

UNIVERSITY OF MUMBAI
No.UG / 459 of 2007

CIRCULAR :-

A reference is invited to the Ordinances, Regulations and Syllabi relating to the M.Phil degree course vide Pamphlet No.180 and to this office Circular No.UG/464 of 2007, dated 19th November, 2007 and the Principals of the affiliated colleges in Arts, Science, Commerce and The Principal, College of Home Science are hereby informed that the recommendation made by the Ad-hoc Board of Studies in Home Science at its meeting held on 20th April, 2007 has been accepted by the Academic Council at its meeting held on 10th August, 2007. Vide Item No.4.2 and that in accordance therewith, the M.Phil degree course in Home Science has been introduced by the University from the academic year 2007-2008.

Further that the syllabus for the M.Phil. degree course Home Science is as per Appendix and that the same has been brought into force with effect from the academic year 2007-2008.

MUMBAI-400 032

19th November, 2007

for I/c. REGISTRAR

To,

The Principals of the affiliated colleges in Arts Science, Commerce and Home Science

A.C./4.02/10.08.2007

No.UG/ 459 - A of 2007, MUMBAI-400 032

19th November, 2007

Copy forwarded with compliments for information to :-

- 1) The Deans of the Faculties of Arts, Science and Commerce,
- 2) The Chairperson, Ad-hoc Board of Studies in Home Science
- 3) The Officer on Special Duty and Controller of Examinations Section
- 4) The Co-Ordinator, University Computerization Centre,

for I/c. REGISTRAR

Copy to :-

The Director, Board of College and University Development, , the Deputy Registrar (Eligibility and Migration Section), the Director of Students Welfare, the Executive Secretary to the Vice-Chancellor, the Pro-Vice-Chancellor, the Registrar and the Assistant Registrar, Administrative sub-center, Ratnagiri for information .

The Officer on Special Duty and Controller of Examinations (10 copies), the Finance and Accounts Officer (2 copies), Record Section (5 copies), Publications Section (5 copies), the Deputy Registrar, Enrolment, Eligibility and Migration Section (3 copies), the Deputy Registrar, Statistical Unit (2 copies), the Deputy Registrar (Accounts Section), Vidyanagari (2 copies), the Deputy Registrar, Affiliation Section (2 copies), the Director, Institute of Distance Education, (10 copies) the Director University Computer Center (IDE Building), Vidyanagari, (2 copies) the Deputy Registrar (Special Cell), the Deputy Registrar, (PRO) . the Assistant Registrar, Academic Authorities Unit (2 copies) and the Assistant Registrar, Executive Authorities Unit (2 copies) . They are requested to treat this as action taken report on the concerned resolution adopted by the Academic Council referred to in the above Circular and that no separate Action Taken Report will be sent in this connection. the Assistant Registrar Constituent Colleges Unit (2 copies), BUCT (1 copy), the Deputy Account, Unit V (1 copy), the In-charge Director, Centralize Computing Facility (1 copy), the Receptionist (1 copy), the Telephone Operator (1 copy), the Secretary MUASA (1 copy), the Superintendent, Post-Graduate Section (2 copies), the Superintendent, Thesis Section (2 copies)

UNIVERSITY OF MUMBAI



Syllabus for
M.Phil.degree

in
Home Science

(With effect from the academic year 2007-2008)

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Paper I: Advances in Research and Teaching (Common Paper across All Branches)

Section A: Advances in Research

Advancements in the Conceptualization of Scientific Inquiry

Objectivity and Subjectivity in Scientific Inquiry
Premodern, Modern and Postmodern Approaches to Scientific Inquiry
Positivist and Post-Positivist Approaches
Quantitative and Qualitative Research Paradigms

Overview of the Research Process

Priority Areas of Research in Each of the Three Branches/
Identifying Priority Areas of Research in Each of the Three Branches

Latest Research Designs and Supporting Quantitative and Qualitative Analytical
Procedures in Each of the Three Specializations

Ethics in Research

Research/Scientific Writing and Related Communication

Writing Research Proposals/Applying for Research Grants
Writing Research Papers
Publishing Research Papers
Poster and Paper Presentations
Liaison/Networking as a Researcher

Section B: Enhancement of the Teaching-Learning Process

Teacher Learning: Goals and Strategies

Goals of teaching
Role of the teacher
Role of the student
Types of teaching-learning strategies
Best practices in teaching and learning

Educational Technology

Value of educational technology
Latest innovations in educational technology

Educational Assessment

Best practices in educational assessment

Effective Classroom Management

Best practices in classroom management

Evaluating Teaching Effectiveness

Purpose of evaluation
Criteria of evaluation
Sources of evaluation
Methods of evaluation

Other Topics

Professional ethics in teachers
Course design and curriculum development

References:

Section A: Research

American Journal of Clinical Nutrition

Andrews, Richard. (2005). *Research questions*. London: Continuum.

Ary, Donald J., Cheser, Lucy, & Razavieh, Asghar. (2002). *Introduction to research in education*. Belmont, CA: Wadsworth/Thomson Learning.

Bennett, Judith. (2005). *Evaluation methods in research*. London: Continuum.

Berg, Bruce L. (2004). *Qualitative research methods for the social sciences*. Boston: Pearson Education, Allyn & Bacon.

Bordens, Kenneth S., & Abbott, Bruce C. (2006). *Research design and methods: A process approach*. N. Delhi: Tata McGraw-Hill.

Boushey, C. (2006). Publishing nutrition research: A review of study design, statistical analyses, and other key elements of manuscript preparation. Part I. *Journal of the American Dietetics Association*, 106 (1), pp. 89-96.

Child Development

Colourage

Coorabes, Hilary. (2001). *Research using IT*. Hampshire, Palgrave.

