quantitative tests for carbohydrates, lipids, proteins, amino – acids and vitc. 2 x 3 hrs.

2.	Estimation of ascorbic acid by titirmetirc method	1 x 3 hrs.
3.	Determation of starch, sugar, and analysis of proximate constituents of foods.	1 x 3 hrs.
4.	Estimation of energy requirement BMR Energy Expenditure on physical activities.	1 x 3 hrs.
5.	Assessment of micronutrient status Iron Calculim	1 x 3 hrs.
6.	Estimation of Urea, Estimation of Creatinine	1 x 3 hrs.
7.	Enzymes – Effect of PH and temperature on enzyme activity. Effect of salivary amylase on starch, Pepsis on proteins and lipase on facts.	1 x 3 hrs.

Paper No.18 : Introduction to Early Childhood Education

Theory - 4 lec/ week — Theory-100 marks
Practical – 2 — Practical-25 marks

Objectives:

1. To became acquired with essential requirements for planning & conducting a preschool programme.
2. To develop an understanding of programme planning for preschool children.
3. To create awareness of the importance of parents involment.

Unit I	**Principals of early childhood Education.**	8
	• Importance, need & scope , objectives. • Types of preschool programmes.	
Unit II	**Organization of Preschool**	8
	• Building, ground, equipments. • Teacher- roles & responsibilities. • Programme planning – longterm, short term, weekly, daily	
Unit III	**Programme / Activities**	12
	• Play- importance, values, types. • Creative play / activities – Painting, clay modeling, cutting & pasting, block, water, sand. • Language activities – story telling, song, dramatization, informal talk, picture talk. • Science - Goals, content & method, recourses. • Social Studies - Goals, content & method, recourses. • Mathematics- Objectives & concepts. • Readiness- Reading & Writing. • Recourse unit.	
Unit IV	**Working with parents** –	8
	• Importance & methods.	
Unit V	**Guidance** –	8

	• Handling feeling of insecurity & hostility.	

Practical:

Objctives:

1. To prepare materials for promoting larning in preschool children

2. To proved aportunites for practical teaching experiences with use of aids.

Content:-

1 . Observation and recoring of early childhood programe
-Report writing.

2. Creative and craft activities
   - Drawing, panting, printing, finger printing, molding, threading and lacing,tearinc,cutting, collage.

3 . Language activites
   -Picture book
   - story telling
   - object talk

4 . Science
   - List of activites

5 . Mathematical kit on premathametical concepts.

6 . Music and movement.
   - Collection of song.

7 . Rediness activities
   - Matching sets, visual discrimination, work pages

8 . Games

9 . Participation in nursery/preschool with all activites.

Reference:

1 . Leeper ,Skipper - Good Schools for young children.
2 . Murlidharan R & Banerji U – A guidance for Nursery School teachers.

S.Y.B.Sc. (Home Science)

Format of the Question Paper

Time : Three Hours Maximum Marks: 100

N.B. : 1) All questions are compulsory
2) Figures to the right indicate full marks.
3) Draw need diagram where ever necessary.

1) Attempt any ten (out of 13) of the following (one or two sentences each.) **[20]**

2) Attempt any five (out of 7) of the following (five or six sentences each.) **[20]**

3) Attempt any three (out of 5) of the following (25 to 30 sentences each.) **[30]**

4) Attempt any two (out of 3) of the following (50 to 60 sentences each.) **[30]**