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List of reference books of various courses

Name of Degree Programme: B.Sc. (Honours) Community Science

I. Department of Extension Education and Communication Management Courses

Extension and Rural Development 2 (2+0)

Suggested Readings:

- Sandhu, A.S. (2019) Textbook on Agricultural Communication: Process and Methods. Oxford and IBH Publishing Co. Pvt. Ltd.
- Chitambar, J.B. (2008). Introductory Rural Sociology. New Age International (P) Limited.
- Sachdeva, D. R. and Bhushan, V (2007). An Introduction to Sociology. KitabMahal Agency.
- Ray, G.L. (2003), Extension Communication and Management. Kalyani Publishers. Fifth revised and enlarged edition.
- Dahama, O.P. and Bhatnagar, O.P. (2003). Education and Communication for Development. Oxford and IBH Publishing Co. Pvt. Ltd.

Extension Training Management 3(1+2)

Suggested Readings:

- Gupta, C.B. (2021). Human Resource Management. Sultan Chand and Sons.
- Dahama, O.P. and Bhatnagar, O.P. (2003). Education and Communication for Development. Oxford and IBH Publishing Co. Pvt. Ltd.
- Lynton, R.P. and Pareek, V. (2008). Training for Development. Vistaar Publications.
- Narwani, G.S. (2002). Training for Rural Development. Rawat Publication.
- Saxena, J.P. and Kakkar, A.T. (2000). Training and Development.

Diffusion and adoption of Homestead Technologies 3(2+1)

Suggested Readings:

- Ray, G.L. (2018) Extension Communication and Management. Kalyani Publishers. Fifth revised and enlarge edition.
- Dahama, O.P. and Bhatnagar, O.P. (2013). education and communication for development. Oxford and IBH Publishing Co. Pvt. Ltd.
- Sandhu, A.S. (1993) Textbook on Agricultural Communication: Process and Methods. Oxford and IBH Publishing Co. Pvt. Ltd.
- Chitambar, J.B. (2008) Introductory Rural Sociology. New Age International (P) Ltd.
- Sachdeva, D. R. and Bhushan, V. (2007) An Introduction to Sociology. Kitab Mahal Agency.

Programme Development for Rural Families 3(1+2)

Suggested Readings:

- Sandhu, A.S (2018), Extension Programme Planning, New Delhi: Oxford IBH.

- Ray, G.L. (2014), Extension Communication and Management. New Delhi: Kalyani Publishers.
- Reddy, A.A (2001), Extension Education, Bapatla: Sri Lakshmi Press.
- Dahama, O.P and Bhatnagar, O.P (2003). Education and Communication for Development. New Delhi: Oxfords IBH.
- Sehgal, S. and Raghuvanshi, R.S. (2017) Text Book of Community Nutrition. ICAR: New Delhi.

Print and Electronic Journalism 3(0+3)

Suggested Readings:

- Arvind Kumar (2019). The Electronic Media. Anmol Publications, New Delhi.
- Bhatnagar, R. (2001). Print Media and Broadcast Journalism. Indian Publisher Distributors, Delhi.
- Katyal, V.P (2007). Fundamentals of Media Ethics. Cyber Tech Publishers, New Delhi.
- Bhatt, S.C. (1993) Broadcast Journalism. Basic Principles Har Anand Publications, Delhi.

Public Relation and Social Marketing 3(0+3)

Suggested Readings:

- Yadava, J.S and Mathur, P. (2018). Issues in Mass Communication: the basic concepts. Volumes 1 and 2. Indian Institute of Mass Communication, New Delhi.
- Douglas, S. (2019). A Social Marketing Perspective on Communication Campaigns in Public Opinion Campaigns. Sage publications, New Delhi.

Instructional Video Production 3(0+3)

Suggested Readings:

- Zettl, H. (2015) Television Production Handbook. Thomson Learning, USA.
- Vasuki, B. (2013). Video Production. 2nd edition. Oxford University Press.
- Zettle, H. (2010). Video Basics. Wadsworth Publishing, Belmont, California.
- Millerson, G. and Owens, J. (2008) A Hand book of Video Production. ButterworthHeinemann, Oxford.
- Millerson, G. and Owens, J. (2009) Television Production. Focal Press, London.
- Millerson, G. and Owens, J. (2011), Video Production Handbook. 5th ed.

II. Department of Textile Science and Design Core Courses

Textile Science and Fabric Care 3(2+1)

Suggested Readings

- Sara. J Kadolph & Sara Marcketti. 12th ed. 2016. Textile. England. Pearson-640p
- E.P.G. Gohl & L.D. Vilensky. 2005. Textile Science. 2nd ed. CBS Publishers & Distributors. 228p
- Vatsala, R. 2003. Textbook of Textiles and Clothing. New Delhi. Indian Council of Agriculture Research.
- Cook. G.J. 2005 Handbook of Textile Fibre: Man Made Fibres. Vol 2. USA. Woodhead Publishing Pvt.Ltd.
- Cook. G.J. 2005 Handbook of Textile Fibre: Natural Fibres. Vol 1. USA. Woodhead Publishing Pvt.Ltd.

Techniques of Fabric Construction 3(1+2)

Suggested Readings:

- G. R. Dunham.2021. The Fitting Book. Gina Renee Design Publishing. 280p
- Vilensky, L. D. and Gohl, E. P.G. 2005 Textile Science. 2nd ed. Delhi. CBS Publishers and Distributors.
- Vatsala, R. 2003, Textbook of Textiles and Clothing. New Delhi. Indian Council of Agriculture Research.
- Joseph, M. L. 1986. Introductory Textile Science. 5th ed. New York. CBS College Publishing.

Textile Finishes 2(1+1)

Suggested Readings:

- S.P. Mishra. 2020. Science and Technology of Textile Dyeing and Colouration.2nd ed. New Age International Ltd.
- K. L. Mittal & Thomas Bahners. 2017. Beverly. Scrivener Publishing House.
- Koushik, C.V and Josico, A.I. 2003. Chemical processing of textiles: Preparatory processes and dyeing. NCUTE. New Delhi.
- Vankar, P.D. 2006. Handbook on natural dyes for industrial applications. New Delhi. National Institute of Industrial Research
- N.N. Mahapatra.2016. Textile Dyes. New Delhi. Woodhead Publishing India Ltd.

Retailing and Merchandising –Textiles and Apparel 2(2+0)

Suggested Readings:

- Dimitris Koumbis. 2021. An Introduction to Fashion Retailing: from Managing to Merchandising. United Kingdom. Bloomsbury Publishing India Private Limited. 168p
- T. Morgan.2021. Visual Merchandising. 4th ed. U. K. Laurence King Publishing.224.
- Kotler, P.and Keller, K.L. 2006. Marketing management. 12th ed. New Delhi. Prentice Hall of India Pvt. Ltd.
- Pradhan, S. 2009. Retailing management. 3rded. New Delhi. Tata McGraw-Hill Publishing Company Ltd.
- Ramaswamy, V.S. and Namakumari, S. 2004. Marketing management- Planning, Implementation and Control. 4thed. New Delhi. Mcmillan India Pvt. Ltd.
- Jhon Donnelon.2016 Merchandise Buying and Management.4th ed. United Kingdom. Bloomsbury Publishing India Private Limited. 464p

Fundamentals of Clothing Construction 3(1+2)

Suggested Readings:

- B. Padmavat. 2022. Techniques of Drafting and Pattern Making. Atlantic. Atlantic Publishers and Distributors Ltd. 328p.
- G. R. Dunham.2021. The Fitting Book. Gina Renee Design Publishing. 280p
- Sodhia, M. 2004. Advanced drafting and draping. New Delhi. Kalyani Publisher.
- Armstrong J. Helen. 2005. Pattern Making for Fashion Design. 3rd ed. Pearson Education Pvt. Ltd. Delhi. 821p
- L.Mazumdar.2004. Textbook of Fundamentals of Clothing Construction. ICAR New Delhi. 173p.

Garment and Accessory Designing 3(0+3)

Suggested Readings:

- Bhatnagar, P. 2005. Decorative Design History in Indian Textiles and Costumes. Chandigarh. India. Abhishek Publications. 41-43 pp.
- Peacock, J. 2000. Fashion accessories- The complete 20th century source book. London. Thames and Hudson.
- Meadows, C. S. 2003. Know your fashion accessories. New York. Fairchild books.
- Alison Smith. 2018. The Sewing Book. 2nd ed. India. DK Publisher. 400p
- F. Chapel & C Dorsey. 2011. Garment Construction. Design Original Publishing. 179p.

Traditional Textiles and Costumes of India 3(2+1)

Suggested Readings:

- Bhatnagar, P. 2005. Decorative Design History in Indian Textiles and Costumes. Chandigarh, Abhishek Publication.
- Harney, J. 1997. Traditional Textiles of Central Asia. London. Thames and Hudson Ltd.
- Treasure of Indian Textiles. 1980. Calico Museum. Ahmedabad. Marg Publication Bombay.
- A. Karoliya. 2019. Traditional Indian Handcrafted Textiles 1st. India. Niyogi Books Pvt Ltd. 686p
- M Gupta. 2015. Traditional Indian Textile. United Kingdom. Lambert Academic Publishing. 172p

III. Department of Family Resource Management and Consumer Science

System Dynamics and Management of Resources 2(1+1)

Suggested Readings:

- Plam, W.J. (2020). System Dynamics, McGraw-Hill Education
- Mann, M.K. (2004). Home Management for Indian Families, Kalyani Publisher Ludhiana
- Nickell, P. and Dorsey, J.M. (1970). Management of Family Living. Wiley Eastern, New Delhi
- Vargeese, M.N. Ogale, N.N. and Srinivasan, K. (1992). Home Management, Wiley Eastern, New Delhi

Fundamentals of Art and Design 3(2+1)

Suggested Readings:

- Singh, P. (2018). Fundamentals of art & design. Mount hill publishing company
- Dorothi, et al., (1980). Introduction to Interior Design. New York: Mc Millan.
- Faulkner and Faulkner. (2005). Inside Today's Home. New York: Holt, Rinehart and Winston.
- Gewther, M. (2003). The Home, its Furnishings and Equipment U.S.A. Mc. Graw Hill.
- Mike, L. (2006). The Complete Interior Decoration. United Kingdom: Mc Donald.
- Ruth, M. (2014). The Home and its Furnishings, U.S.A.: Mc. Graw Hill.

Financial Management and Consumer Education 2(2+-0)

Suggested Readings:

- Brigham, E. F. (2019). Fundamentals of Financial Management: Concise Edition;
- Bhargava, Bela. (2005). Family Resource Management and Interior Decoration. Univ. book home Pvt. Ltd. Jaipur.
- Khetarpaul, N and Grover, I. (2004). Consumer Guide for Home Maker – Udaipur: Agratech Pub Academy.
- Maneesha Shukul and Veena Gandotra. (2006). Home Management and Family Finance. Dominant Publishers and Distributors, New Delhi.
- Mann, M.K. (2004) Home Management for Indian Families. Kalyani Publishers, New Delhi.
- Rice, Nickel and Tucker. (1999). Management in Family Finance. John Wiley and Sons., New York.
- Seetharaman P. Sethi M. (2002). Consumerism Strategies and Tactics. CBS Publishers and Distributors. New Delhi

Housing and Space Management 3(2+1)

Suggested Readings:

- Parvez, R. (2016). Housing and space management. Disha International publishing house.
- Cherunilam, F. and Heggade, O. (2007). Housing in India. Mumbai: Himalaya Publishing.
- Dorothy Stepat – Devan, Kathryn Camp Logan, Darlene M. Kness, Laura Szekely. Macmillan Publishing Co., Inc, New York.
- Faulkner, R. and Faulkner, S. (1975). Inside Today's Home. New York: Rinehart and Winston.
- Mathur, G.C. (1993). Low-Cost Housing in Developing Countries. New Delhi: Mohan Primplani, Oxford and IBH.

Ergonomics and Appropriate Technologies 2(1+1)

Suggested Readings:

- Singh, L. P. (2018). Work Study and Ergonomics. Cambridge university press.
- Grandjean, E. (2009). Ergonomics of the Home Taylor and Francis Ltd. New York.
- Grandjean, E. and Kroemer, K.H.E. (1999). Fitting the Task to the Human a Text Book of Occupational Ergonomics. Taylor and Francis, New York.
- Steidle, Roze and Bratton. (2016). Work in the Home. John Wiley and Sons Inc. New York.
- Varghese, M.N., Ogale, N.N. and Srinivasan, K. (1992). Home Management. Wiley Eastern, New Delhi.

Entrepreneurship Development and Business Management 3(2+1)

Suggested Readings:

- Singh, P. (2019). Fundamentals of entrepreneurship development. anshika publishing house.
- Vasant Desai. (2011). Entrepreneurial Development Potential beyond Boundaries; Himalaya Publishing House

Event Management 3(0+3)

Suggested Readings and Visits:

- Chaudhari, B. (2017). Event Management. nirali prakashan.
- Aditya, Suvarna. (2003). Event Management Development Institute. I.E.S. Management College. 4th Floor, 791, S.K.Marg, Opp. Lilavati Hospital, Bandra (W), Mumbai - 400 050.
- Kit, Potions, H.P. Bhuson. (1998). Festival and Special Event Management. IBM Cooperation, 60 Renfrew Drive, Suite 105, Markham, Ontario, Canada L3R0E1.

- National Institute of Event Management. Ground Floor, Nandavan Building, Corner of Vallabhbai Road and Ansari Road, Vile Parle (W), Mumbai.
- Sulekha, Narayna. (2001). International Institute of Event Management. SNDDT Women's University, Juhu Campus, Juhu Tara Road, Santacruz (W), Mumbai - 400 049

Computer Aided Interior Designing 4(0+4)

Suggested Readings:

- Grimely, c. & love, m. (2018) Interior design. Rockport publisher.
- Aptech, Ltd. (2002). Auto CAD – A Beginners Companion. Tata Mc Graw-Hill Series, New Delhi.
- Frey, D. (2002). Auto CAD-2000. BPB Publications, Conaught Place, New Delhi.
- Srivastava, P. and Pushker, R. (2003). Multimedia an Education Tool. Advanced Publishing Concept, New Delhi.

IV. Department of Food Science and Nutrition

Principles of Human Nutrition 3(3+0)

Suggested Readings:

- Ashley Martin (2016) Nutrition & Dietetics. Syrawood publishing house.
- Agarwal, A and Udipi, S. (2014). Text Book of Human Nutrition. Jaypee Medical Publication, Delhi.
- Stipanuk MH and Caudill MA. 2013. Biochemical, Physiological and Molecular Aspects of Human Nutrition .3rd Edition, Elsevier Pub.
- Sehgal, S. and Raghuvanshi, R.S. (2007). Text Book of Community Nutrition. ICAR Publication.

Food Science and Processing 3(2+1)

Suggested Readings:

- A laboratory manual of Food Analysis. Shalini Sehgal, Dream Tech Press. (2020)
- Food Safety and standards Act 2006 by Bare Act 2020 Commercial Law Publisher (India) pvt. Limited.
- Food Processing & Preservation by Sivasankar. Prentice Hall pvt. Limited .(2002)
- Sehgal, S., Grewal, R.B., Kawatra, A. and Kaur, Y. (1997). Practical Aspects of Food Preservation. Directorate of Publications. Haryana Agricultural University, Hisar.
- Khadder V., (1999), Text book of Food, Storage and Preservation. Kalyani Publishers, New Dehi.
- Kalia, M. and Sood, S. (2010). Food Preservation and Processing. Revised Edition, Kalyani Publishers, New Delhi.

Normal and Therapeutic Nutrition 3(2+1)

Suggested Readings:

- Krause and Mahan's Food and the Nutrition care process by Janice L Raymond & Kelly Morrow (2020) Saunders Publisher.
- Judith (University of Minnesota) 2019 Brown Nutrition Through the Life Cycle Brooks/Cole Publisher
- Raghuvanshi, R.S. and Mittal, M. (2014). Food Nutrition and Diet Therapy. Westvills Publication Delhi.
- Agarwal, A and Udipi, S. (2014). Text Book of Human Nutrition. Jaypee Medical Publication Delhi.

Clinical Nutrition and Dietetics 3(2+1)

Suggested Readings:

- Clinical dietetics Manual by Indian Dietetics Association. Elite Publisher (2018).
- Diet Metrics: Handbook of food exchanges by Meenakshi Bajaj Notion Press (2019)

- Ashley Martin (2016) Nutrition & Dietetics. Syrawood publishing house.
- Raghuvanshi, R.S. and Mittal, M. (2014). Food Nutrition and Diet Therapy. Westvills Publication Delhi.

Food Analysis 3(1+2)

Suggested Readings:

- AOAC. (2000). Association of Official Analytical Chemists. Washington, DC.
- Pearson, D. (1973). Laboratory Techniques in Food Analysis. Butterworths and Co., London
- Pomeranz and Yeshajahu. (1987). Food Analysis Theory and Practice. 2nd ed. AVI Publ. Company, Westport.
- A laboratory manual of Food Analysis. Shalini Sehgal, Dream Tech Press.(2020)
- NIN. (2003). A Manual of Laboratory Techniques.

Diet and Nutrition Counseling 3(0+3)

Suggested Reading:

- Krause and Mahan's Food and the Nutrition care process by Janice L Raymond & Kelly Morrow (2020) Saunders Publisher.
- Moris, E.S. (1994). Modern Nutrition in Health and disease. Leaned Febiger, USA.
- Aronson. V. (1986). Effective Nutrition Counselling. Van Nostrand Reinhold, New York.
- Bamji, M.S. (2003). Textbook of Human Nutrition. Oxford and IBH Publishing Co. Pvt. Ltd. New Delhi.

Food Service and Hospitality Management 3(0+3)

Suggested readings:

- Sethi and Malhan. (2013) Catering Management: An Integrated Approach. Wiley Eastern.
- West, Wood and Hanger.
- Food Service in Institutions. John Willey.

Nutraceuticals and Health Foods 3(0+3)

Suggested Reading:

- Arrigo F.G. Cicero , Alessandro Colletti (2019) Handbook of Nutraceuticals for Clinical Use By Springer journal
- Brigelius-F., J. and Joost HG. (2006). Nutritional Genomics: Impact on Health and Disease. Wiley VCH.
- Cupp, J. and Tracy, T.S. (2003). Dietary Supplements: Toxicology and Clinical Pharmacology. Humana Press.
- Webb, GP. (2006). Dietary Supplements and Functional Foods. Blackwell Publ.
- Robert. E.C. (2002). Hand book of Neutraceuticals and Functional Foods, CRC, Press.
- Losso, J.N. (2007). Angi-angiogenic Functional and Medicinal Foods. CRC Press.

V. Department of Human Development and Family Studies

Fundamentals of Human Development 2(2+0)

Suggested Readings:

- Berk, E. L. (2021). Exploring life span development. 3rd ed. McGraw Hill, New York.
- Santrock, J. (2012). Life span development. 14th ed. McGraw Hill, New York.
- David, M.T., Garavan, L. and Dooley, M. 2012. Fundamentals of human resource development. SAGE Publications Ltd.

- Papalia, D.E. and Olds, S.W. (2018). Human development. 11th ed. McGraw Hill. New York.

Life-Span Development 3 (2+1)

Suggested Readings:

- Santrock, J. (2022). Life span development. 14th ed. McGraw Hill, New York.
- Papalia, D.E. and Olds, S. W. (2008). Human development. 11th ed. McGraw Hill, New York.
- Grindeir, R.E. (2016). Adolescence. John Wiley and Sons, New York.
- Laura, B.E. (2013). Exploring life span development. 3rd ed. McGraw Hill, New York
- Schaimberg, L.B. (2009). Child and adolescent development. Macmillan publishing company, New York.

Marriage and Family Dynamics 3 (2+1)

Suggested Readings:

- Kumar, R. (2019). Violence against women. Anmol publication pvt ltd., New Delhi.
- Adams B.N. (2018). The family: A sociological interpretation. 3rd ed. Rand McNally College Publishing Company, Chicago.
- Benokraitis.V.N. (2014). Marriage and families. 8th ed. Pearson publication.
- Ahuja, R. (2005). Indian social system. Rawat publication. New Delhi.
- Goode, W.J. (2014). The family. New Delhi: Prentice Hall of India Private Limited.

Educational Psychology and Early Childhood Education 3(2+1)

Suggested Readings:

- Mazur, J.E. (2020). Learning and behaviour. Prentice Hall, New Delhi.
- Mertens, M.D. (2014), Research and evaluation in education and psychology. Sage publication.
- Klausmier, H.J. (2009). Educational psychology. Harper and Row, New York.
- Papalia, D.E. and Olds, S. W. (2008). Human development. 11th ed. McGraw Hill. New York.
- Dubious, N.F. (2001). Educational psychology and instructional decisions. Dorsey press.