Costello, Patrick J. M. (2005). *Action research*. London: Continuum.

Cozby, Paul C. (2003). *Methods in behavioral research*. NY: McGraw-Hill.

Cullen, Karen. (2000). Market research for nutrition professionals: Focus group discussions. *Journal of the American Dietetics Association*, 100 (11), p. 12.

Developmental Psychology

Finlay, Linda. (1997). Evaluating research articles. *Journal of Occupational Therapy*, 60 (5), 205-208.

Fraenkel, Jack R., Wallen, Norman E. (2006). *How to design and evaluate research in education*. NY: McGraw-Hill.

Freudenheim, Jo L. (1999). Study design and hypothesis testing: Issues in the evaluation of evidence from research in nutritional epidemiology. *American Journal of Clinical Nutrition*, 69 (6), pp. 1315S-1321S.

Gilgun, Jane F., Daly, Kerry, & Handel, Gerald. (Eds.) (1992). *Qualitative methods in family research*. Newbury Park: Sage.

Gillham, Bill. (2005). *Case study research methods*. London: Continuum.

Hoffman, Ingrid. (2003). Transcending reductionism in nutrition research. *American Journal of Clinical Nutrition*, 78 (3), pp. 514-516.

JADA. (1999). Code of ethics for the profession of dietetics. *JADA*, 99, pp. 109-113.

JADA. (2005). E-cheating: Electronic plagiarism. *JADA*, 105 (7), pp. 1058-1062.

Indian Journal of Dietetics

Indian Journal of Fibre and Textile Research

Indian Journal of Medical Research

Journal of Marriage and Family

Journal of the American Dietetics Association

Kerlinger, Fred N., & Lee, H. B. (2000). *Foundations of behavioral research*. Orlando: Harcourt College.

Leong, Frederick. & Austin, James T. (Eds.) (1996). *The psychology research handbook*. Thousand Oaks, CA: Sage.

Man-Made Textiles in India

Manore, Melinda. (2003). Research and the dietetics profession: Making a bigger impact. *Journal of the American Dietetics Association*, 103 (1), pp. 108-112.

Mattes, R. D. (2000). To read or not to read original research articles: It should not be a question. *Journal of the American Dietetics Association*, 100 (2), pp. 171-174.

May, Tim. (1997). *Social research: Issues, methods and process*. Buckingham: Open University.

Merrill Palmer Quarterly

Pelham, Brett W. (2003). *Conducting research in psychology: Measuring the weight of smoke*. Belmont, CA: Wadsworth/Thomson Learning.

Peterson, D. A. (1999). Broadening career opportunities in dietetics: Employment in independent research. *Journal of the American Dietetics Association*, 99 (7), pp. 799-801.

Polin, E. (2001). Statistical and psychobiological significance in developmental research. *American Journal of Clinical Nutrition*, 74 (3), pp. 281-282.

Rakshit, Arup K. (2002). Research and development activities and achievement. *Colourage*, XLV (4), pp. 95-98.

Research in Childhood Education

Rimer, S. (September 3, 2003). A campus fad that's being copied: Internet plagiarism seen on the rise. *The New York Times*.

Schmidt, Frank L. (1992). What do data really mean? Research findings, meta-analysis and cumulative knowledge in psychology. *American Psychologist*, October, pp. 1173-1181.

Shaughnessy, John, & Zechmeister, Eugene B. (2000). *Research methods in psychology*. Boston: McGraw-Hill.

Sommer, Barbara, & Sommer, Robert. (1997). *A practical guide to behavioral research*. NY: Oxford University.

Teachman, Jay. (2002). Multilevel model in family research: Some conceptual and methodological issues. *Journal of Marriage and the Family*, 64 (2), pp. 280-294.

Trostler, Naomi. (2003). Blending practice and research: Practice-based research networks an opportunity for dietetics professionals. *Journal of the American Dietetics Association*, 103 (5), pp. 626-632.

Wellman, Nancy S. (1999). Do we facilitate the scientific process and the development of dietary guidance when findings from single studies are publicized? *American Journal of Clinical Nutrition*, 70 (5), pp. 802-805.

WHO. (1993). *Health research methodology: A guide for training in research methods*. Delhi: Oxford University.

Section B: Teaching

- Black, P., Harrison, C., Lee, C., Marshall, D., and William, D. (2004). Working inside the black box: Assessment and learning in the classroom. *Phi Delta Kappan*, 86.
- Fry, H., Ketteridge, S., & Marshall, S. (2003). *A handbook for teaching and learning in higher education: Enhancing academic practices*. London: Routledge.
- Hennan, A. (2005). Innovating in higher education: Context for change in learning technology. *British Journal of Educational Technology*, 36 (6), p. 975.
- Journal of Educational Technology*
- Journal of Higher Education*
- Kienziex, D. S. (2004). Teaching ethics isn't enough: The challenge of being ethical teachers. *The Journal of Business Communication*, 41.
- Morzano, R. J., & Morzano, J. S. (2003). *The key to classroom management*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Race, P., & Brown, S. (2001). *The lecturer's toolkit: A practical guide to learning, teaching and assessment*. London: Routledge.
- Ramsden, P. (2003). *Learning to teach in higher education*. London: Routledge.
- Stiggins, R., Arter, J., & Chappurs, J. (2003). Implementing assessment for learning. www.assessment.com
- Trenholm, S., & Jenson, A. (2000). *Interpersonal communication*. Wadsworth.