Family Counseling and Child Welfare 3(2+1)

Suggested Readings:

- NIPCCD. (2020). Child in India: A statistical profile. NIPCCD, New Delhi.
- Randhawa, M.S. (2013). The Rural and urban aged. National Book Organization, Unit IX, New Delhi.
- Saraswathi, S. (2006). Youth in India. ICSSR, Govt. of India, New Delhi.
- TISS (1994). Enhancing the role of family as agency for social and economic development. TISS Bombay. Vol. II, Part II.
- Marasimhan, S. (2001). Employment of women. Sage publication. New Delhi.
- Boraian, P.M (2008). Employment of rural women. Concept publishing company. New Delhi.

Developmental Challenges in Children 3(2+1)

Suggested Readings:

- Philip, M. and Duckworth, D. (2018). Children with disabilities and their families: A review of research. Berks: NFER-NELSON Publishing Co., Windsor.
- Berdine, W.H. and Blackhurst, A.E. (2015). An introduction to special education. 2nd ed. Harper Collins, Lexington.
- Loring, J. and Burn, G. (Eds.). (2007). Integration of handicapped children in society. Routledge and Kegan Paul, London.

- Hallahan, D.P. and Kauffman, J.M. (1999). Introduction to exceptional children. 5th ed. Allyn and Bacon, Boston.
- Werner, D. (1994). Disabled Village Children (Indian edition). Voluntary Health Association of India, New Delhi.

Methods and Materials for Teaching Young Children 4(0+4)

Suggested Readings:

- Blackie, Pamela. (2017). Drama. Macmillan, London. y Contractor, M. (1984). Creative drama and puppetry in education. National Book Trust of India, Delhi.
- Currell, D. (2015). The complete book of puppet. A and C. Black, London.
- Hendrick, J. (2001). Total Learning for the Whole Child. The C V Mosby, St. Louis.
- Kaul, V. (1991). Early childhood education programme. NCERT, New Delhi.
- Kaul, V. and Bhatnagar, R. (1992). Early childhood education: A trainer's handbook, NCERT, New Delhi.

Education and Counseling of Parents and Community 2(0+2)

Suggested Readings:

- Epstein, L.J. (2018). School, family and community Partnership: Preparing educators and Improving School, Westview press.
- Tett, L. (2016). Community education: Lifelong learning and social inclusion (Policy and practice in education). Dunedin Academic Press.
- Cempbell, D. (2003). Group parent education: Promoting parents learning and support. Sage publication.

Early Childhood Care, Education and Management 4(0+4)

Suggested Readings:

- Mohanty, J. and Mohanty, B. (2017). Early childhood care and education (ECCE). Deep and Deep publishing pvt ltd.
- Hildebrand, V. (2014). Management of child development centers. 8thed. McMillan publishing. New York.
- Agarwal, C.J. (2007). History and philosophy of pre-primary and nursery education. DOABA house, New Delhi.
- Singh, B. (2004). Preschool education. APH publishing corporation, New Delhi.
- Rao, K.V. and Islam-ul-Khurshid. (1997). Early childhood care and education. Ajay Verma for Common Wealth publishers, New Delhi.
- Gill, S. (1993). Child care programmes in India: Changing trends. In Saraswathi, S.S. and Kaur, B. Sage Publication. Unit II, New Delhi.
- Roopnarine, J.L. and Johnson, J.E. (1993): Approaches to early childhood education. Macmillan Publishing Co., New York.
- Beaty, J.J. (1992). Skills for preschool teachers. Macmillan Publishing Co.

Developmental Assessment of Young Children 3(0+3)

Suggested Readings:

- Minds, L. (2021). Assessing young children. 5thed. Pearson publication.
- Losardo, A. (2018). Alternative approaches to assessing young children. 2nded. Brooker publishing.
- Anastasi, A. (2017). Psychological testing. 7thed. Pearson publishers

Name of Degree Programme: B.Tech Agricultural Engineering

I Department of Renewable Energy Engineering

Courses

Fundamental of Renewable Energy 3(2+1)

Suggested Readings:

- “Fundamentals of Renewable Energy” by N.S. Rathore & N.L. Panwar (2021)
- “Fundamentals of Renewable Energy” By Shaji James P & Dipak Suresh Khatawkar (2023)

Renewable Power Sources 3(2+1)

Suggested Readings:

- “Renewable Energy and Green Technology” by Ritu Dogra, Manpreet Singh, Y.M. Singla, Dhiraj Kumar, Ravi Gupta (2023)
- “Renewable Energy Resources” By John Twidell (2021)

Bio-energy System; Design and Application 3(2+1)

Suggested Readings:

- “Handbook on Biofuel, Ethanol and Bioenergy Based Products” by P. K. Chattopadhyay (2022)
- “Biomass Production and Efficient Utilization For Energy Generation” by N.S. Rathore & N.L. Panwar (2020)

Human Engineering and Safety 3(2+1)

Suggested Readings:

- “Human Factors in Engineering Manufacturing Systems, Automation, and Interactions” by Beata Mrugalska, Tareq Ahram, & Waldemar Karwowski (2023)
- “Introduction To Human Factors And Ergonomics” by Bridger (2017)

II Department of Soil and Water Conservation Engineering

Soil and water Conservation Engineering 3(2+1)

Suggested Readings:

- Soil and water Conservation Engineering 2020 R. Suresh
- Principles Of Agricultural Engineering (Volume II) 2022 A.M. Michael T.P. Ojha

Watershed Hydrology 2(1+1)

Suggested Readings:

- Engineering hydrology 2020 K. Subramanya
- Watershed hydrology 2017 R. Suresh

Watershed Planning And Management 2(1+1)

Suggested Readings:

- Watershed: Planning and Management 3rd Edition 2016 Raj Vir Singh
- Watershed Planning And Management 2020 R. Suresh

Water Harvesting and Soil Conservation Structures 3(2+1)

Suggested Readings:

- Handbook of Water harvesting and conservation : basic concept and fundamentals 2021 Fayez Abdulla, Cealeen Abdulla, Saeid Eslamian
- Conservation of The Soil 2011 A.F Gufstson

Soil & Water Conservation Structures 3(2+1)

Suggested Readings:

- Soil & Water Conservation Structures Design 2023 Rajendra Singh
- Field manual of Soil & Water Conservation Structures 2017 V.V. Dhruva Narayana

Floods and control Measures 3(2+1)

Suggested Readings:

- Flood Control and Drainage Engineering 3rd edition 2017 S N Ghosh
- Hand book of flood Management Vol. 1 2019 Arun Kumar

III Department of Processing and Food Engineering

Courses

Engineering Properties of Agricultural Produce 2(1+1)

Suggested Readings:

- Chandra, S., Samsher and Goyal, S. K. (2020) Engineering Properties of Agricultural Produce. New India Publishing Agency.
- Rao, A.M., Rizvi, S.H. and Datta A.K. (2014) Engineering Properties of Foods. Publisher: CRC Press

Agricultural Structures and Environmental Control 3(2+1)

Suggested Readings:

- Pandey, P.H. (2019) Principles and Practices of Agricultural Structures and Environmental Control, Kalyani Publishers, Ludhiana,
- Ojha, T.P. and Michael, A.M. (2021) Principles of Agricultural Engineering, Vol. I, Jain Brothers, Karol Bag, New Delhi.

Post-Harvest Engineering of Cereals, Pulses and Oil Seeds 3(2+1)

Suggested Readings:

- Chakraverty, A. and Sing R. P. (2016) Post-Harvest Technology and Food Process Engineering. CRC Press Publishing.
- Chakraverty, A. (2019) Post-Harvest Technology of Cereals, Pulses and Oil Seeds. Oxford & IBH Publishing co. Ltd., New Delhi

Post-Harvest Engineering of Horticultural Crops 2(1+1)

Suggested Readings:

- Mayani, J.M., Desai, C.S., Vagadia, P.S. (2021) Post-Harvest Management of Horticultural Crops. Narendra Publishing House
- Joshi V.K. (2021) Postharvest Management of Fruits and Vegetables. New India Publishing Agency- Nipa

Dairy and Food Engineering 3(2+1)

Suggested Readings:

- Kutz, M (2019) Handbook of Farm, Dairy and Food Machinery Engineering. Academic Press;

3rd edition

- Frrall, A. W. (2018) Dairy and Food Product for Engineering. Medtech; Second edition; scientific international

IV Department of Farm Machinery and Power Engineering

Courses

Farm Machinery and Equipment-I 3(2+1)

Suggested Readings:

- Farm Machinery 2017 T.P Singh
- Farm Machinery and Equipment-I (Agricultural Engineering) 2020 Dr. Ritu Dogra, Dr. K. K. Singh

Farm Power 3(2+1)

Suggested Readings:

- Farm Power And Machinery Management 2021 Sharma and Mukesh
- Elements of Agricultural Engineering 2020 Jagdishwar sahay

Farm Machinery and Equipment-II 3(2+1)

Suggested Readings:

- Farm Machinery And Equipment II 2020 Dr. Anoop Dixit
- Farm Machinery and Equipment II 2020 Dr. Anoop dixit and Dr. Surendra Singh

Field Operation and Maintainence of Tractors and Farm machinery-II 2(1+1)

Suggested Readings:

- Farm Tractor Systems: Maintenance and Operations: Maintenance & Operation: 2 (Farm Power & Mechanization) 2023 Dr. Baldev Dogra
- Farm Tractor Systems: Maintenance and Operations: Maintenance & Operation:(Farm Power Mechanization 2023 By R S, Bello

Tractor System & Controls 3(2+1)

Suggested Readings:

- Tractor Systems and Controls2022 Prashant Shahare
- Fundamentals of Tractor Design 2019 Karl Th. Renius

Tractor and Automotive Engines 3(2+1)

Suggested Readings:

- Tractor Design And Testing 2020 Dr. Manjit Singh, Dr. L. N. Shukla
- Text Book Of Tractor Engine And Systems 2019 Manoj Kumar Ghosal

Tractor and Farm Machinery Operation and Maintenance 2(0+2)

Suggested Readings:

- Farm Tractor Systems: Maintenance and Operations: Maintenance & Operation: 2 (Farm Power & Mechanization) 2023 Dr. Baldev Dogra
- Farm Tractor Systems: Maintenance and Operations: Maintenance & Operation:(Farm Power Mechanization) 2018 By R S, Bello

V Department of Irrigation and Drainage Engineering Courses

Irrigation Engineering 4(3+1)

Suggested Readings:

- “Elementary Irrigation and Water resource Engineering” By SK Garg and Rajeshwari Garg (2021)
- Irrigation Engineering, 1st Edition By N.N. Basak (2017)

Sprinkler and Micro Irrigation System 2(1+1)

Suggested Readings:

- Water Resource Utilization and Micro-Irrigation (Sprinkler & Drip System) by Jena P.K. Mandal R.C. (2022)
- Principles of Sprinkler Irrigation By MS Mane (2022)

Drainage Engineering 2(1+1)

Suggested Readings:

- Land Drainage and Irrigation By Salvatore Ciriaco (2017)
- Text-book of Land Drainage By Joseph Alexander Jeffery (2022)

Groundwater Wells and Pumps 3(2+1)

Suggested Readings:

- An Introduction to Groundwater Well Pumps By J Paul Guyer (2020)
- Groundwater Engineering By Rajandrea Sethi , Antonio Di Molfetta (2019)

Name of Degree Programme: B.Tech Computer Science Engineering

Courses

Microprocessor TCP-221 4(3+1)

Suggested Readings:

- P Raja.(2018) Introduction to Microprocessors. Publisher: VISIONIAS
- Rachhpal Singh, Ikvinderpal Singh(2020) Introduction to Microprocessors 8085 and 8086. Publisher: Khanna Book Publishing Company.

Computational & Numerical Analysis TCP-223 2(2+0)

Suggested Readings:

- Reena Garg (2018) Numerical Techniques—Computing with C .Publisher : CBS PUBLISHERS AND DISTRIBUTORS PVT LTD .
- Sudhil Shukla and shikha Tiwari (2020) Numerical Technique: A Textbook Of Numerical Technique. Publisher : LAP LAMBERT Academic Publishing .

Theory of Computing TCP-224 3(3+0)

Suggested Readings:

- Dr. Varsha H. Patil, Dr. Vaishali S. Pawar, Dr. Swati A. Bhavsar ,Dr. Aboli H. Patil(2020). Theory of Computation Simplified: Simulate Real-world Computing Machines and Problems with Strong Principles of Computation Publisher : BPB Publications
- Emre Sermutlu (2020) Automata, Formal Languages, and Turing Machines Publishing Agency- Nipa Publisher :ASIN

Computer organization TCP-225 3(2+1)

Suggested Readings:

- David A. Patterson (Author), John L. Hennessy (2020) Computer Organization and Design MIPS Edition: The Hardware/Software Interface. Publisher: Morgan Kaufmann
- William Stallings (2021), Computer Organization and Architecture, Global Edition. Publisher: Pearson

Electronic devices & circuits 4(3+1)

Suggested Readings:

- Theodore F. Bogart, Jeffrey S. Beasley, Guillermo Rico (2019), Electronic Devices and Circuits (6th Edition). Publisher: Pearson
- Dale R. Patrick, Stephen W. Fardo (2023), Electronic Devices and Circuit Fundamentals 1st Edition, Kindle Edition. Publisher: River Publishers

System Programming TCP-311 4(3+1)

Suggested Readings:

- Jack-Benny Persson (2021), Linux System Programming Techniques: Become a proficient Linux system programmer using expert recipes and techniques. Publisher: Pearson
- Jin-Jwei Chen (2020), (System Programming Vol II.

Programming Languages TCP-312 3(2+1)

Suggested Readings:

- Dr. M. A. Ansari, Dr. Araddhana A. Deshmukh (2023) Principles of Programming Languages. Publisher : TechKnowledge Publications
- SIA(2021), Principles of Programming Languages, Publisher : SIA Publishers & Distributors

Fundamental of Computer Communication system TCP-313 4(3+1)

Suggested Readings:

- Elmasri Ramez, Navathe Shamkant (2017), Fundamentals of Database System, Publisher: Pearson

Name of Degree Programme: B.Tech Mechanical Engineering Courses

Thermodynamics & Heat Engines TME-111 4(3+1)

Suggested Readings:

- Engineering Thermodynamics 2017 Tata McGraw Hill PK Nag
- Basic and Applied Thermodynamics 2020 Tata McGraw Hill PK Nag

Internal Combustion Engines TME-121 4(3+1)

Suggested Readings:

- Internal Combustion Engines 2017 Dhanpat Rai Mathur & Sharma
- Internal Combustion Engines 2016 Laxmi Publication

Material Science TPE-211 3(2+1)

Suggested Readings:

- Material Science & Engineering 2017 Wiley India R. Balasubramaniam
- Materials Science and Engineering 2019 PHI Raghavan, V

Fluid Mechanics TCE-211 3(2+1)

Suggested Readings:

- Fluid Mechanics 2020 Khanna Book Publishing Sadhu Singh
- Introduction to Fluid Mechanics and Fluid Machines 2022 TMH Som & Biswas

Manufacturing Process TME-221 4(3+1)

Suggested Readings:

- Basic Manufacturing Process 2018 Viva Books Mehta & Gaira
- Manufacturing Technology 2022 TMH PN Rao

Machine Drawing TME-223 2(0+2)

Suggested Readings:

- Machine Drawing 2021 Katsons PS Gill
- Machine Drawing 2019 Khanna Publishing House O.P Jahkar & Amit Mathu

Measurement & Control TME-224 4(3+1)

Suggested Readings:

- Engineering Metrology and Measurements 2015 OUP India Raghavendra, Krishnamurthy
- Measurement and Control Basics 2021 ISA Thomas A. Hughes

Strength of Materials TME-311 4(3+1)

Suggested Readings:

- Strength of Materials 2019 Khanna Publishing House D.S. Bedi
- Strength of Materials 2020 Oxford University Press R Subramanian

Heat and Mass Transfer TME-312 4(3+1)

Suggested Readings:

- Fundamental of Heat and Mass Transfer 2018 Pearson M.Thirumaleshwar
- Computational Heat Transfer and Fluid Flow 2017 Narosa Murlidhar & Sunder Rajan

Fluid Machinery & System-I TME-313 4(3+1)

Suggested Readings:

- Fluid Machinery 2020 Khanna Publishing House Sadhu Singh
- Fluid Mechanics and Machinery 2022 Oxford University R Berndtsson & P.N. Chandramouli

Ref. & Air Conditioning TME-314 4(3+1)

Suggested Readings:

- Refrigeration and Air Conditioning 2017 TMH C.P. Arora
- A Course in Refrigeration & Air Conditioning 2015 Dhanpat Rai Domkundwar

Theory of Machines TME-315 4(3+1)**Suggested Readings:**

- Theory of Machines 2018 Tata McGraw Hill SS Rattan
- Kinematics & Theory of Machines 2022 Pearson Sadhu Singh

Fluid Machinery & Systems-II TME-322 4(3+1)**Suggested Readings:**

- Fluid Machinery 2020 Khanna Publishing House Sadhu Singh
- Fluid Mechanics and Machinery 2022 Oxford University R Berndtsson & P.N. Chandramouli

Industrial Economics TPE-321 3(3+0)**Suggested Readings:**

- Industrial Economics 2017 New Age International Publishers R.R. Barthwal
- Sociology & Economics for Engineers 2022 Khanna Publishing House Premvir Kapoor

Production Engineering TPE-322 4(3+1)**Suggested Readings:**

- Production Engg 2021 S. Chand Dr. P. C. Sharma
- Manufacturing Technology 2019 TMH PN RAO

Machine Design-I TME-323 4(3+1)**Suggested Readings:**

- Introduction to Machine Design, McGraw Hill V.B. Bhandhari, 2020
- A Textbook of Machine Design S.Chand RS Khurmi, 2016

Work Study TPE-323 3(3+0)**Suggested Readings:**

- Work Study & Ergonomics S K Kataria and Sons Dr.S. K. Sharma 2020
- WORK STUDY (Motion and Time Study) Dhanpat Rai O. P. KHANNA 2021

Power Plant Engineering & Energy Conversion TME-411 4(3+1)**Suggested Readings:**

- Power Plant Engineering TMH P.K. Nag 2019
- Power Plant Engineering Khanna Publications S.C. Sharma, 2020

Industrial organization & Management TPE-411 3(3+0)**Suggested Readings:**

- Engineering Management: Industrial Engineering & Management Khanna SC Sharma 2018
- Industrial Engineering and Production Management S. Chand Publishing Martand T Telsang SK Sharma 2016

Machine Design II TME-412 4(3+1)

Suggested Readings:

- Introduction to Machine Design, McGraw Hill V.B. Bhandhari, 2019
- A Textbook of Machine Design, S.Chand RS Khurmi 2016

Computer Aided Design TME-413 3(1+2)

Suggested Readings:

- Computer Aided Design Lab Laxmi Publications Pvt Limited M. N. Shesha Prakash, Dr. G. S. Suresh 2020
- Computer-aided Mechanical Design and Analysis McGraw-Hill V. Ramamurti 2016

Automobile Engineering TME-414 4(3+1)

Suggested Readings:

- Automotive Engineering, Standard Publishers Kirpal Singh 2019
- Automobile Mechanics, Khanna book Publishing A.K. Babu & S.C. Sharma, T.R. Banga, 2022

Nuclear Engineering TME-412 4(3+1)

Suggested Readings:

- Nuclear Reactor Engineering S.Chand Vaidyanathan, 2018
- Nuclear Reactors, New Age Publications, New Delhi R.K. Singhal, 2021

Solar thermal Processes TME-422 4(3+1)

Suggested Readings:

- Principles of Solar Engineering Taylor & Francis D. Yogi Goswami, Jan F. Kreider· 2018
- Modeling and Optimization of Solar Thermal Systems IGI Global Jagadish, Agnimitra Biswas 2015

Design of Rotodynamic Pumps TME-423 4(3+1)

Suggested Readings:

- Rotodynamic Pumps (Centrifugal and Axial) New Age International (P) Limited K. M. Srinivasan 2022
- Rotodynamic and Positive Displacement Types : Theory, Design and Applications New Age International G. K. Sahu 2016

Name of Degree Programme: M.Sc. Community Science

I. M.Sc. (Community Science) in Food and Nutrition

Macro and Micro Nutrients in Human Nutrition 3(3+0)

Suggested Reading:

- Martin Kohlmeier Nutrient Metabolism: Structures, Functions, and Genes 2015 Academic Press Inc
- Berdanier CD and Zemleni J. 2009. Advanced Nutrition: Macronutrients, Micronutrients and Metabolism. CRC Press, New York.
- Eastwood MA. 1997. Principles of Human Nutrition. London; Chapman & Hall.
- FAO. 2004. Human Energy Requirements - Report of a Joint FAO/WHO/UNU Expert Consultation. Technical Report Series 1. Food and Agriculture Organization, Geneva.

Public Health and Nutrition 3(2+1)

Suggested Reading:

- Bamji MS, Kamala K and Brhman GNV. 2017. Textbook of Human Nutrition. 4th Edition, Oxford & IBH.
- Endres JB. 1990. Community Nutrition Challenges and Opportunities. Pearson Education Inc. London.
- Frank GC. 2008. Nutrition: Applying Epidemiology to Contemporary Practice. 2nd Edition, Jonts and Bartlett Publishers, Sadbury, MA.
- Gopaldas T and Seshadari S. 1987. Nutrition Monitoring and Assessment. Oxford University Press.
- IGNOU Study Material, Child Health and Nutrition 2021

Techniques in Food Analysis 3(2+1)

Suggested Reading:

- Dennis D Miller. 1998. Food Chemistry: A Laboratory Manual. John Wiley and Sons Indianapolis.
- Joslyn MA. 1970. Methods in Food Analysis: Physical, Chemical and Instrumental Methods of Analysis. Academic Press.
- Kalia M. 2002. Food Analysis and Quality Control. Kalyani Publishers, New Delhi.
- Neilsen SS. 2010. Food Analysis. 4th Ed., ISBN 978-1-4419-1478-1 Springer Science+ Business Media, LLC, USA.
- Neilsen SS. 2002. Introduction to Chemical Analysis of Foods. 1st Ed., J S Offset Printers, Delhi.
- Raghuramulu N, Mahavan and Kalyanasundaram SK. 2003. A Manual of Laboratory Techniques. 2nd Edition, NIN Press, Hyderabad.

Diet Therapy 3(2+1)

Suggested Reading:

- Cataldo CB, De Brayae LK and Whitney EN. 2012. Nutrition and Diet Therapy. 6th Edn., Wadsworth/Thomson Learning Inc.
- Kathleen ML and JL Raymond. 2016. Krause's Food and the Nutrition Care Process. 14th Edition, Saunders, Philadelphia.
- Mazur EE and Litch NA. 2018. Lutz's Nutrition and Diet Therapy. 7th Edition, F.A. Davis Company, Philadelphia.

- McIntosh SN. 2016. Williams' Basic Nutrition and Diet Therapy. 15th Edition, Mosby, Maryland.
- Schlenker E and Gilbert JA. 2014. Williams' Essentials of Nutrition and Diet Therapy. 11th edition, e- book.
- Srilakshmi B. 2019. Dietetics. 8th Edition, New Age International Publisher.
- <https://www.nutritionintl.org>
- <https://www.hsph.harvard.edu/nutritionsource>
- <https://www.nutrition.org.uk>
- <http://www.nutritioncare.or>

II. M.Sc. in Human Development and Family Studies

Theories of Human Development 3 (3+0)

Suggested Reading:

- Baldwin AL. 1980. Theories of Child Development. John Wiley & Sons, New Jersey.
- Craig. 1985. Theories of Human Development. 2nd Ed., John Wiley & Sons, New Jersey.
- Grain WC. 1980. Theories of Development: Concepts and Application. Englewood Cliffs, Bergon, New Jersey.
- Hall CS. 1998. Theories of Personality. 4th Ed., John Wiley, New Jersey.
- Miller PH. 2016. Theories of Developmental Psychology. Worth Publishers, New York.
- Newman B and Newman R. 2007. Theories of Human Development. Rutledge, New Jersey.
- Sailkind NJ. 2004. An Introduction to Theories of Human Development. Sage Publications, New Delhi.

Dynamics of Human Development 3 (3+0)

Suggested Reading:

- Berk EL. 2017. Development Through the Life Span. 7th Ed., Pearson Education, Atlantic.
- Bronfenbrenner V. 1979. The Ecology of Human Development. Cambridge, Harvard.
- Feldman RS. 2017. Development Across the Life Span. Pearson, London, England.
- Garbarino J. 1982. Children and Families in the Social Environment. Aldine, New York.
- Kail R and Cavaugh JC. 2016. Human Development - A Life Span View. Cengage Learning, Boston.
- Papalia DE and Olds SW. 2008. Human development. 11th Ed., McGraw Hill, New York.
- Santrock JW. 2006. Life Span Development. Mc Graw Hill, New York.

Methods and Techniques of Assessment in Human Development 3 (2+1)

Suggested Reading:

- Anastasi A. 1988. Psychological Testing. 6th Ed., McMillan Publishing Company, New York.
- Bailey DB and Worley M. 2003. Assessing Infants and Pre-schoolers with Handicaps. Merrill Publishing Company, Delhi.
- Gregory RJ. 2004. Psychological Testing - History, Principles and Applications. 4th Ed., Pearson Education, Atlantic.
- Gumbiner J. 2003. Adolescent Assessment. John Wiley & Sons, New Jersey.
- Kumar R. 2014. Research Methodology - A Step by Step Guide for Beginners, 4th Ed., Sage Publications, New Delhi.

Innovative Programmes in Early Childhood Development and Education 3 (2+1)

Suggested Reading:

- Deiner PL. 2006. Inclusive Early Childhood Education. Cengage Learning Press.
- Jaipaul I Roopnarian and James EJ. 2008. Approaches to Early Childhood Education. Pearson Education, Atlantic.
- Kaul V. 1997. Early Childhood Education Programmes. NCERT, Delhi.
- Saraswathi TS. 1988. Issues in Child Development - Curriculum and Other Training and Employment. Spmaiya.
- Shiradhonkar K and Patnam V. 2019. Understanding and Developing Creativity. New Academic Publications, New Delhi.

Gender Issues in Human Development and Relationships 3 (2+1)

Suggested Reading:

- Banddarge A. 1997. Women Population and Global Crisis - A Political and Economical Analysis. Zed books, London.
- Barnett RC, Biner L and Baruch GK. 1987. Gender Stress. The Free Press, New York.
- Chanana K. 1989. Gender and the Household Domain. Sage Publications, New Delhi.
- Kapadia S and Gala J. 2015. Gender Across Cultures: Sex and Socialization in Childhood. Sage Publications, New Delhi.
- Kumar CS. 2017. Gender Socialization and The Making of Gender in The Indian Context. Sage Publications. New Delhi.
- Menon L. 1997. Gender Issues and Social Dynamics. Kanishka Publishers and Distributors, New Delhi.
- Sudha DK. 2000. Gender Roles. A.P.H. Publishing Corporation, New Delhi.

III. M.Sc. in Resource Management and Consumer Science

Resource Management: Principles and Practice 3(3+0)

Suggested Reading:

- Henry John. 2019. Functions of Management Process: Planning, Organizing, Leading, Controlling <https://iedunote.com/function-of-management-process>.
- Koontz H and Wechrich H. 2008. Management. Tata McGraw Hill Inc., N.Y.
- Draft Richard L. 2015. Management. Thomson South-Western.
- Robbins SP and Decenzo DA. 2010. Fundamentals of Management. Pearson Education Asia, New Delhi.
- SatyaRaju R and Parthasarathi A. 2009. Management- Text & Cases. PHI, New Delhi.
- Stephen PR and Mary AC. 2015. Management. 13th Edition. Prentice Hall of India. New Delhi.
- Subba Rao P. 2017. Management and Organizational Behaviour (Text and Cases). Himalaya Publishing House, New Delhi.

Human Factors and Ergonomics 3 (2+1)

Suggested Reading:

- Bridger, R.S. (2017) Introduction to human factors and ergonomics. Taylor & francis.
- Benchmark Research and Safety Inc. 2008. A Brief History of Human Factors and Ergonomics <http://www.benchmarkrs.com/main/human-factors/what.aspx> .
- Dalela S and Saurabh. 1999. Text book of Work Study and Ergonomics. Standard Publishers and Distributors, Delhi.
- Galer IAR. 1982. Applied Ergonomics Handbook. Butterworth-Heinemann.

- Grandjean E. 1978. Ergonomics of the Home. Taylor & Francis, London.
- Grandjean E. 1980. Fitting the Task to the Man. Taylor & Francis, London.
- Jain AK. 2017. Human Anatomy and Physiology. Arya Publications, Udaipur.

Interior Space Planning 3(1+2)

Suggested Reading:

- Dechiera et. al (2017) standards for interior design and space planning. McGraw HILL education
- Parikh A, Robertson D, Lane T, Hilliard E and Paine M. 2000. The Ultimate Home Design Source Book. Conran Octopus.
- Pears A, Lawrence M, Hymers P and Howell J. 2000. Working with the Professionals. Marshall Publ.
- Philip S. 2017. Concept Design and Space Planning <https://www.designblendz.com/solutions/concept-design-space-planning>
- Seetharaman P and Pannu P. 2005. Interior Design and Decoration. CBS.
- Zimmerman N. 2003. Home Workspace Idea Book. The Taunton Press.

Consumer Economics 3(2+1)

Suggested Reading:

- Ahuja HL. 2012. Modern Micro Economics: Theory & applications. Chand Company Ltd., New Delhi.
- Chadha R. 1995. The Emerging Concepts and Strategies. New Age International & Wiley Eastern.
- Deepashree. 2016. Introductory Macroeconomics. Saraswati House Pvt Ltd.
- Dewett KK and Varma JD. 2017. Elementary Economic Theory. S. Chand & Company Ltd., New Delhi.
- Dhingra IC and Garg VK. 2002. Basic Economics & Business Environment. Sultan Chand & Sons, New Delhi.
- Dhingra IC and Garg VK. 2004. Economics Fundamentals. Sultan Chand & Sons, New Delhi.

Name of Degree Programme: Ph.D. Community Science

III Ph.D. in Human Development and Family Studies

Advanced Human Development 3(3+0)

Suggested Reading:

- Ausubel D and Sullivan EV. 1980. Theory and Problems of Child Development. 3rd Ed., Grune & Stratton, New York.
- Berk LE. 2013. Child Development. Pearson, New Delhi.
- Damon W and Lerner R. 1998 & 2006. Handbooks of Child Psychology. Vol. I to Vol. IV. John Wiley & Sons.
- Lerner RM and Newell KM. 2014. Handbook of Developmental Systems Theory and Methodology. Pp. 19-65. The Guilford Press, New York.
- Rogoff B. 2005. The Cultural Nature of Human Development. Oxford University Press, New York.
- Sharma N and Chaudhary N. 2009. Human development: Context and Processes. In G. Misra (Ed.), Psychology in India (Vol.I) Basic Psychological Processes and Human Development. Pp. 69-109. Pearson, New Delhi.
- https://en.wikipedia.org/wiki/Capability_approach

- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5830131>

Ecology and Human Development 3(3+0)

Suggested Reading:

- Lerner RM. 2015. Handbook of Child Psychology (Ed.), Vol. 1 to 7. John Wiley & Sons, Harvard.
- Smith EA and Winterhalter B. 1992. Evolutionary Ecology and Human Behavior. Aldine, New York.
- https://en.wikipedia.org/wiki/Human_behavioral_ecology.
- Hames R. 2001. Human Behavioral Ecology. International Encyclopedia of the Social and Behavioral Sciences. Elsevier Science Ltd.

Programme Development for Vulnerable Families 3 (2+1)

Suggested Reading:

- Chandra P. 1995. Project Planning, Analysis, Selection, Implementation and Review. Tata McGraw, New Delhi.
- Chaudhary DP. 1992. Women Welfare and Development. NIPPCD, New Delhi.
- Dunst C, Trivette C and Angela D. 1998. Enabling and Empowering Families: Principles and guidelines for families. Brookline Books, Inc. Newton.
- Golden O, Lopres P and Mills G. 2012. Economic Security for Extremely Vulnerable Families: Themes and Options for Work-force Development and Asset Strategies. Urban Institute, University of New Hampshire, New Hampshire.

Strategic Developmental Intervention 3 (2+1)

Suggested Reading:

- Berk LE. 1996. Child Development. Prentice Hall.
- Chandra P. 1995. Project Planning, Analysis, Selection, Implementation and Review. Tata McGraw, New Delhi.
- Choudhary DP. 1992. Women Welfare and Development. NIPCCD, New Delhi.
- Guralnick MJ. 2017. Early intervention for young children with developmental delays. In H Sukkar CJ, Dunst & J Kirkby (Eds.), Early Childhood Intervention (pp. 17-35). Oxon, UK: Routledge.
- Hetherington EM and Parke RD. 1993. Child Psychology: A Contemporary View Point. Mc Graw Hill.
- Saraswathi TS and Kaur P. 1999. Human development and Family Studies in India. Sage Publications, New Delhi.
- Sukkar H, Dunst CJ and Kirkby. 1999. Early Childhood Intervention. Routledge, Oxon.

Family Studies 3(3+0)

Suggested Reading:

- Le Poire and Beth A. 2005. Family Communication: Nurturing and Control in a Changing World. Sage Publications, New Delhi.
- Nichols P and Schwartz R. 2006. Family Therapy - Concepts and Methods (7th Ed.). Pearson Education, Inc. USA.
- Roger L. 2004. Family Therapy - A Constructive Framework. Sage Publications, New Delhi.
- Trask B. 2010. Globalization and Families: Accelerated Systemic Social Change.
- White JM and Klein DM. 2007. Family Theories. Sage Publications, New Delhi.
- <http://www.Springer.com>

V. Ph.D. (Community Science) in Food and Nutrition

Macronutrient Metabolism 3(3+0)

Suggested Reading:

- Akoh CC and Min DB. 2002. Food Lipids - Chemistry, Nutrition and Biotechnology. Marcel Dekker Inc. New York.
- Dickens F. 1981. Carbohydrate Metabolism and its Disorders Vol. III. Academic Press, Cambridge.
- FAO WHO/UNU (2004) Human Energy Requirements: Report of a Joint FAO/WHO/UNU Expert Consultation. Geneva: World Health Organization. FAO Food and Nutrition Technical Report Series 1.

Micronutrient Metabolism 2(2+0)

Suggested Reading:

- FAO/WHO. 2004. Vitamins and Minerals in Human Nutrition. A report of joint FAO/WHO Expert Consultation. 2nd Edition, World Health Organization and Food and Agriculture Organization of the United Nations.
- Garland CF, Garland FC, Gorham ED, Lipkin M, Newmark H, Mohr SB and Holick MF. 2019. The Role of Vitamin D in Cancer Prevention. American Journal of Public Health. 96(2), 252–261.
- Groff JL and Gropper S. 2012. Advanced Nutrition and Human Metabolism. 7th Edition, Yolanda Cossio, New York.
- Guardia M and Garrigues S. 2015. Hand Book of Mineral Elements in Foods. John Wiley & Sons Inc. Hoboken, New Jersey.
- Rizvi S, Raza, ST, Ahmed F, Ahmad A, Abbas S and Mahdi F. 2014. The Role of Vitamin E in Human Health and Some Diseases. Sultan Qaboos University Medical Journal, 14(2), 157–165.

Nutrition and Agricultural Interface 3 (3+0)

Suggested Reading:

- FAO. 2017. The State of Food and Agriculture - Leveraging Food Systems for Inclusive Rural Transformation. Food and Agriculture Organization, Rome.
- FAO. 2017. The State of Food Security and Nutrition in the World. Food and Agriculture Organization, Rome.
- GOI. 2016. Agricultural Statistics at a Glance. Ministry of Agriculture & Farmers Welfare Department of Agriculture, Cooperation and Farmers Welfare Directorate of Economics and Statistics, Government of India.
- GOI. 2017. Agriculture - Statistical Year Book India. Ministry of Statistics and Programme Implementation, Government of India.
- GOI. 2011. Census of India. Government of India.
- GOI. 2018. A Reference Manual by Publication Division. Ministry of Information about Broadcasting, Govt. of India.
- <https://www.who.int>.

Global Nutritional Problems 2(2+0)

Suggested Reading:

- Babu SC, Gajanan SN and Hallam JA. 2017. Nutrition Economics-Principles and Policy Applications. Science Direct. Elsevier.

- FAO. 2017. Regional Overview of Food Security and Nutrition in Asia and the Pacific. Food and Agriculture Organization, Rome.
- Park JE and Park K. 2007. Text Book of Preventive and Social Medicine. Barnasi Das Bhanot Publishers, Jabalpur.
- Semba RD and Bloem MW. 2008. Nutrition and Health in Developing Countries. 2nd Edition. Humana Press Inc. New York.
- Temple NJ and Steyn N. 2016. Community Nutrition for Developing Countries. AU Press, Athabasca University, Canada and UNISA Press, University of South Africa.
- <https://www.who.int>
- <http://www.fao.org/home/en>
- <https://www.harvestplus.org>
-

III. Ph.D. in Resource Management and Consumer Science

Trends in Resource Management 3(3+0)

Suggested Reading:

- Elezabeth BG. 2013. Resource Management for Individuals and Families. Thomson Learning Inc.
- Hellregel. 2002. Management. Thomason Learning, Bombay.
- Koontz H and Wechrich H. 2008. Management. Tata McGraw Hill Inc. N.Y.
- Richar LD. 2015. Management. Thomson South-Western.
- Robbins SP and Decenzo DA. 2010. Fundamentals of Management. Pearson Education Asia, New Delhi.
- Satya Raj R and Parthasarathi A. 2009. Management- Text & Cases. PHI, New Delhi.
- Stephen PR and Mary AC. 2015. Management. 13th Edition, Prentice Hall of India. New Delhi.

Occupational Biomechanics 3(2+1)

Suggested Reading:

- Allan Toomingas, Svend Erik Mathiassen, Ewa WT. 2011. Occupational Physiology. 1st Edition, CRC Press, Taylor and Francis Group, London.
- Ayub MM and Mittal A. 1998. Manual Material Handling. Taylor and Francis, London.
- Chapanis A. 1996. Human Factors in Systems Engineering. John Wiley and Sons, New York\.
- Dalela S and Saurabh. 1999. Text Bbook of Work Study and Ergonomics. Standard Publishers Distributors, Delhi.
- John R Wilson and Nigel Corlett. 2005. Evaluation of Human Work. Third Edition Taylor and Francis Group, London.
- Kumar Shrawan. 2007. Biomechanics in Ergonomics. Second Edition, www.crcpress.com/product/isbn/

Globalization and Consumer Economics 3(2+1)

Suggested Reading:

- Nayar BR. 2007. India's Globalization. Vistaar Publication.
- Rajagopal. 2007. Globalization and Consumer Behavior.
- https://link.springer.com/chapter/10.1057%2F9781137281920_11
- Schiffman LG. 2004. Consumer Behaviour. Prentice Hall.
- Schiffman LG and Wisenblit JL. 2015. Consumer Behaviour. 11th Edition.
- Sharma AK. 2006. Consumer Behaviour. Global Vision Publication.
- Sherlekar SA. 2012. Marketing Management. Himalaya Publishing House, Delhi.

- Srivastava R. 2011. Marketing Skills in Globalisation. Subline Publications, Jaipur.

Space Designing and Managerial Dimensions for Special Needs Economics 3(1+2)

Suggested Reading:

- Bakker M. L.(2016) Space planning for commercial office interiors. Fairchild books Publisher.
- Bridger RS. 1994. Introduction to Ergonomics. McGraw Hill.
- Dalela S and Saurabh. 1999. Textbook of Work Study and Ergonomics. Standard Publ.
- Designing for disabled children and children with special educational needs https://www.unicef.org/devpro/files/CFSSManual_Ch03_052009.pdf
- Grandjean E. 1978. Ergonomics of the Home. Taylor & Francis.
- Ian G. 2006. Applied Ergonomics Handbook. Butterworths.
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Name of Degree Programme: M.Sc. (Honours) Agriculture

M.Sc. (Ag) Agricultural Statistics

Probability Theory

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Mathematical Methods

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Design of Experiment-I

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- Chakrabarti M.C. 1962. Mathematics of Design and Analysis of Experiments. Asia Publ.House.
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Statistical Inference

Suggested Reading :

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Applied Multivariate Methods

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Essential Statistical Methods

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Advanced Statistical Inference

Suggested Reading:

- Berger, J.O. 1985. Statistical Decision Theory and Bayesian Analysis, Springer Verlag.
- Box, G.P. and Tiao, G.C. 1992. Bayesian Inference in Statistical Analysis, Addison – Wesley
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Advanced Design of Experiments-I

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- Chakraborti M.C. 1962. Mathematics of Design and Analysis of Experiments. Asia Publ.House.
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Advanced Sampling Survey-I

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Advanced Sampling Survey-II

Suggested Reading :

- Berger J.O. 1993. Statistical Decision Theory and Bayesian Analysis. Springer.
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M.Sc. Agril. Economics

Micro Economics

Suggested Reading :

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- Richard A. Bilas, Micro Economic Theory.
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- Allen CL. A Frame Work of Price Theory.