DEPARTMENT OF FOODS, NUTRITION & DIETETICS

PAPER II ADVANCES IN NUTRITION

Marks: 100

UNIT I: RECENT ADVANCES IN HUMAN NUTRITION

- Cellular Nutrition – Role of different nutrients in regulation of Gene Expression.
- Role of Nutrients in regulation of food intake.
- Photochemical & micronutrients.
- Interrelationships of Nutrients
- Nutrition, Immunity & Infections
- Nutritional Imbalances & Adaptations.
- Nutrition, Genetics & Obesity
- Maternal & Foetal Nutritional aspects
- Geriatric Nutrition
- Sports & Exercise Nutrition
- Space Nutrition

UNIT II: RECENT ADVANCES IN COMMUNITY NUTRITION

- Vital statistics & indices of Health & Nutritional Status.
- Markers of Nutritional status & Assessment
- Nutrition & health policy.
- Effectiveness of Nutrition Intervention & Education programs & Projects.
- Prevention & treatment of Micronutrient deficiencies in community.
- Communication for Behavioral change (CBC)

UNIT III: CONTEMPORARY ISSUES IN NUTRITION

BIBLIOGRAPHY -- PAPER II - ADVANCES IN NUTRITION

1. Bamji, Mahtab, S. and Rao (1996), "Textbook of Human Nutrition" Pub - New Delhi, Oxford and IBM Publishing Co-Private Ltd.
2. Bernard D (1999), "Nutrition for Serious Athletes: An advanced Guide". Pub - Campaign, IL, Human Kinetics.
3. Bhargav, Priya and Chand, Tara (2005), "Food and Nutrition". Pub - New Delhi, Commonwealth Publishers.
4. Boyle, Marie A. and Holben, David H. (2006) Fourth Edition, "Community Nutrition in Action". Pub - Belmont, CA, Thomson / Wasworth.
5. Burke, House., (ED) and Deakin, Vicky (ED). (2006), Third Edition, "Clinical Sports Nutrition" Pub - London Mosby /Elsevier Ltd.
6. Carolyn D. Berdanier (2002), "Handbook of Nutrition and Food". Pub - CRC - press LLC.
7. Catherine Geissler & Hilary Powers. (2005), 11th Edition, "Human Nutrition", Edinburgh London New York Oxford Philadelphia St Louis Sydney Toronto.
8. Croft J.C. (1999), "Advance Nutrition and Human Metabolism". Pub - Belmont, CA, Wadsworth Thomson Learning.
9. Dass, Sujata K. (2004), "Changing trends in health and nutrition, Vol 3: Food and Nutrition Security: Urban challenges ". Pub Delhi Isha Books.
10. Davidson (Sir), Stanley, 8th Edition, "Human Nutrition and Dietetics" . Pub - Edinburgh Churchill Living Stone and ECBS.
11. Garro J.S (1993) 9th Edition, "Human Nutrition and Dietetics". Pub - New York, Churchill Living Stone.
12. Insel, Paul and Turner, R. Elaine and Ross, Don (2006), Second Edition, "Discovering Nutrition" Pub - Sudbury, M.A., Jones and Barlett Publishers.
13. Insel, Paul and Turner, R. Elaine and Ross, Don (2004), Second Edition, "Nutrition" Pub - Sudbury, MA, Jones and Barlett Publishers.
14. McArdle, William. D. and Katch, Frank I. (2004) Second Edition, "Sports and Exercise Nutrition". Pub - Philadelphia, Lippincott Williams and Wilkins A Wolters KC.
15. Mishra, Kuchi (2006), "Health for All - Today and Tomorrow. Pub - New Delhi, Adhyayan Publishers and Distributors.
16. Narasinga Rao, B.S. (2005) "Development of Nutrition Science in India" Pub - New Delhi Allied Publishers Pvt. Ltd.
17. Sachdev H.P.S. (ED) & Chauday Panna (ED) (2004) "Nutrition in Children: Developing Country concerns". Pub - New Delhi B.I. publication Pvt. Ltd.
18. Sadler M.J. (1999), "Encyclopedia of Human Nutrition" Pub - San Diego Academic Press.
19. Sen, Amit (2005) Health Education & Nutrition", Pub - Delhi, Isha Books.
20. Shiles, Maurice, E (ED) and Sheke, Moshe (ED) (2006), 10th Edition, "Modern Nutrition in Health and Disease" Pub - Philadelphia, Lippincott Williams & Wilkins - A Wolters KL.

21. Stupnik, Martha. (2006), Second Edition, "Biochemical, Physiological, Molecular Aspects of Human Nutrition". Pub – Missouri, Saunders / Elsevier.
22. Thomson, Janice & Monroe Melinda "Nutrition : An Applied Approach" Pub – San Francisco, Pearson Education, Inc. / Beryceerices Cumming.
23. Wilson Ted (ed) and Temple Norman J. (ed), (2004), "Beverages in Nutrition and Health" Pub New Jersey Humana Press Inc.

Paper II, Option B: Advanced Study of Human Development

Explanations for the Manner in Which Human Development Proceeds
Principles of Development
Gene-Environment Influences

Development in Each Domain:

- Physical Development
- Motor Development
- Cognitive Development
- Language Development
- Emotional Development
- Attachment
- Development of the Self
- Personality Development
- Social Development
- Spiritual Development
- Family Development

References:

Child Development

- Damon, W., & Lerner, R. M. (Eds.) (1998). *Handbook of Child Psychology, Vol 1: Theoretical models of human development*. NY: John Wiley.
- Damon, W., Kuhn, D., & Siegler, R. S. (Eds.) (1998). *Handbook of Child Psychology, Vol 2: Cognition, perception and language*. NY: John Wiley.
- Damon, W., & Eisenberg, N. (Eds.) (1998). *Handbook of Child Psychology, Vol 3: Social, emotional, and personality development*. NY: John Wiley.
- Damon, W., Sigel, I. E., & Renninger, K. A. (Eds.) (1998). *Handbook of Child Psychology, Vol 4: Child psychology in practice*. NY: John Wiley.
- DeHart, G. B., Sroufe, L. A., & Cooper, R. G. (2004). *Child development: Its nature and course*. NY: McGraw-Hill.