Research Methodology

Suggested Reading:

- Baker CB. Research Methodology in Agricultural Economics
- Cohen MR and Nagel R. An Introduction to Logic and Scientific Method
- Devey J Logic. The Theory of Enquiry
- Dhondhyal SP. Social Science Research and Thesis Writing
- Ezekiel M. Correlation Analysis
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Agricultural Marketing And Prices

Suggested Reading:

- Acharya SS & Agarawal NL. 2004. Agricultural Marketing in India. Oxford and IBH Publishingcompany Pvt. Ltd. New Delhi.
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Ph.D. Agril. Economics

Advanced Micro Economic Theory

Suggested Reading:

- Henderson JM and Quandt RE. Microeconomic Theory: A Mathematical Approach Tata McGraw HillPublishing Co Ltd
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Operations Research in Agricultural - L

Suggested Reading :

- Taha HA. Operations Research: An Introduction.
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Advanced Macro Economic Theory

Suggested Reading :

- Heibroker RL. Understanding Macro Economics.
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Advanced Production Economics

Suggested Reading:

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M.Sc. (Ag) Crop Physiology

Principles of Plant Physiology-I: Cell Organelles, Water Relations and Mineral Nutrition

Suggested Reading :

- Vilalta JM and Forner NG. 2017. Water potential regulation, stomatal behaviour and hydraulic transport under drought: deconstructing the iso/anisohydric concept Plant, Cell and Environment 40, 962–976
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Principles of Plant Physiology-II: Metabolic Processes and Growth Regulation

Suggested Reading:

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- *Introduction to Plant Physiology (Wie)* by William G. Hopkins

Abiotic Stress Responses in Plants

Suggested Reading :

- *Plant Physiology* Book by Eduardo Zeiger and Lincoln Taiz.
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Ph.D. Biotechnology

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Advances in Plant Genetics Engineering

Suggested Reading :

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M.Sc. (Ag) Soil Science

Soil Chemistry

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- Stevenson FJ. 1994. Humus Chemistry. 2nd Ed. John Wiley & Sons.
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Soil Mineralogy, Genesis and Classification

Suggested Reading :

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- Oswal MC. 1994. Soil Physics. Oxford & IBH.

Soil Biology and Biochemistry

Suggested Reading :

- Paul EA and Clark FE. Soil Microbiology and Biochemistry.
- Lynch JM. Soil Biotechnology
- Willey JM, Linda M. Sherwood and Woolverton CJ. Prescott's Microbiology.
- Subba Rao NS. Advances In Agricultural Microbiology.

Ph.D. Soil Science

Advanced Soil Physics

Suggested Reading :

- Baver LD, Gardner WH and Gardner WR. 1972. Soil Physics. John Wiley & Sons.
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Advances in Soil Fertility

Suggested Readings:

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Physical Chemistry of Soil

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M.Sc. Agri-Business Management

Principles Of Management And Organizational Behaviour

Suggested Reading :

- Fred Luthans 1998. Organizational Behavior. Tata McGraw Hill.
- Harold Koontz & Keing Weighhrich. Essentials of Management. McGraw Hill.
- John W Newstrom & Keith Davis. 1997. Human Behaviour at Work. Tata McGraw.
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Agribusiness Environment And Policy

Suggested Reading :

- Bhat, a and Kachroo, J. (2021) Agribusiness Development Planning and Management. New Delhi Publishers, New Delhi, ISBN- 9788194899365
- Adhikary M. 1986. Economic Environment of Business. S. Chand & Sons.
- Aswathappa K. 1997. Essentials of Business Environment. Himalaya Publ.
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Managerial Accounting And Control

Suggested Reading :

- Horngren. 2018. Introduction to Financial Accounting. 8thEd. Pearson Edu. Khan MY & Jain
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Communication For Management And Business

Suggested Reading :

- Bovee. 2008. Business Communication Today, 7 Ed. Pearson Edu.
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- Mahesh Kadam, Ranjit Patil , Milind Bhujbal (2017). Animal Husbandry and Dairy Management: A Basic Approach to Livestock Production and Management. LAP LAMBERT Academic Publishing
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Masters in Veterinary Science & Animal Husbandry

M.V.Sc. Veterinary Anatomy

Gross Anatomy

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- S. No. Topic No. of Lectures/Practicals
- Ham AW and Cormack DH. 1979. *Histology*. J.B. Lippincott, Philadelphia, USA.
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Embryology

- Arey LB 1965. *Developmental Anatomy*. W.B. Saunders.
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Anatomical Techniques

- Durry RAB and Wallington EA. 1967. *Carleton's Histological Techniques*. Oxford University Press, London.
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- **List of Journals**
- *Acta Anatomica*
- *American Journal of Anatomy*
- *Anatomia Histologia and Embryologia*
- *Anatomical Record*
- *Anatomy and Embryology*
- *Indian Journal of Veterinary Anatomy*
- *Journal of Anatomy*
- **e-Resources**
- <http://www.interscience.wiley.com/journal/117927935/group/home/home>. (American Journal of Anatomy)
- <http://www.ovid.com/site/catalog/Journal/1057.jsp> (Journal of Anatomy)
- <http://www.interscience.wiley.com/jpages/0003-276X/>(Anatomical Record)
- <http://www.blackwellpublishing.com/submit.asp> (Anatomia Histologia and Embryologia)

M.V.Sc. in Veterinary Biochemistry

Biophysical Chemistry

- David L Nelson and Cox Michael M. 2008. *Lehninger's Principles of Biochemistry*. 5th Ed. Freeman.
- James P Allen. 2008. *Biophysical Chemistry*. 1st Ed. Wiley-Blackwell Publication.
- Peter Jomo Walla. 2014. *Modern Biophysical Chemistry: Detection and Analysis of Biomolecules*. 2nd Ed. Wiley-VCH Publication.

Biochemistry of Biomolecules

Suggested Readings:

- David L Nelson and Cox Michael M. 2017. *Lehninger's Principles of Biochemistry*. 7th Ed. Freeman.
- Voet D, Voet JG and Pratt CW. 2016. *Fundamentals of Biochemistry of Life at the Molecular Level*. 5th Ed. John Wiley and Sons.
- Berg JM, Tymoczko JL, Stryer L and Clarke ND 2015. *Biochemistry*. 8th Ed. WH Freeman and Co.
- Zubay GL. 1998. *Biochemistry*. 4th Ed. WCB London.

Enzymology

Suggested Readings:

- Bergmeyer HU. 1983. *Methods of Enzymatic Analysis*. Vol. II. Verlag Chemie, Academic Press.
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- David L Nelson and Cox Michael M. 2008. *Lehninger's Principles of Biochemistry*. 5th Ed. Freeman.
- Kaneko JJ, Harvey JH and Bruss ML. 2008. *Clinical Biochemistry of Domestic Animals*. 6th Ed. Academic Press.

Analytical Techniques and Instrumentation in Biochemistry

Suggested Readings:

- David L Nelson and Cox Michael M. 2017. *Lehninger's Principles of Biochemistry*. 7th Ed. Freeman.
- Wilson K and Walker J. (Eds.). 2010. *Principles and Techniques of Biochemistry and Molecular Biology*. 7th Ed. Cambridge Univ. Press.
- Willard *et al.* 1988. *Instrumental Methods of Analysis*. 7th Ed. Wadsworth Pub Co.
- Garrity S. 1999. *Experimental Biochemistry*. 3rd Ed. Academic Press.
- Gowenlock AH. 2002. *Varley's Practical Clinical Biochemistry*. 6th Ed. CBS.
- Holme DJ and Hazel P. 1998. *Analytical Biochemistry*. 3rd Ed. Longman.
- George W. Latimer, Jr. 2016. *Official Methods of Analysis of AOAC International*, 20th Ed.
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- Carl A. Burtis, Edward R. Ashwood and David E. Burns, 2014. *Tietz Textbook of clinical Biochemistry and Molecular Diagnostics*. 5th Edition. Elsevier

Clinical Biochemistry of Animals

Suggested Readings:

- David L Nelson and Cox Michael M. 2007. *Lehninger's Principles of Biochemistry*. 4th Ed. Freeman.
- Kaneko JJ, Harvey JH, Bruss ML. 2008. *Clinical Biochemistry of Domestic Animals*. 6th Ed. Academic Press.
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- Voet D, Voet JG and Pratt CW. 2006. *Fundamentals of Biochemistry of Life at the Molecular Level*. 2nd Ed. John Wiley and Sons.

Intermediary Metabolism and Regulation

Suggested Readings:

- Jocelyn E Krebs *et al.* 2017. *Lewin's Genes XII*. Jones and Bartlett Publishers Inc.
- Watson JD *et al.* 2017. *Molecular Biology of the Gene*. 7th Ed. Pearson Education.
- Eberhard. O. Voit. 2017. *A First Course in Systems Biology*, 2nd Edition. Garland Science Publishers.
- *Genome Editing and Engineering: From TALENs, ZFNs and CRISPRs to Molecular Surgery*, Ed.

Krishnarao Appasani, Cambridge University Press, 2018

- *Molecular Cell Biology*, 8th Ed, Lodish *et al.* WH Freeman and Co., 2016
- *Molecular Biology of the Cell*, 6th Ed. Bruce Alberts *et al*, WW Norton and Company, 2014
- *Transgenic Animal Technology: A laboratory handbook*, 3rd Edition, Ed. Carl. A. Pinkert, Academic Press, 2014.
- *Molecular Biology*, 4th Ed, Robert F. Weaver, McGraw Hill Higher Education, 2007.

Nutritional and Industrial Biochemistry

Suggested Readings:

- *Dukes' Physiology of Domestic Animals*, 13th edition/ editor, William O Reece, Wiley Blackwell.
- Guyton and Hall *Textbook of Medical Physiology*, 13th edition/ editor, John E Hall, Elsevier.
- *Applied Animal Endocrinology*, E. James Squires, CABI
- *Endocrinology: An Integrated Approach*, by SS Nussey, SA Whitehead, 1st edition, CRC Press.
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- *Clinical Biochemistry of Domestic Animals*, 6th Edition/ Editors: Jiro Kaneko John Harvey Michael Bruss, Elsevier.
- *Lipid Metabolism in Ruminant Animals*, 1st Edition/ Editors: William W Christie, Elsevier.
- *Digestive Physiology and Metabolism in Ruminants*, Editors: Ruckebusch Y, Thivend.
- *Energy Nutrition in Ruminants*, Editors: Orskov ER.
- *Zoo and Wild Animal Medicine (Current Therapy 3)* by Murray E Fowler, 5th edition.
- *Textbook of Veterinary Biochemistry*, by RS Dhanotiya, JAYPEE.

Introduction to Bioinformatics and Computational Biology

Suggested Readings:

- Sandhu, S.G. (2022) *Bioinformatics and its Applications*. Agrotech Press. ISBN- 9789383101030
- *Introduction to Bioinformatics* 2003. Attwood TK and Parry-Smith DJ, Pearson Education.
- *Essential bioinformatics* 2006. Xin Xiong. Cambridge University Press.
- *Bioinformatics: Concepts, Skills and Applications* 2004. Rastogi SC, Mendiratta N and Rastogi P. CBS.
- *Principles of Genome Analysis and Genomics* 2003. SB Primrose and RM Twyman, Blackwell
- *Molecular Analysis and Genome Discovery* 2004. Ralph Rapley and Stuart Harbron (Eds.), John Wiley and Sons.
- *Bioinformatics* 2001. Andreas D Baxevanis and BF Francis Ouellette (Eds.)
- *Wiley Interscience Proteins and Proteomics* 2003. Richard J. Simpson, Cold Spring Harbor Laboratory.

Course Title Applied Molecular Biochemistry and Systems Biology

Suggested Readings:

- *Molecular Biology of the Gene*, 7th Ed. JD Watson *et al.*, Pearson Education, 2017
- *Lewin's Genes XII*, Jocelyn E Krebs *et al.*, Jones and Bartlett Publishers Inc., 2017
- *A First Course in Systems Biology*, 2nd Edition, Eberhard. OVoit, Garland Science publishers 2017
- *Directed Enzyme Evolution: Advances and Applications*, Ed. Miguel Alcalde, Springer International Publishing, 2017
- *Genome Editing in Animals: Methods and Protocols*, Ed. Izuho Hatada, Springer Protocols, 2017
- *Genome Editing and Engineering: From TALENs, ZFNs and CRISPRs to Molecular Surgery*, Ed. Krishnarao Appasani, Cambridge University Press, 2018
- *Molecular Cell Biology*, 8th Ed, Lodish *et al.*, WH Freeman and Co., 2016
- *Nutrigenomics*, Eds. Carsten Carlberg, Stine Marie Ulven and Ferdinand Molnar, Springer Intl. Pub, 2016
- *CRISPR: Methods and Protocols*, Eds. Magnus Lundgren, Emmanuelle Charpentier, Peter C Fineran, Humana Press, 2015

- *Genome Analysis: Current Procedures and Applications*, Ed Maria S Poptava, Caister Academic Press, 2014
- *Transgenic Animal Technology: A laboratory handbook*, 3rd Edition, Ed. Carl A Pinkert, Academic Press, 2014
- *Molecular Biology of the Cell*, 6th Ed. Bruce Alberts *et al*, WW Norton and Company, 2014
- *Bovine Genomics*, Ed. James E Womack, Wiley Blackwell, 2012
- *The Genetics of the Dog*, Eds. Elaine A Ostrander and Anatoly Ruvinsky, CABI press, 2012
- *An Introduction to Systems Biology*. Ed. Sangdun Choi, Humana Press, 2010
- *Genome Mapping and Genomics in Domestic Animals*, Eds. Noelle E Cockett, Chittaranjan Kole, Springer Verlag, 2009.
- *Gene Knockout protocols*, Eds. Ralf Kuhn, Wolfgang Wurst, 2009, Springer
- *Molecular Biology*, 4th Ed, Robert F. Weaver, McGraw Hill Higher Education, 2007
- *Comparative Genomics*, Ed. Nicholas H Bergman, Humana press, 2007
- *Molecular Biology and Genomics*, Cornel Mulhardt, Academic Press, 2007
- *The Dog and Its Genome*, Eds. Elaine A. Ostrander, Urs Giger, Kerstin Lindblad-Toh, CSHL press, 2006
- *Life: An Introduction to Complex Systems Biology*, Springer, 2006
- *An Introduction to Systems Biology: Design principles of Biological circuits*, Uri Alon, 2006, Chapman and Hall/ CRC
- *Directed molecular Evolution of Proteins: or How to improve Enzymes for Biocatalysis*, Eds. Susanne Brakmann, Kai Johnsson, Wiley VCH Verlag GmbH, 2003
- *Directed Evolution Library Creation*, Eds. Frances H Arnold, George Georgiou, Humana Press, 2003.
- Selected articles from journals.

Membrane Biochemistry

- Alberts B, Johnson A, Lewis J, Raff M, Roberts HK and Walter P. *Molecular Biology of the Cell*. Garland Science, Taylor and Francis Group.
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- Lodish H, Berk A, Zipursky SA, Matsudaira P, Baltimore D and Darnel J. 1999. *Molecular Cell Biology*. WH Freeman.
- Nelson DL and Cox MM. 2000. *Lehninger Principles of Biochemistry*. 3rd Ed. Replika Press Pvt. Ltd., New Delhi for Worth Publ., New York.
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Recent Trends In Biochemical Techniques And Instrumentation

Suggested Readings:

- Burtis CA, Ashwood ER and Burns DE. 2014. *Tietz Textbook of clinical Biochemistry and Molecular Diagnostics*. 5th Edition. Elsevier
- Nelson DL and Cox MM. 2017. *Lehninger's Principles of Biochemistry*. 7th Ed. Freeman.
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- Selected articles from standard journals.

Developmental Biochemistry

Suggested Readings:

- Scott F Gilbert. 2010. *Developmental Biology*, 9th edition. Sunderland (MA): Sinauer Associates.
- Scott Freeman 2014. *Biological Science*, 5th edition. Publisher: Benjamin-Cummings Publishing Co.
- Selected articles from standard journals.

Bioinformatics Tools in Biochemistry

Suggested Readings:

- *Essential bioinformatics* 2006. Xin Xiong. Cambridge University Press
- *Discovering Genomics, Proteomics and Bioinformatics* 2007. A. Malcolm Campbell and Laurie J Heyer. Benjamin Cummings.
- *Proteins: Structures and Molecular Properties* 1993. Creighton TE. W.H. Freeman.
- *Bioinformatics: Sequence and Genome Analysis* 2001. Mount DW. Cold Spring Harbor.
- *Introduction to Computational Molecular Biology* 1997. Setubal Joao and Meidanis Joao. PWS Publishing Company.
- *Bioinformatics: Concepts, Skills and Applications* 2004. Rastogi SC, Mendiratta N and Rastogi P. CBS.
- *Principles of Genome Analysis and Genomics* 2003. SB. Primrose and R.M. Twyman, Blackwell Publishing.
- *Molecular Analysis and Genome Discovery* 2004. Ralph Rapley and Stuart Harbron (Eds.), John Wiley and Sons.
- *Bioinformatics* 2001. Andreas D. Baxeavanis and B. F. Francis Ouellette (Eds.).
- Online Resources available on Internet and Selected articles from standard journals.

Environmental and Toxicological Biochemistry

Suggested Readings:

- Casarett, Louis J.; Doull, John. *Casarett and Doull's Toxicology: The Basic Science of Poisons*
- 8th ed.: New York: McGraw-Hill, 2013. ISBN:9780071769235
- Hayes AW, Kruger CL. *Hayes' principles and methods of toxicology* 6th ed. ISBN:9781842145364
- Kaneko JJ, Harvey JW and Bruss ML. *Clinical Biochemistry of Domestic Animals, Academic press*, ISBN 13:978-0-12-370491-7.
- Selected articles from journals.

Biochemistry of Diseases and Disorders

Suggested Readings:

- Charles A Janeway Jr, Paul Travers, Mark Walport and Mark J Shlomchik. 2001.
- *Immunobiology, The Immune System in Health and Disease*, 5th edition, New York.
- David L Nelson and Cox Michael M. 2017. *Lehninger's Principles of Biochemistry*. 7th Ed. Freeman.
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- Selected articles from standard journals.

Immuno-biochemistry

Suggested Readings:

- Abbas AK and Lichtman AH. 2003. *Cellular and Molecular Immunology*. 5th Ed. WB Saunders.

- David J Dabbs. 2018. *Diagnostic Immunohistochemistry*. 5th Ed. Elsevier.
- Goldsby RA, Kindt TJ and Osborne BA. 2003. *Immunology*. 4th Ed. WH Freeman.
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- Ivan Roitt (Eds.). 1997. *Essential Immunology* Publisher -Blackwell Scientific Publication, Oxford.
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- Mariusz Skwarczynski, Istvan Toth. 2017. *Micro and Nanotechnology in Vaccine Development*. 1st ed. Elsevier.
- Mathew Sebastian, Neethu Ninan AK. Haghi. 2012. *Nanomedicine and Drug Delivery*. 1st Ed. Apple Academic Press.

Special Problem

Suggested Readings:

- *Indian Journal of Chemical Technology*
- *Indian Journal of Biochemistry and Biophysics*
- *Indian Journal of Chemistry - Section B*
- *Indian Veterinary Journal*
- *Journal of Chemical Sciences*
- *Journal of Indian Chemical Society*
- *Meat Science - An International Journal*
- *The EMBO Journal*
- *Theriogenology*
- *Trends in Biochemical Sciences*
- **e-Resources**
- www.niscair.res.in/ScienceCommunication (Indian Journal of Biochemistry)
- www.medind.nic.in/iaf/iafm.shtml (Indian Journal of Clinical Biochemistry)
- www.ijcb.co.in (Indian Journal of Clinical Biochemistry)
- www.mcponline.org (Molecular and Cellular Proteomics)
- www.elsevier.com/vj/proteomics (Proteomics Virtual Journal)
- www.elsevier.com (Journal of Proteomics)
- www.elsevier.com (Clinical Biochemistry)
- www.sciencedirect.com/science/journal (Science Direct – Clinical Biochemistry)
- www.jbc.org (Journal of Biological Chemistry)

M.V.Sc. in Veterinary Extension Education

Development Perspectives of Extension Education

Suggested Readings:

- Anandajayasekeram P, Puskur R, Sindu Workneh and Hoekstra D. 2008. *Concepts and practices in agricultural extension in developing countries: A source book*. IFPRI (International Food Policy Research Institute), Washington, DC, USA, and ILRI (International Livestock Research Institute), Nairobi, Kenya. 275 pp. https://cgspace.cgiar.org/bitstream/handle/10568/99/Source_book.pdf
- Ashok G, Sharma P, Anisha S and Prerna T. 2018. *Agriculture Extension System in India Review of Current Status, Trends and the Way Forward*, Indian Council for Research on International Economic Relations (ICRIER).
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- Van den Ban AW and Hawkins HS. 1998. *Agricultural extension- Chapter 10*, BSL, CBS Publishers and Distributors.

Communication for Livestock Development

Suggested Readings:

- Bhagat Amit K. *Communication as a Management Tool: Principles and Practices*. Akhand Publishing House, New Delhi. 2012
- Cragan FJ and Wright WD. 1999. *Communication in Small Groups – Theory, Process, Skills*. Wadsworth Publ.
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- Sehgal MK and Khetrupal V. 2008. *Business Communication*. Excel Books. New Delhi.
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Diffusion and Adoption of Innovations

Suggested Readings:

- Brown Lawrence A. 1981. *Innovation Diffusion: A New Perspective*. *Communication for Social Change*. Sage Publ.
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Programme Planning and Evaluation

Suggested Readings:

- Bagno IB. 2014. *Conducting participatory monitoring and evaluation*. Pages 81-85 in FAO, Decision tools for family poultry development.
- Baker H. 1984. *The program planning process*. Pages 50-64 in D. Blackburn (ed.), *Extension handbook*. Guelph, Ontario, Canada: University of Guelph.
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Research Methodology

Suggested Readings:

- Arlene Fink (Ed). 2003. *The Survey Kit* (10 booklets). Sage Publ.
- Babbie E. 2008. *The basics of social research*. 4th ed. Belmont, CA, USA; Thompson Wordsworth.
- Creswell JW. 2009. *Research design: Qualitative, quantitative, and mixed methods approaches*. Third edition. Thousand Oaks: Sage Publications.

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Social Psychology and Group Dynamics

Suggested Readings:

- Cragan FJ and Wright WD. 1999. *Communication in Small Groups – Theory, Process, Skills*. Wadsworth Publ.
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Livestock Entrepreneurship

Suggested Readings:

- Khanka SS. 1999. *Entrepreneurial Development*. S. Chand and Co.
- Gupta CB. 2001. *Management Theory and Practice*. Sultan Chand and Sons.
- Grover I. 2008. *Handbook on Empowerment and Entrepreneurship*. Agrotech Public
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- Tripathi PC and Reddy PN. 1991. *Principles of Management*. Tata McGraw Hill.
- Desai V. 1997. *Small Scale Industries and Entrepreneurship*. Himalaya Publ. House.

Human Resource Management in Animal Husbandry Sector

Suggested Readings:

- Khanka SS. 1999. *Entrepreneurial Development*. S. Chand and Co.
- Gupta CB. 2001. *Management Theory and Practice*. Sultan Chand and Sons.
- BJ Lathi, Parag Narkhede and Vivek Yawalkar 2015. *Human Resource Management*, Prashant Publications.
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Gender Empowerment and Livestock Development

Suggested Readings:

- Grover I and Grover D. 2002. *Empowerment of Women*. Agrotech Publ. Academy.
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Course Title : Farm Journalism

Suggested Readings:

- Bhaskaran C, Prakash R and Kishore Kumar N. 2008. *Farm Journalism in Media Management*. Agro-Tech Publ. Academy.
- Chatterjee PC. 1991. *Broadcasting in India*. Sage Publ.
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- Singh AK 2014. *Agricultural Extension and Farm Journalism*, Agrobios Publications

Statistics for Social Sciences

Suggested Readings:

- Cunningham BJ. 2012. *Using SPSS: An Interactive Hands-on approach*
- Edwards Allen L. 1969. *Techniques of Attitude Scale construction*. Vakils, Feffer and Simons Pvt. Ltd, Bombay
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Ph.D. in Veterinary Extension Education

Organizational Leadership and Management

Suggested Readings:

- Bhattacharyya DK. 2011. *Organizational Change and Development*, Oxford University Press.
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- Gary A Yukl. 2013. *Leadership in Organizations* (8th edition), Pearson
- Anita Satterlee. 2018. *Organizational Management and Leadership* (3rd edition, Synergistics Inc.
- Patricia D Witherspoon. 1997. *Communicating Leadership: An Organizational Perspective*, Allyn and Bacon, Inc.

Recent Trends in Research Techniques in Social Sciences

Suggested Readings:

- Babbie E. 2008. *The basics of social research* (4th Edition), Belmont, CA, USA; Thompson Wordsworth.
- Creswell JW. 2009. *Research design: Qualitative, quantitative, and mixed methods approaches*. Third edition. Thousand Oaks: Sage Publications.
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Training for Development

Suggested Readings:

- Bentaya GM and Hoffmann V (Eds). 2011. *Rural Extension Volume 3 -Training Concepts and Tools*, Margraf Publishers GmbH, Scientific books, KanalstraBe 21; D-97990, weikersheim, 191 pp.
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- GFRAS. 2012. *The New Extensionist: Roles, Strategies, and Capacities to Strengthen Extension and Advisory Services*, Global Forum for Advisory Services
- GFRAS. 2015. *The New Extensionist: Core Competencies for Individuals*, GFRAS Brief 3.
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- Mishra DC. 1990. *New Directions in Extension Training*. Directorate of Extension, Ministry of Agriculture, Govt. of India, New Delhi.
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Policies and Regulations in Livestock Sector

Suggested Readings:

- Jessica Vapnek Megan Chapman. 2010. *Legislative and regulatory options for animal welfare*
- (FAO Legislative Study 104) <http://www.fao.org/docrep/013/i1907e/i1907e00.pdf>
- Richard A Sprenger 2018. *The HACCP Handbook (7th Edition)*
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- <https://awbi.org/awbi-pdf/APL.pdf>
- <https://www.petaindia.com/wp-content/uploads/2017/05/Prevention-of-Cruelty-to-Animals-Dog->

Educational Technology

Suggested Readings:

- Aggarwal JC. 2000. *Essential of Educational Technology: Teaching Learning Innovations in Education*. New Delhi: Vikas Publishing House.
- Alston, Antoine JW, Wade Millerand, David L Williams. 2003. *The future role of instructional technology in agricultural education in North Carolina and Virginia*. Journal of Agricultural Education, Volume 44, Number 2, 2003.
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- Fred Percival and Phil Race. 2005. *Handbook of Educational Technology 3rd Edition*. New Jersey: Nichols Publishing Company.
- Holz-Clause MS and Guntuku D. 2010. *Global Agricultural Knowledge Initiative: Strengthening the global competence of students, faculty and extension agents*.
- Kumar KL. 2000. *Educational Technology*. New Delhi: New Age International Publishers.
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- Sampath K, Panneerselvam A, Santhanam M. 2001. *Introduction to Educational Technology*. New Delhi: Sterling Publishers Pvt. Ltd.
- Sharma RA. 2007. *Educational Technology and Management*. Agra: Vinod Pustak Mandir.

Dynamics of Social Change

Suggested Readings:

- Chandra Shekhar. 2009. *Dynamics of Social Change*. Popular Prakashan.
- Johannes Dragsbaek Schmidt, Jacques Hersh. 2000. *Globalization and Social Change*, Routledge.
- John Solomos, Les Back. 1995. *Race, Politics, and Social Change*, Routledge.

Monitoring and Evaluation of Livestock Development Programmes

Suggested Readings:

- Carlson GA, Miranowski J and Zilberman D. 1998. *Agricultural and Environmental Resource Economics*. Oxford Univ. Press. 63
- Hanley N, Shogren J and White B. 2007. *Environmental Economics in Theory and Practice*. Palgrave, London.
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- Prato T. 1998. *Natural Resource and Environmental Economics*. Iowa State Univ. Press.
- Sterner T. 2003. *Policy Instruments for Environmental and Natural Resource Management. Resources for the Future*. The World Bank and SIDA.

Managing Extension Organizations

Suggested Readings:

- Bitzer V. 2016. *Incentives for enhanced performance of agricultural extension systems*, KIT Working Paper 2016-6, Royal Tropical Institute, Amsterdam
- <https://www.kit.nl/wp-content/uploads/2018/08/Incentives-for-enhanced-performance-of-agricultural-extension-systems.pdf>

- Bitzer V, Wennik B and de Steenhuijsen B. 2016. *The governance of agricultural extension systems*, KIT Working Paper 2016-1 Royal Tropical Institute, Amsterdam.
- <https://www.kit.nl/wp-content/uploads/2018/08/The-governance-of-agricultural-extensionsystems.pdf>
- Chand S. *Modern Management Theory: Quantitative, System and Contingency Approaches to Management*.
- <http://www.yourarticlelibrary.com/management/modern-management-theory-quantitativesystem-and-contingency-approaches-to-management/25621>
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- Gabathuler E, Bachmann F and Klay A. 2011. *Reshaping Rural Extension Learning for Sustainability: An integrated and learning based advisory approach for rural extension with small scale farmers*- Chapter 4. Margraf Publishesrs, Kanalstr.
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- HRM. 2013. *Current Trends in Human Resource Management*
- <https://corehr.wordpress.com/2013/08/21/current-trends-in-human-resource-management/>
- Koontz H and Weihrich H. 2015. *Essentials of Management: An International, Innovation and Leadership perspective*. Mcgrow Hill Education (India) Private Ltd.
- MANAGE. 2008. *Project Management in Agricultural Extension*, AEM-203, Post Graduate Diploma in Agricultural Extension Management (PGDAEM), National Institute of Agricultural Extension Management, Hyderabad <http://www.manage.gov.in/pgdaem/studymaterial/aem203.pdf>
- Mind Tools. *Core Leadership Theories: Learning the Foundations of Leadership*
- *Why are some leaders successful, while others fail?* Available online <https://www.mindtools.com/pages/article/leadership-theories.htm>
- Qamar KM. 2005. *Modernizing National Agricultural Extension Systems: A Practical Guide for Policy-Makers of Developing Countries*, Food and Agriculture Organization of the United Nations
- <http://www.fao.org/uploads/media/modernizing%20national.pdf>
- Swanson BE, Bentz RP and Sofranko AJ. 1997. *Improving Agricultural Extension. A Reference Manual*. Food and Agriculture Organization of the United Nations, Rome.
- Van den Ban AW and Hawkins HS. 1998. *Agricultural extension*- Chapter 10, BSL, CBS Publishers and Distributors.
- **List of Journals**
- *Communicator*
- *Development communication*
- *Indian Dairyman*
- *Indian journal of Adult Education*
- *Indian Journal of Dairy Science*
- *Indian Journal of Extension Education*
- *Indian Journal of Psychology*
- *Indian Journal of Public Administration*
- *Journal of Dairy Research*
- *Journal of Extension Systems*
- *Journal of Rural Development*
- *Journal of Training and Development*

- *The Indian Journal of Animal Sciences*
- *The Indian Veterinary Journal*
- *Journal of Agriculture Extension and Education*
- *Indian Journal of Animal Research*
- *Indian Journal of Gender of Studies*
- *Kurukshetra*
- *Yojana*
- *Economic and Political weekly*
- *Indian Farming*
- **e-Resources**
- www.informaworld.com (Journal of Agricultural Education and Extension)
- www.blackwellpublishing.co (International Journal of Training and Development)
- www.blackwellpublishing.co Educational Measurement: Issue and Practices
- www.academicjournals.net (International Journal of Dairy Science)
- www.cipav.org.co (Livestock Research for Rural Development)
- www.joe.org Journal of Extension

M.V.Sc. in Veterinary Physiology

Physiology of Digestion

Suggested Readings:

- *Dukes' Physiology of Domestic Animals*, 13th Edn. William O Reece, Howard H Erickson, Jesse P Goff, Etsuro E Uemura. 2015.
- *Cunningham's Textbook of Veterinary Physiology* 5th Edn. Bradley G. Klein 2012
- *Digestive Physiology and Nutrition of Ruminants* by D C Church, 1975
- *The Rumen Microbial. Ecosystem.* 2nd Edn. Ed. by. P.N. HOBSON and C.S Stewart 1997
- Hungate RE. 1966. *Rumen and its Microbes.* Acad. Press. N.Y.
- *Rumen Microbiology*, Burk A Dehority. 2003. Nottingham University Press

Cardiovascular and Respiratory Physiology

Suggested Readings:

- Guyton and Hall *Textbook of Medical Physiology* 13th Edn John E. Hall Ph.D. 2015
- *Ganong's Review of Medical Physiology*, 26th Edn Kim E. Barrett, Susan M. Barman, Scott Boitano, Heddwen Brooks, 2019
- *Dukes' Physiology of Domestic Animals*, 13th Edn. William O. Reece, Howard H. Erickson, Jesse P. Goff, Etsuro E. Uemura 2015.
- *Cunningham's Textbook of Veterinary Physiology* 5th Edn. Bradley G. Klein 2012.

Renal Physiology and Body Fluid Dynamics

Suggested Readings:

- Guyton and Hall *Textbook of Medical Physiology* 13th Edn John E Hall Ph.D.. 2015
- *Ganong's Review of Medical Physiology*, 26th Edn Kim E Barrett, Susan M Barman, Scott Boitano, Heddwen Brooks. 2019.
- *Dukes' Physiology of Domestic Animals*, 13th Edn. William O Reece, Howard H Erickson, Jesse P Goff, Etsuro E Uemura. 2015.
- *Cunningham's Textbook of Veterinary Physiology* 5th Edn. Bradley G Klein. 2012.
- Klahar S. 1983. *The Kidney and Body Fluids in Health and Diseases.* Plenum Press.

Hematology

Suggested Readings:

- Jain NC. 1993. *Essentials of Veterinary Hematology.* Lea and Febiger.
- *Schalm's Veterinary Hematology* 6th Ed - D Weiss J Wardrop, Wiley-Blackwell. 2010.
- *Guyton and Hall Textbook of Medical Physiology* 13th Edn John E Hall Ph.D. 2015.

- *Cunningham's Textbook of Veterinary Physiology* 5th Edn. Bradley G Klein. 2012.
- *Dukes' Physiology of Domestic Animals*, 13th Edn. William O Reece, Howard H Erickson, Jesse P Goff, Etsuro E Uemura. 2015.

Growth and Environmental Physiology

Suggested Readings:

- Samuel Brody. 1945. *Bioenergetics and growth*. Reinhold Publishing Corp., New York
- Hossner KL. 2005. *Hormonal Regulation of Farm Animal Growth*. CABI.
- McDowell LR. 1989. *Vitamins in Animal Nutrition*. Academic Press.
- Underwood EJ. 1977. *Trace Elements in Human and Animal Nutrition*. Academic Press.
- ESE Hafez. 1968. *Adaptation of Domestic Animals*. Lea and Febiger.
- *Dukes' Physiology of Domestic Animals*, 13th Edn. William O Reece, Howard H Erickson, Jesse P Goff, Etsuro E Uemura 2015.

Physiology of Animal Reproduction

Suggested Readings:

- *Reproduction in Farm Animals*, 7th Edn ESE Hafez, B Hafez. 2013.
- *McDonald's Veterinary Endocrinology*, Pineda and Doley. Iowa State University Press, Ames, 2003.
- *Physiology of Reproduction and Artificial Insemination*, Salisbury GW and Demark NL. WB Saunders, 1978.
- *Dukes' Physiology of Domestic Animals*, 13th Edn. William O Reece, Howard H Erickson, Jesse P Goff, Etsuro E Uemura. 2015.

Clinical Physiology

Suggested Readings:

- *Clinical Biochemistry of Domestic Animals* 6th Edn, Jiro Jerry Kaneko, John W Harvey, Michael L Bruss, Academic Press. 2008.
- *Hawk's Physiological Chemistry*. Oser BL Tata McGraw-Hill. 1976.
- *Clinical Biochemistry: An Illustrated Colour Text*. Allan Gaw; Michael Murphy; Robert Cowan; Denis O'Reilly; Michael Stewart; James Shepherd, 2004
- *Clinical Physiology of Acid Base and Electrolyte Disorders*. Rose BD. McGraw-Hill. 1989.
- *Clinical Physiology: An Examination Primer*. 1st Edn, Ashis Banerjee, Cambridge University Press. 2005.
- *Textbook of Veterinary Physiological Chemistry* 3rd Edn, Larry R Engelking. 2014.
- *Practical Clinical Biochemistry: Methods and Interpretations*. 4th Edn. Chawla Ranjna. 2014.

Neuromuscular Physiology

Suggested Reading

- *Guyton and Hall Textbook of Medical Physiology* 13th Edn John E Hall Ph.D. 2015.
- *Ganong's Review of Medical Physiology*, 26th Edn Kim E Barrett , Susan M Barman, Scott Boitano, Heddwen Brooks, 2019.
- *Dukes' Physiology of Domestic Animals*, 13th Edn. William O Reece, Howard H Erickson, Jesse P Goff, Etsuro E Uemura. 2015.
- *Cunningham's Textbook of Veterinary Physiology* 5th Edn. Bradley G. Klein. 2012.
- *Fundamentals of Neurophysiology*. Smith RF Springer Verlag. 1978.

Endocrinology of Domestic Animals

Suggested Readings:

- *McDonald's Veterinary Endocrinology*, Pineda and Doley. Iowa State University Press, Ames, 2003
- *General Endocrinology*. Turner CD and Bagnara JT, WB Saunders. 1976

- *Canine and Feline Endocrinology and Reproduction*, 3rd Edition, Edward C Feldman, Richard W Nelson. 2003.
- *Applied Animal Endocrinology* 2nd Edn. E James Squires. 2010

Instrumentation and Research Techniques in Veterinary Physiology

Suggested Readings:

- *Hawk's Physiological Chemistry*. Oser BL Tata McGraw-Hill. 1976.
- *Varley's Practical Clinical Biochemistry* Alan H Gowenlock
- *Handbook of Radioimmunoassay*. Abraham GE Marcel Dekker. 1977.
- *Electrocardiograms: A Systematic Method of Reading Them* Armstrong ML. 1978
- *Rumen Microbiology*, Burk A Dehority 2003 Nottingham University Press

Ph.D. in Veterinary Physiology

List of Journals

- *Acta Endocrinologica*
- *Advances in Clinical Chemistry*
- *Advances in Reproductive Physiology*
- *Advances in Veterinary Sciences*
- *American Journal of Clinical Nutrition*
- *American Journal of Physiology*
- *American Journal of Veterinary Research*
- *Animal Nutrition and Feed Technology*
- *Animal Reproduction Science*
- *Animal Sciences*
- *Annual Review of Physiology*
- *Buffalo Journal*
- *Domestic Animal Endocrinology*
- *Indian Journal of Animal Reproduction*
- *Indian Journal of Animal Nutrition*
- *Indian Journal of Animal Physiology*
- *Indian Journal of Animal Research*
- *Indian Journal of Animal Science*
- *Indian Veterinary Journal*
- *Journal of Endocrinology*
- *Journal of Physiology*
- *Journal of Reproduction and Fertility*
- *Neuroendocrinology*
- **e-Resources**
- <http://intl-joe>, endocrinology-journals.org (Journal of Endocrinology)
- <http://intl-ajpcon.physiology.org> (American Journal of Physiology)
- <http://arjournals.annualreviews.org> (Annual Review of Physiology)
- www.jneurosci.org (Journal of Neuroscience)
- www3.interscience.wiley.com (Journal of Physiology and Animal Nutrition)
- <http://jp.physioc.org>. (Journal of Physiology)

M.V.Sc. in Animal Reproduction Gynaecology and Obstetrics

Course Title : General Gynaecology

Suggested Readings:

- Perry T Cupps. 2009. *Reproduction in Domestic Animals*. Academic Press.
- Hafez ESE and B Hafez. 2013. *Reproduction in Farm Animals*. Wiley-Blackwell.

- Mauricio Pineda and Michael P Dooley. 2008. *McDonald's Veterinary Endocrinology* and Wiley-Blackwell.
- Veterinary Clinical Subjects: Animal Reproduction Gynaecology and Obstetrics
- David Noakes, Timothy Parkinson and Gary England 2018. *Veterinary Reproduction and Obstetrics*. Saunders Ltd.
- Roberts SJ. 2005. *Veterinary Obstetrics and Genital Diseases*. Scientific Book Agency.