- DeLoache, J. S., Mangelsdorf, S. C., & Pomerantz, E. (Eds.) (1998). *Current readings in child development*. Boston: Allyn & Bacon.

Developmental Psychology

- Greene, S., & Hogan, D. (Eds.) (2005). *Researching children's experience. Approaches and methods*. New Delhi: Sage.

Journal of Marriage and Family

- Larsen, R. J., & Buss, D. M. (2005). *Personality psychology. Domains of knowledge about human nature*. NY: McGraw-Hill.

- Lemme, B. H. (2002). *Development in adulthood*. Needham Heights: Allyn & Bacon.

Merrill Palmer Quarterly

- Plomin, R., DeFries, J. C., McClearn, G. E., & Rutter, M. (1997). *Behavioural genetics*. NY: W.H. Freeman.

- Sternberg, R. J. (2003). *Cognitive psychology*. Belmont, CA: Wadsworth/Thomson Learning.

- Zinnbauer, B. J., Pargament, K. I., & Scott, A. B. (1999). The emerging meanings of religiousness and spirituality: Problems and prospects. *Journal of Personality*, 67 (6), 889-919.

DEPARTMENT OF TEXTILES & FASHION TECHNOLOGY

PAPER II - CURRENT TRENDS IN FIBRES, PROCESSING & FINISHING

(MARKS 100)

SECTION I – TECHNICAL TEXTILE FIBRES

- Birth of new fibres
- Transition to new fibres
- High-touch fibres
- New high-tech fibres & skin-gosen
- High-performance fibres
- NASA – Advancing Ultra-performance
- Textiles from novel means of innovation
- Fibres of the next millennium

SECTION II - PROCESSING AND FINISHING

- Textile processing & properties
- Finishing of technical textiles
- Heat and flame protection
- Water proof breathable fabrics
- Medical textiles
- Textiles in defense
- Textiles in filtration
- Textiles in transportation
- Textiles for survival
- Fabrics with improved aesthetics & functional properties
- Textile performance : end use & relevant tests
- Biotechnology in processing & finishing
- Fabrics & finishes for the future.

PAPER II

Section I: Fibers

1. Chernyshova N, 1973, "Chemical Technology Of Fibrous Materials". Moscow, Mir Publishers
2. Mishra S P, 2000, "A Textbook Of Fiber Science And Technology". New Delhi, New Age International (P) Ltd
3. Carter Mary, 1971, "Essential Fiber Chemistry". New York, Marshall Dukker Inc.
4. Baker A F, 1998, "Handbook Of Textiles". Chandigarh, Abhishek Publications.
5. Hall A J, 1975, "The Standard Book Textiles" 8th Edition. India, Newness-Butterworths
6. Common Mary L, Jungerman Martha E, 1980, "Introduction To Textiles". India, Taraporewala Sons And Co Pvt Ltd.
7. Cook Gordan J, 2001, "Textile Fibres Volume 1- Natural Fibers". England, Woodhead Publishing Ltd
8. Corbman Bernard P, 1983, "Textiles Fibers To Fabric". McGraw Hill International Edition.
9. Corbman, Bernad P., 1975, "Textiles: Fiber To Fabric, 5th Edition", Mc Granthill Book Company,
10. Potter, M. David And Corbman, Bernard P., 1967 "Fiber To Fabric" Mc. Graw Hill Co. Gregg Division.
11. Warner, Steven, B., 1996 "Fiber Science", Prentive Hall, Inc., 1995
12. Levin, Menachem And Preston, Jack (Ed), "Handbook Of Fiber Science And Technology, Vol 3: High Technolog Fibers Part I " Marcel Dekker Inc.
13. Mishra S. P., 2000, "Textbook Of Fiber Science And Technology". New Age Int. Pvt. Ltd.
14. Hess, Katharine Paddock, 1996, "Textile Fibers And Their Use", Oxford And Ibh Publishing Co. Pvt Ltd
15. Hess. Katharine Paddock, 1958 "Textile Fibers And Their Use", 6th Edition, Oxford And Ibh Publishing Co. Pvt Ltd.
16. Needles. Howard L., 1986, "Textile Fibers, Dyes, Finishes And Processes: A Consise Guide. Noyes Publications.
17. Dattl, Keshav V. And Vaidya, A. A., 1984 "Chemical Processing Of Synthetic Fibers And Blends", John Wiley And Sons, Inc.
18. Robinson, J.S. (E.D.), 1986, "Spinning Extruding And Processing Of Fibers: Recent Advances". Mahajan Book Distributors.
19. Robinson, J. S. (E.D.), 1996, "Manufacture Of Yarns And Fibers From Synthetic Fibers", Mahajan Book Distributors.
20. Hongu, Tatsuya And Phillips, Glyl, O., 1997 "New Fibers", 2nd Edition, Woodhead Publishing.
21. Berkstresser Iii, G.A., Buchanan, D. R., Grady, P.L., 1995, "Automation In Textile Industry: From Fibers To Apparel", Textile Institute.
22. Jeffries, R., 1971, "Biocomponent Fibers. (A Merron Monograph), Woodhead Publishing Ltd.
23. Cook, J. Gordon, 2001, "Handbook Of Textile Fibers Vol 1 : Natural Fibers", 5th Edition, Woodhead Publishing Ltd.

Section II Processing & Finishes /Finishing

1. Braddock, Sarah, E. And O'mahany, Marie, 1998, "Techno Textiles-Revolutionary Fabrics For Fashion And Design", Thames And Hudson Ltd.
2. Arora, S.M, 1984, "Modern Techniques Of Textile Dyeing Bleaching And Finishing", Small Industry Research Inst.
3. Shenai (Dr.) V.A And Saral, N.M., 1990, "Technology Of Textile Finishing", 2nd Edition, Sevak Publications.
4. Nalankilli, G And Jayprakasan, S., 1997, "Textile Finishing", S.S.N Institute Of Textile Technology.
5. Edge, J.H., 1998, "Practical Cotton Finishing", Abhishek Publications.
6. Beapark, I., Marriote, F.W., James, P, 1986, "A Practical Introduction To The Dyeing And Finishing Of Wool Fabrics", 1st Edition, Society Of Dyers And Colourists.
7. Route, Hans-Karl, 2001, "Encyclopedia Of Textile Finishing", Volume 1 (A-F) 4th Edition, Springer Verlag.
8. Schilndler, W.D And Hauser, F.J, 2004, "Chemical Finishes Of Textiles", Woodhead Publications Ltd.
9. Burkrishaw, S.M.,(1995), "Chemical Principles Of Synthetic Fibre Dyeing". Blackie Academic & Professionals, London.
10. Broughton, Kate.,(1995), "Textile Dyeing: The Step By Step Guide & Showcase". Rockpost Publishhers Inc, Rockpost.
11. Brannt, W.T.(E.D.), (2000), "Dry Cleaning, Scouring, Dyeing Of Garments, Furs & Rugs". Ablhishek Publication, Chandigarh.
12. Dean, Jenny.,(1994), "The Craft Of Natural Dyeing". Search Press, Kent.
13. Eri 2000 Programme, (2002), "Colours From Nature: Silk Dyeing Using Natural Dyes". Oxford & Ibm Publishing Co. Pvt. Ltd., New Delhi.
14. Gulrajani, M.L., (1990), "Wool Dyeing & Printing". I.I.T.-Dept. Of Textile Technology, New Delhi.
15. Hurst, G.H., (1998), "Silk Dyeing, Printing & Finishing". Abhishek Publication, Chandigarh.
16. Park, J., (1990), "A Practical Introduction To The Continous Dyeing Of Woven Fibres". Roaches Engineering Ltd., Staffordshire.
17. Pellew, C.E., (1998), "Dyes & Dyeing". Abhishek Publication, Chandigarh.
18. Prayag, R.S., (1990), "Bleaching, Mercerising & Dyeing Of Cotton Materials". Dharwad.
19. Shenai, V.A., (1993), "Dyeing Of Silk". Sevak Publication, Bombay.
20. Shenai, V.A., (1993), "Technology Of Textile Processing Vol2 Chemistry Of Dyes & Principles Of Dyeing". Sevak Publication, Bombay.
21. Shenai, V.A., (1994), "Technology Of Textile Processing Vol6 Technology Of Dyeing". Sevak Publication, Bombay.
22. Trotman, E.R., (1994), "Dyeing & Chemical Technology Of Textile Fibres". New Delhi Publication Pvt. Ltd., New Delhi.
23. Vigo, Tyrone, L., (1994), "Textile Processing & Properties (Preparation, Dyeing, Finishing & Performance)". Elsenier, Amsterdam.

24. Cheetam, R.C., (1966), "Dyeing Fiber Blends: The Processing Of Blends Union And Mixture Containing Natural Or Man-Made Fibers". D. Van Nostrand Co. Inc., London.
25. Gulrajani, M.L., (1993), "Chemical Processing Of Silk". IIT.- Dept. Of Textile Technology, New Delhi.
26. Manivasakam, N. (1995), "Treatment Of Textile Processing Effluents (Including Analysis)". Sakhi Publication, Coimbatore.
27. Niir- National Instt. Of Industrial Research, (2006), "The Complete Technology Book On Textile Processing With Effluent Treatment". Asia Placific Business Press Inc., Delhi.
28. Palmer, John, W. (1996), "Textile Processing And Finishing Aids: Recent Advances". Mahajan Book Distribution (Noyes Data Corp.), Ahemedabad.
29. Shenai, V.A., (2003), "Technology Of Textile Processing: Vol. Iii: Technology Of Bleaching And Mercerizing", 3rd Ed. Ed. Sevak Publication, Mumbai.
30. Shenai, V.A., (2002), "Technology Of Textile Processing: Vol. V: Chemistry Of Textile Auxiliaries", 2nd Ed. Ed. Sevak Publication, Mumbai.
31. Shenai, V.A., (1999), "Technology Of Textile Processing: Vol. X: Technology Of Textile Finishing", 3rd Ed. Ed. Sevak Publication, Mumbai.
32. Shenai, V.A., (1996), "Technology Of Textile Processing: Vol. VIII: Evaluation Of Textile Chemicals", 2nd Ed. Ed. Sevak Publication, Mumbai.
33. Shenai, V.A., (1994), "Technology Of Textile Processing: Vol. VI: Technology Of Dyeing". Sevak Publication, Mumbai.
34. Shenai, V.A., (1993), "Technology Of Textile Processing: Vol. V: Chemistry Of Dyes And Principles Of Dyeing", 3rd Ed. Sevak Publication, Mumbai.
35. Shenai, V.A., (1991), "Technology Of Textile Processing: Vol. II: Technology Of Bleaching And Mercerizing". Sevak Publication, Mumbai.
36. Shenai, V.A., (1991), "Technology Of Textile Processing: Vol. I: Textile Fibres", 2nd Ed. Sevak Publication, Mumbai.
37. Shenai, V.A., (1991), "Technology Of Textile Processing: Vol. I: Textile Fibres", 3rd Ed. Sevak Publication, Mumbai.
38. Shenai, V.A., (1990), "Technology Of Textile Processing: Vol. IV: Technology Of Printing". Sevak Publication, Mumbai.
39. Shenai, V.A., (1977), "Technology Of Textile Processing: Textile Fibres". Sevak Publication, Mumbai.
40. Vigo, T.L. (1994), "Textile Processing And Properties (Preparation, Dyeing, Finishing And Performance)", 1st Ed. Ed. Elsevier, Amsterdam.