Course Title : Female Infertility in Farm Animals

Suggested Readings:

- Laing JA. 1979. *Fertility and Infertility in Domestic Animals*. English Language Book Soc. and Bailliere Tindall.
- Restructured and Revised Syllabi of Post-graduate Programmes Vol. 3
- Morrow DA. 1986. *Current Therapy in Theriogenology*. WB Saunders.
- David Noakes. Timothy Parkinson and Gary England 2018. *Veterinary Reproduction and Obstetrics*. Saunders Ltd.
- Roberts SJ. 2005. *Veterinary Obstetrics and Genital Diseases*. Scientific Book Agency.

Course Title : Veterinary Obstetrics

Suggested Readings:

- David Noakes, Timothy Parkinson and Gary England 2018. *Veterinary Reproduction and Obstetrics*. Saunders Ltd.
- Roberts SJ. 2005. *Veterinary Obstetrics and Genital Diseases*. Scientific Book Agency.
- Sloss V and Dufty JH. 1980. *Handbook of Bovine Obstetrics*. Williams and Wilkins.

Course Title : Andrology and Male Infertility

Suggested Readings:

- Hafez ESE and B Hafez. 2013. *Reproduction in Farm Animals*. Wiley-Blackwell.
- Mann T and Lutwak-Mann C. 1981. *Male Reproductive Function and Semen*. Springer- Verlag.
- Morrow DA. 1986. *Current Therapy in Theriogenology*. WB Saunders.
- Roberts SJ. 2005. *Veterinary Obstetrics and Genital Diseases*. Scientific Book Agency.
- Salisbury GW, VanDemark NL and Lodge JR. 1978. *Physiology of Reproduction and Artificial Insemination of Cattle*. WH Freeman and Co.

Semen Preservation and Artificial Insemination

Suggested Readings:

- Hafez ESE and B Hafez 2013. *Reproduction in Farm Animals*. Wiley-Blackwell.
- Enos Johnson Perry 2013. *Artificial Insemination of Farm Animals*. Jodhpur: Axis Books (India).
- Salisbury GW, VanDemark NL and Lodge JR. 1978. *Physiology of Reproduction and Artificial Insemination of Cattle*. WH Freeman and Co.

Basics of Reproductive Biotechnology

Suggested Readings:

- Ian Gordon. 2017. *Reproductive Technologies in Farm Animals*. Wallingford, Oxfordshire CABI.
- Hafez ESE and B Hafez. 2013. *Reproduction in Farm Animals*. Wiley-Blackwell.
- B Singh, SK Gautam and MS Chauhan. 2012. *Textbook of Animal Biotechnology*, Pearson Education.
- Heiner Niemann, Christine Wrenzycki. 2018. *Animal Biotechnology 1: Reproductive Biotechnologies*. Springer.
- Heiner Niemann, Christine Wrenzycki. 2018. *Animal Biotechnology 2*. Springer International Publishing AG.
- Troy L Ott, Zhihua Jiang. 2010. *Reproductive Genomics in Domestic Animals*. John Wiley. Restructured and Revised Syllabi of Post-graduate Programmes Vol. 3

- Marcelo Marcondes Seneda, Katia Cristina Silva-Santos LS Rafagnin Marinho. 2016.
- *Biotechnology of Animal Reproduction*, Nova Science Pub. Inc; UK Ed.
- Tacia Gomes Bergstein-Galan. 2018. *Reproduction Biotechnology in farm animals*. Avid Science.

Clinical Practice-I

Suggested Readings:

- Morrow DA. 2022. *Current Therapy in Theriogenology*. WB Saunders.
- Zemjanis R 2012. *Diagnostic and Therapeutic Techniques in Animal Reproduction*. Williams and Wilkins; Second Edition.

Canine and Feline Reproduction

Suggested Readings:

- Edward C Feldman, Richard William Nelson. 2003. *Canine and Feline Endocrinology and Reproduction*. Elsevier Health Sciences, Saunders.
- Shirley Dianne Johnston, Margaret V Root Kustritz, Patricia Schultz Olson. 2001. *Canine and Feline Theriogenology*. Saunders Publ.
- Margaret V, Root Kustritz. 2009. *Clinical Canine and Feline Reproduction: Evidence-Based Answers*. John Wiley and Sons.
- Phyllis A. Holst MS. 2010. *Canine Reproduction: The Breeder's Guide 3rd Edition*. DOGWISE.
- Cheryl Lopate. 2012. *Management of Pregnant and Neonatal Dogs, Cats, and Exotic Pets*. John Wiley and Sons.
- Jovi R Otite. 2015. *Reproduction in the Dog a Tropical Approach*. Xlibris Corporation.

Caprine and Ovine Reproduction

Suggested Readings:

- Mauricio Pineda and Michael P Dooley. 2008. *McDonald's Veterinary Endocrinology and Reproduction*. Wiley-Blackwell.
- Lindsay DR and Pearce DT. 2011. *Reproduction in Sheep*, Cambridge University Press, Cambridge, London.
- Selected articles from journals.

Equine Reproduction

Suggested Readings:

- Mauricio Pineda and Michael P Dooley. 2008. *McDonald's Veterinary Endocrinology and Reproduction*. Wiley-Blackwell.
- McKinnon, Squires, Vaala and verner. 2011. *Equine Reproduction (2nd Ed)*. Wiley- Blackwell.
- Juan Samper, Jonathan Pyocock and Angus McKinnon. 2007. *Current Therapy in Equine Reproduction*. Saunders.
- Steven Brinsko Terry Blanchard Dickson Varner James Schumacher Charles Love. 2010.
- *Manual of Equine Reproduction (3rd Ed)*. CV Mosby.
- John Dascanio and Patrick McCue. 2014. *Equine Reproductive procedures*. John Wiley and Sons, Inc.
- Selected articles from journals.

Camel Reproduction

Suggested Readings:

- H Merkt, D Rath, B Musa, MA El-Naggar. 1990. *Reproduction in Camels*. FAO.
- Muhammad Jamshed Khan. 2011. *Equine and Camel Production: An Approach towards Better Management*. LAP LAMBERT Academic Pub.
- Selected articles from journals.

Elephant Reproduction

Suggested Readings:

- Brown JL, Paris S, Prado-Oviedo NA, Meehan CL, Hogan JN, Morfeld KA and Carlstead KA. 2016. *Reproductive Health Assessment of Female Elephants in North American Zoos and Association of Husbandry Practices with Reproductive Dysfunction in African Elephants (Loxodonta africana)*. PLOS ONE | DOI:10.1371/journal.pone.014573.
- Ortolani A, Leong K, Graham L, Savage A. 2005. *Behavioral indices of estrus in a group of captive African Elephants (Loxodonta africana)*. Zoo Biol. 24:311-329.
- Rasmussen LE, Schmidt MJ, Henneous R, Groves D, Daves GD. Jr. 1982. *Asian bull elephants: flehmen-like responses to extractable components in female elephant estrous urine*. Science. 217: 159-162.
- Sukumar R. 2006. *A brief review of the status, distribution and biology of wild Asian elephants Elephas maximus*. Int. Zoo Yb. 40: 1-8.
- Thitaram C. 2009. *Elephant reproduction: Improvement of breeding efficiency and development of a breeding strategy*. Ph.D. Thesis, Utrecht University, The Netherlands
- Vidya TNC and Sukumar R. 2005. *Social and reproductive behaviour in elephants*. Current sci. **89**: 1200-1207.

Wild and Zoo Animal Reproduction

Suggested Readings:

- GR Smith, JP Hearn and Wellcome Trust (London, England). 1988. *Reproduction and disease in captive and wild animals*, New York: Oxford University Press.
- Ian Gordon. 1997. *Controlled reproduction in horses, deer and camelids*. CAB International.
- Mauricio Pineda and Michael P Dooley. 2008. *McDonald's Veterinary Endocrinology and Reproduction*. Wiley-Blackwell.
- Paul A Rees. 2011. *An Introduction to Zoo Biology and Management*. Wiley-Blackwell.
- R Eric Miller, Murray E Fowler. 2014. *Fowler's Zoo and Wild Animal Medicine*. Saunders.
- Selected articles from journals.

Course Title : Porcine Reproduction

Suggested Readings:

- Colin T Whittemore, Ilias Kyriazakis. 2008. *Whittemore's Science and Practice of Pig Production*. John Wiley and Sons Press.
- *Control of Pig Reproduction*. Proceedings of the Eighth International Conference on Pig Reproduction, Alberta, Canada, June 2009 by Heriberto Rodríguez Martínez, Jeff L Vallet, Adam J Ziecik, Nottingham University Press. 2009.
- DJA Cole, GR Foxcroft, Butterworth-Heinemann. 2013. *Control of Pig Reproduction*. Technology and Engineering Press.
- Mauricio Pineda and Michael P Dooley. 2008. *McDonald's Veterinary Endocrinology and Reproduction*. Wiley-Blackwell.
- *Pig Reproduction: Problems, Practices and Principles*. Proceedings of a Conference Held at Christ Church, Oxford University, 16-18 December, 1998.
- Sergi Bonet, Isabel Casas, William V Holt, Marc Yeste. 2013. *Boar*
- *Reproduction: Fundamentals and New Biotechnological Trends*. Springer Science and Business Media.

Ultrasonography in Animal Reproduction

Suggested Readings:

- MAM Taverne and AH Willemse. 1989. *Diagnostic ultrasound and animal reproduction*. Dordrecht; Boston: Kluwer Academic.
- J Ginther. 1998. *Ultrasonic imaging and animal reproduction*. Cross Plains, Wis.: Equiservices Pub.
- Selected articles from journals.

Ph.D. in Animal Reproduction Gynaecology and Obstetrics

Course Title : Advances in Gynaecology and Infertility Management

Suggested Readings:

- Hafez ESE and B Hafez. 2013. *Reproduction in Farm Animals*. Wiley-Blackwell.
- Mauricio Pineda and Michael P Dooley. 2008. *McDonald's Veterinary Endocrinology* and Wiley-Blackwell.
- David Noakes, Timothy Parkinson and Gary England. 2018. *Veterinary Reproduction and Obstetrics*. Saunders Ltd.
- Roberts SJ. 2005. *Veterinary Obstetrics and Genital Diseases*. Scientific Book Agency.
- Morrow DA. 1986. *Current Therapy in Theriogenology*. WB Saunders.
- Selected articles from journals.

Advances in Veterinary Obstetrics

Suggested Readings:

- David Noakes, Timothy Parkinson and Gary England. 2018. *Veterinary Reproduction and Obstetrics*. Saunders Ltd.
- Roberts SJ. 2005. *Veterinary Obstetrics and Genital Diseases*. Scientific Book Agency.
- Sloss V and Dufty JH. 1980. *Handbook of Bovine Obstetrics*. Williams and Wilkins.

Course Title : Advances in Andrology and Male Infertility

Suggested Readings:

- Hafez ESE and B Hafez. 2013. *Reproduction in Farm Animals*. Wiley-Blackwell.
- Enos Johnson Perry. 2013. *Artificial Insemination of Farm Animals*. Jodhpur: Axis Books (India).
- Roberts SJ. 2005. *Veterinary Obstetrics and Genital Diseases*. Scientific Book Agency.

Reproductive Biotechnology

Suggested Readings:

- Hafez ESE and B Hafez. 2013. *Reproduction in Farm Animals*. Wiley-Blackwell.
- B Singh, SK Gautam and MS Chauhan. 2012. *Textbook of Animal Biotechnology*, Pearson Education.
- Heiner Niemann, Christine Wrenzycki. 2018. *Animal Biotechnology 1: Reproductive Biotechnologies*. Springer.
- Heiner Niemann, Christine Wrenzycki. 2018. *Animal Biotechnology 2*. Springer International Publishing AG.
- Ian Gordon. 2017. *Reproductive Technologies in Farm Animals*. Wallingford, Oxfordshire CABI.
- Troy L Ott, Zhihua Jiang. 2010. *Reproductive Genomics in Domestic Animals*. John Wiley.
- Marcelo Marcondes Seneda, Katia Cristina Silva-Santos, LS Rafagnin Marinho. 2016. *Biotechnology of Animal Reproduction*, Nova Science Pub. Inc; UK Ed.
- Tacia Gomes Bergstein-Galan. 2018. *Reproduction Biotechnology in farm animals*. Avid Science.

Semenology

Suggested Readings:

- Salisbury GW, VanDemark NL and Lodge JR. 1978. *Physiology of Reproduction and Artificial Insemination of Cattle*. WH Freeman and Co.
- Hafez ESE and B Hafez. 2013. *Reproduction in Farm Animals*. Wiley-Blackwell.

Clinical Practice-I

Suggested Readings:

- Morrow DA. 1986. *Current Therapy in Theriogenology*. WB Saunders.

- Zemjanis R. 1970. *Diagnostic and Therapeutic Techniques in Animal Reproduction*. Williams and Wilkins; Second Edition.

Veterinary Surgery and Radiology

M.V.Sc. in Veterinary Surgery and Radiology

Suggested Readings:

- Fossum TW. (Ed.). 2018. *Small Animal Surgery*. Mosby.
- Slatter DH. 2003. 3rd ed. *Textbook of Small Animal Surgery*. WB Saunders.
- Hendrickson DA and Baird AN. 2013. *Turner and McIlwraiths Techniques in Large Animal Surgery* 4th ed. Wiley Black Well.
- AK Gangwar, Naveen Kumar and Kh. Sangeeta Devi. 2010. *General Animal Surgery and Anesthesiology* (With Theory and Practicals) New India Publishing Agency, New Delhi (ISBN: 9789-38-0235-172).
- Clarke KW, Trim CM and Hall LW. 2013. *Veterinary Anaesthesia*. 11th ed. WB Saunders.
- Grim KA, Lamont LA, Tranquilli WJ, Greene SA and Robertson SA. 2015. *Veterinary Anaesthesia and Analgesia*, The 5th ed. Lumb and Jones. Wiley Blackwell.
- Grim KA, Tranquilli WJ and Lamont LA. 2011. *Essentials of Small Animal Anesthesia and Analgesia*. 2nd ed. Wiley Blackwell.
- Paddleford RR. 1999. *Manual of Small Animal Anesthesia*. 2nd ed. WB Saunders.
- Kealy JK, McAllister H and Graham JP. (Eds.). 2011. *Diagnostic Radiology and Ultrasonography of the Dog and Cat*. 5th ed. WB Saunders, Philadelphia.
- Mannion P. 2006. *Diagnostic Ultrasound in Small Animal practice*. Blackwell Science.
- Kirberger RM and McEvoy FJ 2016. *BASAVA Manual of Canine and Feline Musculoskeletal Imaging*. 2nd BASAVA Gloucester.
- Morgan JP. 1972. *Radiology in Veterinary Orthopaedics*. Lea and Febiger.
- Nyland TG and Mattoon JS. 2002. *Small Animal Diagnostic Ultrasound*. WB Saunders.
- Thrall DE. 2017. *Textbook of Veterinary Diagnostic Radiology*. 7th ed. Saunders, Philadelphia.
- Bargai U, Pharr, JW and Morgan JP. 1989. *Bovine Radiology*. Iowa State University Press, Ames.
- Fossum TW. 2018. *Small Animal Surgery*. 5th ed. Mosby.
- Fubini SL and Ducharme NG. 2016. *Farm Animal Surgery*. 2nd ed. Saunders
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- Yool DA. 2012. *Small Animal Soft Tissue Surgery*. CABI.
- Tobia KM. 2010. *Manual of Small Animal Soft Tissue Surgery*. Wiley Black Well.
- Auer JA. 2006. *Equine Surgery*. WB Saunders.
- Baxter GM. (Ed.). 2011. *Adams and Stashak's Lameness in Horses*. 6th ed. Wiley-Blackwell.
- Decamp CE, Johnston, SA, Dejardin LM and Schaefer SL. 2016. *Handbook of Small Animal Orthopaedics and Fracture Repair*, 5th ed., Elsevier.
- Veterinary Clinical Subjects: Veterinary Surgery and Radiology
- **303**
- Fubini SL and Ducharme NG. 2016. *Farm Animal Surgery*. 2nd ed. Saunders.
- Greenough PR. 2007. *Bovine Laminitis and Lameness*. WB Saunders.
- Millis DL and Levine D 2014. *Canine Rehabilitation and Physical Therapy*, 2nd ed., Elsevier.
- Newton CD and Nunamaker DM. (Eds.). 1985. *Textbook of Small Animal Orthopaedics*. JB Lippincott.
- Oehme FW and Prier JE. (Eds.). 1974. *Textbook of Large Animal Surgery*. Williams and Wilkins.
- Tyagi RPS and Singh J. (Eds.). 1993. *Ruminant Surgery*. CBS.
- Weaver AD, Jean GS and Steiner A. 2007. *Bovine Surgery and Lameness*. 2nd ed. Wiley- Blackwell.
- Fowler ME and Mikota SK. 2006. *Biology, Medicine, and Surgery of Elephants*. Blackwell Publishing

Ph.D. in Veterinary Surgery and Radiology

Suggested Readings:

- Auer JA and Stick JA. 2017. *Equine Surgery*. 4th ed. Elsevier Saunders.
- Baxter GM. (Ed.). 2011. *Adams and Stashak's Lameness in Horses*. 6th ed. Wiley-Blackwell
- Fubini SL and Ducharme NG. 2016. *Farm Animal Surgery*. 2nd ed. Saunders.
- Greenough PR. 2007. *Bovine Laminitis and Lameness*. WB Saunders.
- Newton CD and Nunamaber DM. (Eds.). 1985. *Textbook of Small Animal Orthopaedics*. JB Lippincott.
- Oehme FW and Prier JE. (Eds.). 1974. *Textbook of Large Animal Surgery*. Williams and Wilkins.
- Ross MW and Dyson SJ. 2011. *Diagnosis and Management of Lameness in the Horse*. 2nd ed. Elsevier Saunders.
- Tyagi RPS and Singh J. (Eds.). 1993. *Ruminant Surgery*. CBS
- Weaver AD, Jean GS and Steiner A. 2007. *Bovine Surgery and Lameness*. 2nd ed. Wiley- Blackwell.
- Dewey CW and C da Costa R. 2016. *Practical Guide to Canine and Feline Neurology*, 3rd ed. Wiley Blackwell.
- Lorenz MD, Coastes JR and Kent M. 2011. *Handbook of Veterinary Neurology*, 5th ed. Elsevier.
- Bojrab Joseph M, Monnet Eric. 2010. *Mechanisms of Disease in Small Animal Surgery*, 3rd Teton New Media, U.S.
- Grifffers D and Hamaide A. (Eds.). 2016. *Complications in Small Animal Surgery*. Wiley Blackwell.
- Theoret C and Schumacher J. 2017. *Equine Wound Management*. Griffon, D and Hamaide A 2016. *Complications in Small Animal Surgery*, Wiley Blackwell.
- Fossum TW. 2018. *Small Animal Surgery*. 5th ed. Mosby.
- Fubini SL and Ducharme NG. 2016. *Farm Animal Surgery*. 2nd ed. Saunders
- Slatter DH. 2003. *Textbook of Small Animal Surgery*. 3rd ed. WB Saunders.
- Yool DA. 2012. *Small Animal Soft Tissue Surgery*. CABI
- Kudnig ST and Sequin B. 2012. *Veterinary Surgical Oncology*, Wiley Blackwell.
- Fossum TW. 2018. *Small Animal Surgery*. 5th ed. Mosby.
- Fubini SL and Ducharme NG. 2016. *Farm Animal Surgery*. 2nd ed. Saunders.
- Maggs DJ, Miller PE and Ofri R. 2017. *Slatter's Fundamentals of Veterinary Ophthalmology*. 6th ed. Saunders.
- Slatter DH. 2003. *Textbook of Small Animal Surgery*. 3rd ed. WB Saunders. Veterinary Medicine

M.V.Sc. in Veterinary Medicine

Ruminant Medicine - Internal

Suggested Readings:

- Bradford Smith, David Van Metre, Nicola Pusterla. 2019. *Large Animal Internal Medicine*. 6th Edition, Mosby.
- Neil V Anderson, 1992. *Veterinary Gastroenterology*. 2nd Revised edition, Lea and Febiger, USA.
- Simon F Peek, Thomas J Divers. 2018. *Rebhun's Diseases of Dairy Cattle*. 3rd Edition, Elseviers.
- Research and Review Papers in Current Journals.

VMD 502: Ruminant Medicine-infectious 3+0

Suggested Readings:

- *Dairy Herd Health*. 2012. MJ Green, Andrew J. Bradley. CABI Publishing.
- *Merck's Veterinary Manual* K. 2016. Susan E Aiello, Michael A Moses. (11th Edition). Merck Sharp and Dohme
- *Veterinary Medicine* 2016. Peter Constable, Kenneth W Hinchcliff, Stanley Done, Walter Gruenberg. 11th Edition. Saunders Ltd.
- Research and Review Papers in Current Journals.