DEPARTMENT OF FOODS, NUTRITION & DIETETICS

MARKS: 100

Paper III (Option A): Electives

Unit I: ISSUES IN CLINICAL NUTRITION

- Metabolic Syndrome – Preventive aspects
- Childhood Obesity & Diabesity – Preventive aspects
- Cancer Preventive & curative role of Nutrition
- Nutrition & critical care
- Traditional Nutritional Remedies
- Alternate Therapies
- Aids & Nutrition
- Nutritional management of diseases in special conditions/sports/persons/Astronauts etc.
- Food service management in hospitals & other healthcare institutes.

Unit II: FOOD SCIENCE & TECHNOLOGY

- Applications of Biotechnology & Fermentation Technology
- Functional foods & Nutraceuticals
- Food Quality & Food Safety
- Modern techniques of Food processing & Preservation

BIBLIOGRAPHY Paper III (Option A) Electives

1. Rick Parkar (2003)
"Introduction to Food Science"
Library of congress cataloging – in Publication.
2. Lawless Hayman
"Sensory Evaluation of Food Principles and Practice Kluwer Academic / Plenum Publishers.
3. NIIR National Institute of Industrial Research Delhi "Food Colours, flavours and additive Technology Handbook"
4. Vangardu, S.J. and Wood burn M.
"Food Preservation and Safety: Principles and Practice" : 1Ed. (1999)
Pub: Surabhi Publications Jaipur.
5. a) Urvi B.
Concise Encyclopaedia of Food, Nutrition, Dietetic and Technology. Vol I (A-D) (1998)
Pub : New Delhi, Sarup and Sons 1998

b) Urvi B
Concise Encyclopaedia of Food Nutrition Dietetics and Technology vol II (E- N)
(1998)
Pub: New Delhi, Sarup and Sons (1998)

c) Ururi B
Concise Encyclopaedia of Food, Nutrition, Dietetics and Technology vol. 3 (0-2) (1998)
Pub : New Delhi, Sarup and Sons 1998.
6. Indian Institute Packaging (1998)
"Modern Food Packaging"
Pub: Indian Institute Packaging 1998
7. P.J. Fellows – (1997)
"Food Processing Technology Principles and Practice"
Pub : Wood Read Publishing series in Food Science & Technology.
8. Dennis Lillicrap, John Cousins and Robert Smith 6 E (2002)
Food and Beverage Services"
Pub : Book Power.

9. D.K. Salunkhe, S.S. Kadam (1998)
Handbook of vegetables science and technology
Pub : Marcel Dekker Inc. (New York.Basal)
10. U.S. Department of Agriculture 1999 (2Ed) Complete Guide to Home Canning and Preserving.
Pub: Dover Publication, Inc. Mineola, New York.
11. Jeffery M. Farber, Ewen C.D. Todd. 2000
Safe Handling of Foods
Pub : Marcel Dekker Inc. (New York) Basel.
12. N.L. Kent and A.D. Evers (2004), 4th Ed.
Technology of Cereals
Pub : Wood Read Publishing Limited Abington Hall, Aington.
13. Meera Rao Patankar and Pushpa Bharati,
I Ed (2001)
"Food Preparation – A scientific Approach
Pub : Anmol Publications Pvt. Ltd. New Delhi.
14. S.N. Mahindru (2004)
"Food contaminants – Origin, Propagation & Analysis
Pub : S.B. Nangia, A.P.H. Publishing Corporation, New Delhi
15. N. Shukuntala Manay & M. Shadaksharaswamy
2Ed. (2001)
Foods – Facts and Principles
New Age International (P) Limited (New Delhi)
16. Vicki A. Vaclarick & Elizabeth W. Christian
2nd Ed (2003)
Essentials of Food Science
Pub : Kluwer Academic / Plenum Publishers, New York.
17. SBP board of consultants and Engineers (1998)
SBP Handbook of oilseeds, Oils, Fats and Derivative
Pub: SBP consultants and Engineers Pvt. Ltd. Delhi.
18. Bernard Davis Andrew Lockwood and Sallystone 3rd Ed. (1998)
'Food & Beverage Management'
Pub: Elsevier, A division of Reed Elsevier India Pvt. Ltd.
19. NIIR Board of Consultants & Engineers
The complete book on coconut & coconut products.
Pub : Casia Pacific Business Press Inc.