VMD 503: Equine Medicine (2+0)

Suggested Readings:

- *Equine Internal Medicine*. 2017. Stephen Reed, Warwick Bayly, Debra Sellon, 4th Edition, Elsevier,

Saunders.

- *Large Animal Internal Medicine*. 2019. Bradford Smith, David Van Metre, Nicola Pusterla, 6th Edition, Mosby
- Research and Review Papers in Current Journals.

VMD 504: Canine and Feline Medicine-I (2+0)

Suggested Readings:

- *Small Animal Internal Medicine* 2013. Nelson and Couto, 5th edition, Elsevier Mosby, St. Louis, Missouri
- *Text book of Veterinary Internal Medicine* 2001. Part I and II, Ettinger and Feldman, 7th Edition, Publisher: Saunders
- *Small Animal Medical Diagnosis* 2009. MD Lorenz, TM Neer and PL Demars, 3rd Edition, Wiley Blackwell, Iowa, USA.
- Research and Review Papers in Current Journals.

VMD 505: Canine and Feline Medicine-II (2+0)

Suggested Readings:

- *Small Animal Internal Medicine* 2013. by Nelson RW and Couto, CG 5th edition, Elsevier Mosby, St. Louis Missouri
- *Text book of Veterinary Internal Medicine* 2010. by Ettinger and Feldman, 7th Edition, Publisher: Saunders
- Research and Review Papers in Current Journals.

VMD 506: Metabolic and Endocrine Diseases, Nutritional Deficiencies and Diseases of Mammary Gland (2+0)

Suggested Readings:

- *Veterinary Medicine* 2007. *A Textbook of the Diseases of Cattle, Horses, Sheep, Pigs and Goats* by Otto M Radostits, Clive C Gay, Kenneth W Hinchcliff and Peter D Constable. 10th Edition. Saunders.
- *Clinical Endocrinology of Companion Animals* (2013). Ed. J Rand 1st Edition ed. by Jacquie Rand (Editor), Ellen Behrend (Editor), Danielle Gunn-Moore (Editor), Michelle Campbell-Ward (Editor). Wiley-Blackwell.
- Research and Review Papers in Current Journals.

VMD 507: Paediatrics and Geriatrics (2+0)

Suggested Readings:

- *Equine Pediatric Medicine*. 2018. WV Bernard, BS Barr, 2nd edition, CRC Press.
- *Treatment and Care of the Geriatric Veterinary Patients* 2017. Mary Gardne and Dani McVety, Wiley-Blackwell.
- *Small Animal Pediatrics* 2011. Michael E. Peterson and Michelle Anne Kutzler, Elsevier.
- Research and Review Papers in Current Journals.

VMD 508: Avian and Swine Medicine (2+0)

Suggested Readings:

- *Diseases of Poultry*. 2013. DE Swayne, JR Glisson, LR McDougald, LK Nolan, DL Suarwz, and VL Nair. 13th Edition, Wiley-Blackwell.
- *Diseases of poultry and their control*. 2001. R. Chandra, VDP Rao, JC Gomez-Villamandos, SK Shukla and PS Banerjee. 1st edition, International book distributing Co., Lucknow, India. 2001.
- Research and Review Papers in Current Journals.
- *Diseases of Swine*. 2012. JJ Zimmerman, LA Karriker, A Ramirez, KJ Schwartz and GW. Stevenson. 12th edition, Wiley-Blackwell.
- *Diseases of Swine* 2006. BE Straw, JJ Zimmerman, SD'Allaire and DJ Taylor. 9th edition, Blackwell Publishing.

- Research and Review Papers in Current Journals.

VMD 509: Zoo, Wild and Laboratory Animal Medicine (1+0)

Suggested Readings:

- *Wild Mammals in Captivity: Principles and Techniques for Zoo Management* (2010). 2nd ed. - Kleiman, DG, University of Chicago Press
- *Zoo and Wild Animal Medicine Current Therapy* (2007). 6th ed. -C Fowler, ME
- *Zoo Animal and Wildlife Immobilization and Anesthesia* (2014). 2nd Ed.-C West, D Heard. N Caulkett, Wiley Blackwell
- Research and Review Papers in Current Journals.

VMD 510: Toxicology and Forensic Medicine (1+0)

Suggested Readings:

- *Veterinary Toxicology*. 2014. SK Garg, CBS Publishers.
- *Veterinary Medicine- A textbook of the diseases of cattle, horses, sheep, pigs and goats* by Constable *et al.* 11th Ed., Saunders Ltd.
- *Animal Welfare Ethics and Jurisprudence* 2014. Kirti Dua, 1st Ed., Kalyani Publishers.
- *Veterinary Jurisprudence*. 2015. SN Sharma AK Gahlot and RK Tanwar. 7th Ed., NBS Publisher and Distributor.
- Research and Review Papers in Current Journals.

VMD 511: Clinical Diagnostic Techniques (0+2)

Suggested Readings:

- *Large Animal Internal Medicine*. 2015. Bradford P. Smith, 5th Edition, Mosby Elsevier.
- *Small Animal Clinical Techniques*. 2010. Susan M. Taylor, Saunders Elsevier.
- *Handbook of Veterinary Neurology*. 2010. Michael D. Lorenz, Joan R. Coates and Marc Kent, 5th Edition, Saunders Elsevier.
- *Handbook of Equine Respiratory Endoscopy*. 2007. Safia Barakzai, First Edition, Saunders Elsevier.
- *Manual of Canine and Feline Cardiology*. 2008. Larry P. Tilley, Francis W.K. Smith Jr., M.A. Oyama and M.M. Sleeper, 4th Edition, Saunders Elsevier.
- *Diagnostic Techniques in Equine Medicine: A Textbook for Students and Practitioners Describing Diagnostic Techniques Applicable to the Adult Horse* (2009), Frank GR Taylor, Tim J Brazil and Mark H Hillyer, 2nd Edition, Saunders Elsevier.

VMD 512: Emergency Medicine (0+2)

Suggested Readings:

- *Kirk and Bistner's Handbook of Veterinary Procedures and Emergency Treatment*. 2012. Richard B. Ford and Elisa Mazzaferro, 9th Edition, Saunders Elsevier.
- *Blackwell's Five Minute Veterinary Consult Clinical Companion, Small Animal Emergency and Critical Care*. 2010. Mazzaferro, M. E. 1st Edition, (Wiley Blackwell)
- *Equine Emergencies Treatment and Procedures*. 2008. Orsini J.A. and Divers T.J., 3rd Edition, Saunders Elsevier.
- Research and Review Papers in Current Journals.

VMD 513: Diagnosis of Veterinary Infectious Diseases (0+1)

Suggested Readings:

- *Veterinary Epidemiology* (2018). Michael Thrusfield, Robert Christley. Wiley-Blackwell
- *Veterinary Epidemiologic Research*. (2003). Ian Dohoo, Wayne Martin and Henryk Stryhn, AVC Inc., Charlottetown.
- *Diseases of Animals: Diagnosis and Management* (2013). Singh, Bhoj and Somvanshi, R. Indian Veterinary Research Institute
- *Veterinarian's Guide to the Laboratory Diagnosis of Infectious Diseases* (1986). Gordon R. Carter.

Veterinary Medicine Publishing Company

- Research and Review Papers in Current Journals.

VMD 514: Oncology and Ethno-veterinary Medicine (1+0)

Suggested Readings:

- *BSAVA Manual of Canine and Feline Oncology* by Dobson, Jane M. and Lascelles, B Duncan X. 3rd Ed., BSAVA.
- *Veterinary Herbal Medicine* by SG Wynn and BJ Fougere. 1st Ed., Mosby Elsevier.
- *Textbook of Veterinary Homeopathy*, by J Saxton and P Gregory. Beaconsfield Publishers, Beaconsfield
- *Complementary and Alternative Veterinary Medicine* by Narda G Robinson In: Merck Veterinary Manual. 11th Ed., Wiley.
- *Nutraceuticals in Veterinary Medicine* by, Ramesh C Gupta, Ajay Srivastava and Rajiv Lall. 1st Ed., 2019 Springer.
- Research and Review Papers in Current Journals.

VMD 515: Animal Disease Investigation and Biosecurity (1+1)

Suggested Readings:

- *History of the Surveillance and Control of Transmissible Animal Diseases*. (2003). Jean Blancou. Office International des Epizooties
- *Veterinary Epidemiology* (2018). Michael Thrusfield, Robert Christley. Wiley-Blackwell
- *Biosecurity in Animal Production and Veterinary Medicine* (2018). Jeroen Dewulf, Filip Van Immerseel. *From Principles to Practice*. AMSTERDAM University Press
- Research and Review Papers in Current Journals.

Ph.D. in Veterinary Medicine

VMD 601: Farm Animal Gastroenterology (2+0)

Suggested Readings:

- *Equine Internal Medicine*. 2017. Stephen Reed, Warwick Bayly and Debra Sellon, 4th Edition, Elsevier, Saunders.
- *Large Animal Internal Medicine*. 2019. Bradford Smith, David Van Metre and Nicola Pusterla, 6th Edition, Mosby
- *Rebhun's Diseases of Dairy Cattle*. 2018. Simon F Peek and Thomas J Divers, 3rd Edition, Elsevier
- *Veterinary Gastroenterology*. 1992. Neil V. Anderson, 2nd Revised edition, Lea and Febiger, USA.

VMD 602: Farm Animal Cardiopulmonary and Urinary System Diseases (2+0)

Suggested Readings:

- *Large Animal Internal Medicine*. 2019. Bradford Smith, David Van Metre and Nicola Pusterla, 6th Edition, Mosby
- *Veterinary Medicine: A textbook of the diseases of cattle, horses, sheep, pigs and goats* by Otto M Radostits, Clive C Gay, Kenneth W Hinchcliff and Peter D Constable. 10th Edition. Saunders
- *Rebhun's Diseases of Dairy Cattle*. 2018. Simon F Peek, Thomas and J Divers, 3rd Edition, Elsevier
- Research and Review Papers in Current Journals.

VMD 603: Farm Animal Neurological and Musculo-skeletal System Diseases (1+0)

Suggested Readings:

- *Bovine Laminitis and Lameness*. 2007. Paul R Greenough, First Edition, Saunders Elsevier.
- *Large Animal Internal Medicine*. 2019. Bradford Smith, David Van Metre, Nicola Pusterla, 6th Edition, Mosby
- *Handbook of Veterinary Neurology*. 2010. Michael D Lorenz, Joan R Coates and Marc Kent, 5th Edition, Saunders Elsevier.
- *Equine Internal Medicine*. 2004. Stephen M Reed, Warwick M Bayly and Debra C Sellon, 2nd Edition,

Saunders Elsevier.

- Research and Review Papers in Current Journals.

VMD 604: Farm Animal Neonatology (1+0)

Suggested Readings:

- *Equine Pediatric Medicine*. 2018. W V Bernard, BS Barr, 2nd edition, CRC Press
- *Practical Lambing and Lamb Care*. 2018. N Sargison, JP Crilly and A Hopker, 4th edition, Wiley Blackwell
- *Equine Neonatal Medicine*. 2006. MR Paradis, 1st edition, Saunders
- *Bovine Neonatology*. 2009. *Veterinary Clinics of North America: Food Animal Practice*. 1st Edition, Saunders
- Research and Review Papers in Current Journals.

VMD 605: Herd Health Management (2+1)

Suggested Readings:

- *Dairy Herd Health*. 2012. MJ Green and Andrew J Bradley. CABI Publishing
- *Herd Health: Food, Animal, Production, Medicine*. 1994. OM Radostits, KE Leslie, J Fetrow and WB. Saunders,
- *Veterinary Epidemiology*. 2018. Michael Thrusfield, Robert Christley. Wiley-Blackwell
- *The Keys to Herd Health*. 2006. Jerry Brunetti. Acres U.S.A.
- *Herd Health and Production Management in Dairy Practice*. 2003. Arie Brand. International Book Distributing Company

VMD 606: Canine and Feline Gastroenterology (2+0)

Suggested Readings:

- *Canine and Feline Gastroenterology*. 2013. RJ Washabau and MJ Day, Elsevier Mosby, St. Louis Missouri
- *Text Book of Veterinary Internal Medicine*. 2001. Part I and II, Ettinger and Feldman, 7th Edition, Saunders
- *Small Animal Medical Diagnosis*. 2009. MD Lorenz, TM. Neer and PL Demars, 3rd Edition, Wiley Blackwell, Iowa, USA.
- Research and Review Papers in Current Journals.

VMD-607 Advances in Neurological and Musculoskeletal System Diseases of Canine and Feline (1+0)

Suggested Readings:

- *Small Animal Internal Medicine*. 2013. Nelson RW and Couto, CG 5th edition, Elsevier Mosby, St. Louis Missouri
- *Text book of Veterinary Internal Medicine*. 2010. Ettinger and Feldman, 7th Edition, Saunders
- Research and Review Papers in Current Journals.

VMD 609: Dermatology and Endocrinology (1+0)

Suggested Readings:

- *Clinical Endocrinology of companion animals*. 2013. Ed. J Rand 1st Edition ed. by Jacquie Rand (Editor), Ellen Behrend (Editor), Danielle Gunn-Moore (Editor) and Michelle Campbell-Ward (Editor). Wiley-Blackwell.
- *Muller and Kirk's Small Animal Dermatology*. 2013. 8th Edition. Edited by WH Miller, CE Griffin and KL Campbell. Elsevier, St Louis, MO, USA,
- *Equine dermatology*. 2011. 2nd Edition edited by Danny W Scott and William H. Miller, Jr 2nd edition. Elsevier, St Louis, MO, USA.

VMD 610: Canine and Feline Eye and Ear Diseases (1+0)

Suggested Readings:

- *Veterinary Ophthalmology*. 2013. Kirk N Gellat, Brian C Gilger and Thomas J Kern, 5th edition. Wiley Blackwell,
- *Saunders Manual of Small Animal Practice*. 2016. SJ Birchard and RG Sherding, WB Saunders Company
- Research and Review Papers in Current Journals.

VMD 611: Veterinary Diagnostics (0+2)

Suggested Readings:

- *Large Animal Internal Medicine*. 2019. Bradford Smith, David Van Metre and Nicola Pusterla, 6th Edition, Mosby
- *Small Animal Clinical Techniques*. 2010. Susan M Taylor, Saunders Elsevier
- *Handbook of Veterinary Neurology*. 2010. Michael D. Lorenz, Joan R. Coates and Marc Kent, 5th Edition, Saunders Elsevier.
- *Handbook of Equine Respiratory Endoscopy*. 2007. Safia Barakzai, 5th Edition, Saunders Elsevier.
- *Manual of Canine and Feline Cardiology*. 2008. Larry P Tilley, Francis WK Smith Jr., MA Oyama and MM Sleeper, 4th Edition, Saunders Elsevier.
- *Diagnostic Techniques in Equine Medicine: A Textbook for Students and Practitioners Describing Diagnostic Techniques Applicable to the Adult Horse*. 2009. Frank GR Taylor, Tim J Brazil and Mark H Hillyer, 2nd Edition, Saunders Elsevier.

VMD 612: Metabolic and Nutritional Deficiency Diseases (2+0)

Suggested Readings:

- *Veterinary Medicine*. 2006. OM Radostits, CC Gay, KW Hinchcliff and PC Constable, 10th Edition, Saunders.
- *Large Animal Internal Medicine*. 2019. Bradford Smith, David Van Metre and Nicola Pusterla, 6th Edition, Mosby
- *Textbook of Preventive Veterinary Medicine and Epidemiology*. 2010. RD Sharma, M Kumar and MC Sharma, ICAR- New Delhi.
- *Textbook of Veterinary Internal Medicine Expert Consult*. 2016. SJ Ettinger, EC Feldman and E Cote, 8th Edition, Saunders-Elsevier
- Research and Review Papers in Current Journals.

VMD 613: Emergency and Critical Care Medicine (1+1)

Suggested Readings:

- *Kirk and Bistner's Handbook of Veterinary Procedures and Emergency Treatment*. 2012. Richard B Ford and Elisa Mazzaferro, 9th Edition, Saunders Elsevier.
- *Blackwell's Five Minute Veterinary Consult Clinical Companion, Small Animal Emergency and Critical Care*. 2010. Mazzaferro ME. 1st Edition, (Wiley Blackwell)
- *Equine Emergencies Treatment and Procedures*. 2008. Orsini JA and Divers TJ, 3rd Edition, Saunders Elsevier.

VMD 614: Emerging and Re-emerging Animal Diseases (2+0)

Suggested Readings:

- *Veterinary Epidemiology*. 2018. Michael Thrusfield, Robert Christley. Wiley-Blackwell
- *Emerging Diseases of Animals*. 2000. Corrie Brown and Carole Bolin. ASM Press
- *Emerging and Re-emerging Infectious Diseases of Livestock*. 2017. Jagadeesh Bayry. Springer
- *Transboundary and Emerging Diseases of Animals*. 2016. Anna Rovid Spickler, James A Roth, Gayle Brown and Jane Galyon. Center for Food Security and Public Health

VMD 615: Prevention and Control of Infectious Diseases of Ruminants (2+0)

Suggested Readings:

- *Merck's Veterinary Manual K.* 2016. Susan E Aiello and Michael A Moses, 11th Edition, Merck Sharp and Dohme
- *Veterinary Medicine.* 2016. Peter Constable, Kenneth W Hinchcliff, Stanley Done and Walter Gruenberg, 11th Edition. Saunders Ltd.
- *Dairy Herd Health.* 2012. MJ Green and Andrew J Bradley. CABI Publishing
- Research and Review Papers in Current Journals.

Veterinary Microbiology

Suggested Readings:

- AM Lesk. 2002. *Introduction to Bioinformatics.* Oxford University press.
- Abbas AH. Lichtman and S. Pillai. 2017. *Cellular and Molecular Immunology: Functions and Disorders of the Immune System,* 7th Ed., Elsevier.
- B Detrick and RG Hamilton and JH Schimitsz. 2016. *Manual of Molecular and Clinical Laboratory Immunology.* 8th Ed. American Society for Microbiology.
- B Markey, F Leonard, M Archambault, A Cullinane and D Maguire. 2013. *Clinical Veterinary Microbiology* 2nd Ed. MOSBY- Elsevier.
- BD Singh. 2012. *Biotechnology: Expanding Horizons,* 4thEd.Kalyani Pub.
- C Hirsh, NJ MacLachlan and RL Walker. 2004. *Veterinary Microbiology,* 2ndEdn., Wiley- Blackwell Pub.
- CC Kibbler, R Barton, Neil AR Gow, S Howell, DM MacCallum and RJ Manuel. 2018. *Oxford Textbook of Medical Mycology,* 1st Ed., Oxford University Press.
- CM Fraser, T Read and KE Nelson. 2010. *Microbial Genomes (Infectious Disease).* 1st Edition, Humana Press.
- D Balasubramanian, CFA Bryce, K Jayaraman, J Green and K Dharmalingam. 2004.
- *Concepts in Biotechnology,* Revised edition, Universities Press Pub.
- DW Mount. 2001. *Bioinformatics: Sequence and genome analysis.* Cold Spring Harbor, N.Y: Cold Spring Harbor Laboratory Press.
- FA Murphy, EPJ Gibbs, MK Holzmek and MJ Studdert. 1999. *Veterinary Virology.* 3rd Ed. Academic Press.
- GJ Tortora, BR Funke, CL Case, D Weber and W Bair. 2018. *Microbiology: An Introduction,* 13th Ed., Pearson Pub.
- GM Callahan and RM Yates. 2014. *Basic Veterinary Immunology.* 1stEdn., University Press of Colorado.
- JB Carter and VA Saunders. 2013. *Virology: Principles and Applications,* 2nd Ed., John Wiley and Sons Pub.
- J Glenn Songer and KW Post. 2004. *Veterinary Microbiology: Bacterial and Fungal Agents of Animal Diseases.* 1st Ed., Saunders Pub.
- J Punt, S Stranford, P Jones and J Owen. 2019. *Kuby Immunology,* 8th Ed., W.H. Freeman Pub.
- J Willey, K Sandman and D Wood. 2019. *Prescott's Microbiology,* 11thEdn., McGraw-Hill Education Pub.
- J Mestecky, W Strober, MW Russell, H Cheroutre, BN Lambrecht and BL Kelsall. 2015.
- *Mucosal Immunology* 4th Edn., Academic Press.
- JE Coligan, AM Kruisbeek, DH Margulies, EM Shevach and W Strober. 2003. *Current Protocols in Immunology.* 3rd Edn. John Wiley and Sons.
- L Gyles, JF Prescott, J Glenn Songer and CO Thoen. 2010. *Pathogenesis of Bacterial Infections in Animals,* 4thEdn., Wiley-Blackwell Pub.
- MJ Dey and RM Schultz. 2014. *Veterinary Immunology: Principles and Practice,* 2nd Edn., CRC Press/ Taylor and Francis.
- MM Levine, JB Kaper, R Rappuoli, MA Liu and MF Good. 2004. *New Generation Vaccines.* 3rd Ed. Marcel-Dekker.