20. a) J.S. Pruthi volume I (1999)
Quick Freezing Preservation of Foods – Principles Practices, R & O needs.
Pub : Allied Publishers Limited, New Delhi
- b) J.S. Pruthi volume II (1999)
Quick freezing Preservation of Foods.
Principles Practices, R & D Needs
Pub : Allied Publishers Limited, New Delhi
21. F.C. Blank (1999)
Handbook of Food & Nutrition
Pub: Agro Botanicas Publishers India.
22. S.N. Tripathy (2004) 1st Ed
Food Biotechnology
Pub : Publishers and distributors.
23. Fellows P.J. (1996)
Food Processing Technology: Principle and Paractice
Pub: Cambridge, wood and Publishing Ltd.
24. National Institute of Industrial research
'Wheat, Rice, Corn, Oat, Barley and Sorghum Processing Handbook.
Pub : Delhi, Asia Pacific Business Press Inc.
25. Sohrab (2001)
A Practical guide for Implementation of Interated ISO – 9001 HACCP system for Food
Processing Industries
Pub : Allicd Publishers Pvt. New Delhi.
26. Das, H. 2005
Food Processing Operations Analysis
Asian Books Pvt. New Delhi
27. Fellows, P.
Small scale Food Processing
A guide to appropriate equipment
Intermediate Technology Pub. London.
28. Ahluwalia, Vikas 2Ed 2007
Food Processing
Paragon International Publishers
New Delhi

29. God, P. K.
Technology of Food Products (Food processing industries Series No.29)
Pub : Small business Publication Delhi
30. CFTRI
Home Scale processing and Preservation of fruits and vegetables.
CFTRI Mysore
31. Smith, J. Scott 2004
Food Processing: Principles and application Blackwell Publication Ltd, Oxford.
32. Gregoine Mary B, spears Marian C (2007) 6 Ed.
Food services organization.
Pub. Pearson Prentice Hall, New Jersey USA
33. Payne Palacio , Theis Monica (2005)
Tenth Edition,
Introduction to Food Services
Pub. Pearson Prentice Hall, New Jersey USA.
34. Stanley Carmain and Linda Young
'Bakery products science, Technology and Practice
Culinary and Hospitality Industry Publication Services.
35. Y.H. Hui
'Bakery Products science and Technology'
Culinary and Hospitality Industry Publication Services
36. G.R. Gibson
Prebiotics Development and Application
Culinary and Hospitality Industry Publication services.
37. A.Y. Tamime
Probiotic Dairy products society and dairy Technology.
Culinary and Hospitality Industry Publication.
38. P.F. Fox and P.L.H. McSweeney
Advanced Dairy chemistry Volume I – Protein
3rd edition.
Culi and H.I. Publications Services.
39. Gribney, Micael J. (ED) and Nutrition Society (2005) "Clinical Nutrition". Pub –
Oxford, Blackwell Science / Blackwell Publishing Co.
40. Kartik, Charu (2005), "Nutrition in Diabetes". Pub – New Delhi, B.I. Publications Pvt.
Ltd.,

41. Gibney, Michael J. (ED) and others (2004), "Public Health Nutrition" Pub – Oxford, Blackwell Science / Blackwell Publishing Co.
42. Mahan L. Kathleen and Escott stump, Sylvia (2004), 11th Edition, "Krause's Food Nutrition and Diet Therapy". Philadelphia, Saunders / Elsevier.
43. Shiles, Maurice, E (ED) and Sheke, Moshe (ED) (2006), 10th Edition, "Modern Nutrition in Health and Disease" Pub – Philadelphia, Lippincott Williams & Wilkins – A Wolters KL.
44. Stupanik, Martha. (2006), Second Edition, "Biochemical, Physiological, Molecular Aspects of Human Nutrition". Pub – Missouri, Saunders / Elsevier.
45. Issues in the Regulation of Genetically Engineered Plants and Animals
Biotechnology G.M. Foods
[Attp ://www.who.int/food_safety/biotech/en/](http://www.who.int/food_safety/biotech/en/)
Heat Science and Technology.
[Attp://www.inornit.com.br/](http://www.inornit.com.br/)

Food Safety and Nutrition Information
[Attp :// ifil .org/food/](http://ifil.org/food/)

Prebiotics – Development and Application
Probiotic Dairy Products

Journals

Food Science and Technology International
Journal of Food Processing and Preservation
Journal of Food Quality
Journal of Food Science
Journal of Sensory Studies
Journal of American Dietetics Association

Paper III, Option B, Elective I: Early Childhood and School Education and Administration

Early Childhood Education

The Development of Curriculum Models
Curriculum Development
Evaluation of Curriculum Models
Challenges and Future Trends
Conducting Research in Early Childhood Education

School Administration and School Education

Cross-Cultural Comparisons of School Systems
Schools of Excellence

Best Practices in Education

School Administration Issues Pertaining to:

Students

Teachers

Parents

Administrators

Special Educators and Counselors

Clerical Staff

Support Staff

Community

Policy-Making

Challenges and Future Trends

Conducting Research in School Administration and School Education

Paper III, Option B, Elective II: Psychopathology and Well-Being Across the Lifespan

Clinical Psychology

Mental Health Issues in Children, Adolescents, and Adults

Latest Developments in Theoretical Perspectives

Risk, Resilience, Continuity and Discontinuity in Developmental Pathways

Domains of Psychopathology (e.g., child abuse and neglect; conduct disorder; ADHD; anxiety disorders; personality disorders; learning and communication disorders)

Latest Trends in Assessment, Diagnosis and Treatment

Policy-Making and Services

Ethics

Challenges and Future Trends

Conducting Research in Clinical Psychology

Counseling Psychology

Recent Developments with regard to Goals/Approaches/Target Groups

Cross-Cultural Comparisons of Counseling Models

Licensing and Certification/Professional Development of Counselors

Consultation and Collaboration

Multicultural Counseling

Assessment/Evaluation of Counseling

Ethics
Challenges and Future Trends
Conducting Research in Counseling

Health Psychology
Changing Field of Health Psychology
Understanding and Negotiating/Coping with Stress and Pain
Living with Chronic Illness
Mind-Body Connection and the Concept of Wellness
Domains of Wellness
Creating Wellness
Ethics
Challenges and Future Trends
Conducting Health Research

Special Education
Domains of Special Education (e.g., the visually challenged, the auditorily challenged)
Policy-Making
Challenges and Future Trends
Conducting Research in Special Education

Higher Education
Issues in Higher Education
Policy-Making
Challenges and Future Trends
Conducting Research in Special Education

References:

Abschuler, J. (1997). *Working with chronic illness*. Houndmills: MacMillan.

Annual Editions of the NAEYC's Early Childhood Education

Capuzzi, D., & Gross, D. (1999). *Counselling and psychotherapy: Theories and interventions*. New Jersey: Merrill.

Casson, R. C., & Butcher, J. N. (1992). *Abnormal psychology and modern life*. NY: Harper Collins.

Child Development

Childhood Education

Developmental Psychology

Essa, Eva L. (2003). *Introduction to early childhood education*. Clifton Park, NY: Delmar Learning/Division of Thomson Learning.

Gelfand, D. M., & Drew, C. J. (2003). *Child behavior disorders*. Belmont: Wadsworth/Thomson Learning.

Graham, P., Turk, J., & Verhuist, F. C. (1999). *Child psychiatry*. NY: Oxford University Press.

Handbooks of Child Psychology

Hardman, Michael L., Drew, Clifford J., & Egan, M. Winston. (1999) *Human exceptionality: Society, school, and family*. Boston: Allyn and Bacon.

Harvard Educational Review

Hoeger, W., Turner, L., & Hafen, B. (2002). *Wellness: Guidelines for a healthy life style*. Australia: Wadsworth/Thomson Learning.

Journal of Abnormal Psychology

Journal of Consulting and Clinical Psychology

Journal of Counseling Psychology

Journal of Health Psychology

Journal of Higher Education

Journal of Marriage and Family

- Butler, S., Dainow, S., & Miller, P. (Eds.). (1996). *Counselling: The BAC counselling reader*. London: Sage.
- Coventry, H. (2001). *Favourite counseling and therapy homework assignments*. Philadelphia: Taylor & Francis.
- DePaul, J. (2001). *Interpersonal processes in psychological problems*. NY: Guilford.
- Derogatis, L. R. (2006). *Health psychology*. NY: Tata McGraw-Hill.
- Thompson, C., Rudolph, L., & Henderson, D. A. (2004). *Counselling children*. Australia: Thomson, Brooks, Cole.
- Jenkins, E., & Campbell, V. L. (2000). *Testing and assessment in counseling practice*. New Jersey: Lawrence Erlbaum.

Elective I – MANAGEMENT OF GARMENT MANUFACTURE IN THE GLOBAL ECONOMY

- Overview of the Global Apparel Industries
- Managing productivity in garment industry
- Mergers/ MNC's – New strategies in garment manufacture
- Quality management in garment industry

Elective II – MANAGEMENT OF GARMENT TRADE IN THE GLOBAL ECONOMY

- Brands and brand image
- New trends in garment retailing
- Fashion shows, fairs, exhibitions and events
- Latest fashion forecast
- Fashion marketing research
- Planning and executing purchases

BIBLIOGRAPHY : Paper III (Option C) Electives

Elective I – Management Of Garment Manufacture In The Global Economy

1. Ajgaonkar, D.B., 1996, "Modern Technology Management In Textiles", Mumbai, The Textile Association Of India.
2. Bheda, Rajesh, 2003, "Managing Productivity In The Apparel Industry", Cbs Publishers And Distributors.
3. Brann, W.T.(E.D.), (2000), "Dry Cleaning, Scouring, Dyeing Of Garments, Furs & Rugs". Abhishek Publication, Chandigarh.
4. Brown, Patty And Rice Janett, 2000, "Ready To Wear Apparel Analysis", 3rd Edition. Prentice Hall, Inc.
5. Brown, Patty, 1992 "Ready To Wear Apparel Analysis", Macmillan Publishing Co. Inc.
6. Cooklin, G, 1997, "Garment Technology For Fashion Designers", 1st Edition, Om Book Services.
7. Dickerson, K.G., 1999, "Textiles And Apparel In The Global Economy", Merrill/ Prentice Hall, Inc.
8. Kantilal, Ila, 1990, "The Apparel Industry In India (State Of The Art Report: No.1)" National Information Centre For Textile And Allied Subject.
9. Kothari, V.K., 1999, "Testing And Quality Management", New Delhi, Iafi Publications.
10. Majumdar, Ramanuj, 1993, "Product Management In India", New Delhi, Prentice Hall of India Pvt Ltd.
11. Mehta, Pradip, 1992, "An Introduction To Quality Control To Apparel Industry", Asqc Quality Press.
12. Tyler, D., 1991, "Materials Management In Clothing Production, Oxford, Bsp Professionals Books.

Elective II – Management Of Garment Trade In The Global Economy

1. Bajaj, Chetan And Tuli, Rajnesh, 2005, "Retail Management", Oxford University Press.
2. Berkowitz, Kerin, Hartley, Redlius (1994). "Marketing" 4th Edition. America, Library Of Congress Cataloging- In Publication Data
3. Berman, Barry And Evans, Joel R., "Retail Management – A Strategic Approach", Prentice Hall.
4. Chan, Linda & Robinson Joseph (1984). "A Practical Guide To Visual Merchandizing". New York. John Wiley & Son
5. Dani, L.M., 1990 "Industrial Organisation And Management", Bombay, Manan Prakashan.
6. Davar (Dr.), Rustom S, 1992, "Modern Marketing Management", New Delhi, Universal Book Stall.
7. Easey Mike (1995). "Fashion Marketing" 2nd Edition. London, Blackwell Science Ltd.
8. Gandhi J.C (1996) "Marketing. New Delhi, Tata Mcgraw Hill Publishing Company Ltd.
9. Goodman Stanley (1984) "Fashion Advertising And Promotion" 6th Edition. America Fairchild Publications.