- NJ Maclachlan and EJ Dubovi. 2016. *Fenner's Veterinary Virology*. 5thEdn., Academic Press.
- PJ Quinn, BK Markey, FC Leonard, P Hartigan, S Fanning and ES Fitzpatrick. 2011. *Veterinary Microbiology and Microbial Disease*, 2nd Ed., Wiley-Blackwell Pub.
- PJ Delves, SJ Martin, DR Burton and IM Roitt. 2017. *Roitt's Essential Immunology* 13th
- R Tizard. 2017. *Veterinary Immunology*, 10thEdn., Saunders Publ.
- S Giguère, JF Prescott and PM Dowling. 2013. *Antimicrobial Therapy in Veterinary Medicine*, 5th Ed., John Wiley and Sons, Inc.
- SJ Flint, V Racaniello, G Rall and A Skalka. 2015. *Principles of Virology*, 4th Edition (2 volume set). ASM press
- S Jameel and L Villarreal. 2000. *Advances in Animal Virology*. Science Pub.
- Samanta. 2015. *Veterinary Mycology*. Springer, India, Private Ltd Pub.
- WJW Morrow, NA Sheikh, CS Schmidt and D Huw Davies. 2012. *Vaccinology: Principles and Practice* 1 edition Wiley-Blackwell.
- TA Brown. 2016. *Gene Cloning and DNA Analysis*. 7th Edition., Wiley Blackwell
- WJ Dodds and R Schulz. 1999. *Veterinary Vaccines and Diagnostics*. Vol. 41 (Advances in Veterinary Medicine) 1st Ed. Academic Press.

Veterinary Pathology

M.V.Sc. in Veterinary Pathology

General Pathology

Suggested Readings:

- McGavin MD and Zachary JF. 2017. *Pathologic Basis of Veterinary Diseases*. 6th Ed. Elsevier.
- Vegad JL. 2007. *Text Book of Veterinary General Pathology*. 2nd Ed. International Book Distr.

Techniques in Pathology

Suggested Readings:

- Culling CFA. 1969. *Handbook of Histological Techniques*. Butterworths.
- Lillie RD. 1965. *Histopathologic Techniques and Practical Histo-chemistry*. 3rd Ed. McGraw- Hill.
- Culling CFA. 2013. *Handbook of Histopathological and Histochemical Techniques: Including Museum Techniques* PDF, eBook (<http://mbooknom.men/go/best.php?id=B01DRY52U8>)

Animal Oncology

Suggested Readings:

- Meuten DJ. 2016. *Tumors in Domestic Animals*. 5th Ed. Wiley-Blackwell

Clinical Pathology

Suggested Readings:

- Amy C. Valenciano, Rick L. Cowell. 2013. *Cowell and Tyler's Diagnostic Cytology and Hematology of the Dog and Cat*, 4th Ed, Elsevier
- Benzamin MM. 1985. *Outline of Veterinary Clinical Pathology*. 3rd Ed. Ludhiana, Kalyani Publishers.
- Coles EH. 1986. *Veterinary Clinical Pathology*. 4th Ed, WB Saunders.
- Douglas J., Weiss, K and Jane Wardrop. 2010. *Schalm's Veterinary Haematology*, Wiley.

Necropsy Procedures and Interpretations

Suggested Readings:

- Albert C Strafuss.1988. *Necropsy: Procedures and Basic Diagnostic Methods for Practicing Veterinarians*, Charles C. Thomas Publisher Springfield
- Benjamin Lucio-Martinez and Jodi A Korich. 2010. *Illustrated guide to Poultry Necropsy and diagnosis*, Cornell University (<https://www.slideshare.net/heshamkotb/illustrated-guideto-poultry-necropsy-and-diagnosis>)
- D Gopala Krishna Rao. 2005. *Textbook on necropsy and histopathological techniques*, 1st Ed. Academia
- Donald B Feldman and John Curtis Seely. 1988. *Necropsy Guide: Rodents and the Rabbit*, 1st Ed. CRC Press
- Gahlot AK, Sharma SN and Tanwar RA. 2003. *Veterinary Jurisprudence*. 5th Ed. NBS Publishers, Bikaner.
- John M King, David C Dodd and Lois Roth. 2006. *The Necropsy Book*, Fifth Edition, C L Davis Foundation
- Jones TC and Gleiser CA. 1954. *Veterinary Necropsy Procedures*. JB Lippincott
- Lincoln PJ and Thomson J. 1998. *Forensic DNA Profiling Protocols*. Humana Press.
- Majó Masferrer, Natàlia, Dolz Pascual, Roser and Shivaprasad HL. 2011. *Atlas of Avian Necropsy: Macroscopic Diagnosis Sampling*, SERVET Publishers
- Rudin N and Inman K. 2002. *An Introduction to Forensic DNA Analysis*. CRC Press

Necropsy Conference

Suggested Readings:

- Grant Maxie. 2015. Jubb, Kennedy & Palmer's *Pathology of Domestic Animals*, 6th Ed. Saunders Ltd.
- Vegad JL and Madhu Swamy. 2010. *A text book of Veterinary Systemic Pathology*, 2nd Ed. Publisher IDBC, Lukhnow

Pathology of Infectious Diseases of Domestic Animals

Suggested Readings:

- Jones TC, Hunt RD & King NW. 1997. *Veterinary Pathology*. Blackwell Publishing.
- Grant Maxie. 2015. Jubb, Kennedy & Palmer's *Pathology of Domestic Animals*, 6th Ed. Saunders Ltd.
- Gary Procop and Bobbi Pritt. 2014. *Pathology of Infectious Diseases*, 1st Ed. Saunders

Toxicopathology

Suggested Readings:

- Jones TC, Hunt RD and King NW. 1997. *Veterinary Pathology*. Blackwell Publishing.

Avian Pathology

Suggested Reading

- Saif YM, Barnes FJ, Glisson JR, Fadly AM, Mc Dougald LR & Swayne D. 2008. *Diseases of Poultry*. 12th Ed. Blackwell Publishing.
- Randall CJ. 1984. *A Colour Atlas of Diseases of the Domestic Fowl and Turkey*, Mosby International.
- Majó Masferrer, Natàlia, Dolz Pascual, Roser and Shivaprasad HL. 2011. *Atlas of Avian Necropsy: Macroscopic Diagnosis Sampling*, SERVET Publishers.
- Benjamin Lucio-Martinez and Jodi A Korich. 2010. *Illustrated guide to Poultry Necropsy and diagnosis*, Cornell University (<https://www.slideshare.net/heshamkotb/illustrated-guideto-poultry-necropsy-and-diagnosis>)

Pathology of Wild/ Zoo and Aquatic Animal Diseases

Suggested Readings:

- Arora BM. 1984. *Wildlife Diseases in India*. Periodical Expert Book Agency.
- Fowler ME. 1978. *Zoo and Wild Animal Medicine*. WB Saunders.
- Roberts RJ. 1979. *Fish Pathology*. Bailliere Tindall, London

Pathology of Laboratory Animal Diseases

Suggested Readings:

- Beninchka K, Garner FM and Jones TC. 1978. *Pathology of Laboratory Animals*. Vols. I, II. Springer Verlag.

Ph.D. in Veterinary Pathology (VPL)

Suggested Readings:

- D Gopala Krishna Rao. 2005. *Textbook on necropsy and histopathological techniques*, 1st Ed. Academa.
- Donald B Feldman, John Curtis Seely. 1988. *Necropsy Guide: Rodents and the Rabbit*, 1st Ed. CRC Press.
- Albert C Strafuss. 1988. *Necropsy: Procedures and Basic Diagnostic Methods for Practicing Veterinarians*, Charles C. Thomas Publisher Springfield.
- Jones TC and Gleiser CA. 1954. *Veterinary Necropsy Procedures*. JB Lippincott.
- John M King, David C Dodd and Lois Roth. 2006. *The Necropsy Book*, Fifth Edition, C L Davis Foundation.
- Majó Masferrer, Natàlia, Dolz Pascual, Roser and Shivaprasad HL. 2011. *Atlas of Avian Necropsy: Macroscopic Diagnosis Sampling*, SERVET Publishers.
- Benjamin Lucio-Martinez and Jodi A Korich. 2010. *Illustrated guide to Poultry Necropsy and diagnosis*, Cornell University (<https://www.slideshare.net/heshamkotb/illustrated-guideto->

List of some selected Journals

- *American Journal of Veterinary Medical Association*
- *Annals of Nutrition and Metabolism*
- *Annual Review of Nutrition*
- *Avian Diseases*
- *Avian Pathology*

- *Cancer Research*
- *Cellular and Molecular Biology*
- *Current Contents*
- *European Journal of Nutrition*
- *Genomics, Proteomics and Bioinformatics*
- *Indian Journal of Animal Sciences*
- *Indian Journal of Poultry Science*
- *Indian Journal of Veterinary Pathology*
- *Indian Veterinary Journal*
- *Journal of Applied Toxicology*
- *Journal of Comparative Pathology*
- *Journal of Ethnopharmacology*
- *Journal of Immunology and Immunopathology*
- *Journal of Pathology*
- *Journal of Research in Veterinary Science*
- *Phytomedicine*
- *Toxicology Letters*
- *Toxicon*
- *Trends in Immunology*
- *Veterinary Bulletin*
- *Veterinary Immunology and Immunopathology*
- *Veterinary Pathology*
- **e-Resources**
- www.iavp.org (Indian Journal of Veterinary Pathology)
- www.vetpathology.org (Veterinary Pathology)
- www.tandf.co.uk (Avian Pathology)
- www.avdi.allenpress.com (Avian Diseases)
- www.elsevier.com/locate/vetimm (Veterinary Immunology and Immuno- pathology).

M.V.Sc. in Veterinary Parasitology

Suggested Readings:

- Abubakar I, Stagg HR, Cohen T and Rodrigues LC. 2016. *Infectious Disease Epidemiology*, 1st Edn, Oxford University Press.
- Alan Gunn and Sarah Jane Pitt. 2012. *Parasitology: An integrated Approach*, 1st Edition, Wiley.
- Angela ER, Taylor and John R Baker. 1968. *In-vitro cultivation of parasites*, 1st Edition, Blackwell Scientific Pub.
- Atkinson CT, Thomas NJ and Hunter DB. 2009. *Parasitic diseases of wild birds*, 1st Edition, John Wiley and Sons, Inc
- Bhatia BB, Pathak KML and Juyal PD. 2014. *Textbook of Veterinary Parasitology*, 3rd Edition, Kalyani Publishers
- Boothroyd JC and Komuniecki R. 1995. *Molecular Approaches to Parasitology*. 1st Edition, Wiley-liss Publication, New York.
- Cohen S and Sadun EH. 1976. *Immunology of Parasitic Infections*, 1st Edition, Blackwell Scientific Publications
- David P Huges, Jacques Brodeur and Frederic Thomas. 2012. *Host manipulation by parasites*, Oxford University Press
- Elizabeth A Zeibeg. 2012. *Clinical Parasitology- A practical approach*. 2nd edition, Elsevier Health Sciences
- GW Krantz and DE Walter. 2009. *A manual of Acarology*, 3rd Edition, Texas Tech University Press
- Hendrix CM and Robinson E. 2017. *Diagnostic Parasitology for Veterinary Technicians*. 5th Edition. St. Louis, Missouri: Elsevier Inc
- Joanne P. 2009. *Advances in Parasitology Natural history of host- parasite interactions-* 1st edition,

Vol 68 Academic Press

- Kennedy MW and Harnett W. 2001. *Parasitic nematodes: molecular biology, biochemistry, immunology*, 2nd Edition, CABI Publishing
- Kettle DS. 1995. *Medical and Veterinary Entomology*, 2nd Edition, CAB International
- Levine ND. 1999. *Veterinary Protozoology*, 1st edition, Wiley-Blackwell
- MA Taylor, RL Coop and RL Wall. 2015. *Veterinary Parasitology*, 3rd Edition, Wiley- Blackwell publishers.
- Marr JJ, Nilsen TW and Komuniecki RW. 2003. *Molecular Medical Parasitology*, 1st Edition, Elsevier
- Mehlhorn H. 2016. *Animal Parasites: Diagnosis, Treatment, Prevention*. 1st Edition, . Springer International Publishing
- Pittaway AR. 1991. *Arthropods of Medical and Veterinary Importance*, 1st Edition, CAB International
- Richard Wall and David Shearer. 1997. *Veterinary Entomology*, 1st Edition, Springer, Dordrecht
- Samuel W, Pybus M and Kocan A. 2001. *Parasitic Diseases of Wild Mammals*, 2nd Edition, Iowa State Univ. Press.
- Smyth JD. 1995. *Introduction to Animal Parasitology*, 3rdEdn., Cambridge University Press
- Soulsby EJL. 1982. *Helminths, Arthropods and Protozoa of Domesticated Animals* 7th Edition, Baillière Tindall, London
- Taylor MA, Coop RL and Wall RL. 2015. *Veterinary Parasitology*, 3rdEdn, Wiley- Blackwell Publishers
- Tibor Kassai. 1999. *Veterinary Helminthology*, 1st Edition, Butterworth-Heinemann publishers
- Urquhart GM, Armour J, Duncan JL, Dunn AM and Jennings FW. 1996. *Veterinary Parasitology*, 2nd Edition, Blackwell Science, London, UK
- Wakelin D. 1996. *Immunity to Parasites*. 2nd Edition, Cambridge University Press
- Walker A. 1994. *Arthropods of Humans and Domestic Animal: A Guide to Preliminary Identification*, 1st Edition, Springer Netherlands
- Zajac AM and Conboy GA. 2012. *Veterinary Clinical Parasitology*, 8th Edition, Wiley-Blackwell.
- Protozoological abstracts
- Advances in Parasitology
- Trends in Parasitology
- Experimental Parasitology

M.V.Sc. in Veterinary Public Health and Epidemiology

Course Title : Concepts in Veterinary Public Health and One Health

Suggested Readings:

- Relevant Research/ Review articles
- Calvin W Schwabe. 1984. *Veterinary Medicine and Human health*. Williams and Wilkins
- Sherikar AT, Bachhil VN and Thapliyal DC. 2013. *Text book of Elements of Veterinary Public Health*, ICAR, Govt. of India.
- Zinsstag J, Schelling E, Waltner-Toews D, Whittaker M and Tanner M. 2015. *One Health: the theory and practice of integrated health approaches*. CABI.

Zoonoses-I

Suggested Readings:

- Bauerfeind R, Graevenitz AV, Kimmig P, Schiefer HG, Schwarz T, Slenczka W and Zahner H. 2016. *Zoonoses: infectious diseases transmissible from animals and humans* (No. Ed. 4). American Society for Microbiology (ASM).
- Mahendra Pal. Zoonoses.
- Narayan KG *Epidemiology, Diagnosis and Management of Zoonoses*.
- Pedro N Acha and Boris Szyfres. *Zoonoses and Communicable Diseases Common to Man and Animals*.
- Seyedmousavi S, De Hoog GS, Guillot J and Verweij PE. 2018. *Emerging and Epizootic Fungal Infections in Animals*. Springereds.

- Thapliyal DC. 1999. *Diseases of animals transmissible to man*. 1st ed. International Book Distributing Company, Lucknow.
- *Zoonoses: Recognition Control and Prevention* (Martin E, Jones EH, Hubbart WT and Hagstard HV)

Zoonoses-II

Suggested Readings:

- Bauerfeind R, Graevenitz AV, Kimmig P, Schiefer HG, Schwarz T, Slenczka W and Zahner H. 2016. *Zoonoses: infectious diseases transmissible from animals and humans* (No. Ed. 4). American Society for Microbiology (ASM).
- Mackie and Mc. Cartney. *Practical Medical Microbiology*.
- Parija SC. *Text book of Medical Parasitology*.
- Pedro N Acha and Boris Szyfres. *Zoonoses and Communicable Diseases Common to Man and Animals*.
- Soulsby JL *Helminthes, Arthropods and Protozoa of Domesticated Animals*.
- Steele JL. *CRC Handbook series in Zoonoses*.
- Thapliyal DC. 1999. *Diseases of animals transmissible to man*. 1st ed. International Book Distributing Company, Lucknow.

Principles of Epidemiology

Suggested Readings:

- Elliot P, Wakefield JC, Best NG and Briggs DJ. 2000. *Spatial Epidemiology: methods and applications*; Oxford University Press.
- Martin SW, Meek AH and Willeberg P. 1986. *Veterinary Epidemiology: Principles and methods*. IOWA State University Press/ Ames, Iowa. USA.
- Pfeiffer D. 1998. *Veterinary Epidemiology. An Introduction. Institute of Veterinary, Animal and Biomedical Sciences*. Massey University, Palmerston, New Zealand.
- Salman M. 2008. *Animal disease surveillance and survey systems: methods and applications*. John Wiley and Sons.
- Thrusfield M. 1995. *Veterinary Epidemiology*: Blackwell Science Ltd. Oxford, UK.

Hygiene and Safety of foods of Animal and Aquatic origin

Suggested Readings:

- FAO (Manual No. 79). *Manual on simple methods of Meat preservation*.
- Marriott NG, Schilling MW and Gravani RB. 2018. *Principles of Food sanitation*; Springer.
- Nollet LM and Toldrá F. 2016. *Safety Analysis of Foods of Animal origin*, CRC Press.ed.
- Norer R. 2016. *Genetic Technology and Food Safety*; Springer International Publishing.
- Wro and Bruno. *Fish Disease and Disorders – Viral Bacterial and Fungal Infections*.

Food-borne Infections and Intoxications

Suggested Readings:

- Cliver DO, Potter M and Riemann HP. 2011. *Food borne Infections and Intoxications*; Elsevier.
- D'Mello JPF. *Food Safety-Contaminants and Toxins*.
- Jay JM, Loessner MJ and Golden DA. 2008. *Modern food microbiology*; Springer Science and Business Media.
- Hubbert WT. *Food Safety and Quality Assurance-Foods of Animal Origin*.
- Vernam AH. 1991. *Food-borne pathogens*; Wolfe Publishing Ltd, London.

Food Safety Standards and Regulations

Suggested Readings:

- Fortin ND. 2016. *Food Regulation: law, science, policy, and practice*. John Wiley and Sons.
- Joint FAO. 2004. *Codex alimentarius: food hygiene basic texts* (No. Ed. 3). Food and Agriculture Organization of the United Nations.

- Josling TE, Roberts D and Orden D. 2004. *Food Regulation and Trade: toward a safe and open global system*; Peterson Institute Press.
- Van Der Meulen and Bernd. 2011. *Private Food Law: Governing food chains through contract law, self-regulation, private standards, audits and certification Schemes*. The Netherlands: Wageningen Academic Publishers.
- Vos E. 1999. *Institutional frameworks of community health and safety legislation: Committees, agencies, and private bodies*. Hart.

Environmental Hygiene and Safety

Suggested Readings:

- Fairman R, Mead CD and Williams WP. 1998. *Environmental risk assessment: approaches, experiences and information sources*.
- Frumkin H. 2016. *Environmental health: from global to local*. John Wiley and Sons.ed.
- Levy BS. 2006. *Occupational and environmental health: recognizing and preventing disease and injury*. Lippincott Williams and Wilkins. ed.
- Linkov I and Ramadan AB. 2004. *Comparative risk assessment and environmental decision making* (Vol. 38). Springer Science and Business Media.Ed.
- Ray M. *Environmental Pollution: Impact of technology on quality of life*.
- Richard B Philp. *Environmental Hazards and Human Health*

Applied Epidemiology

Suggested Readings:

- Brownson RC and Petitti DB. 1998. *Applied Epidemiology: theory to practice*. Oxford University Press.
- Durr PA and Gatrell AC. 2004. *GIS and spatial analysis in veterinary science*. Cabi. Ed.
- Toma B, Dufour B, Sanaa M, Benet JJ, Moutou F, Louza A and Ellis P. 1999. *Applied Veterinary Epidemiology and the control of disease in populations*. 7 Avenue du Général de Gaulle.
- Twisk JW. 2013. *Applied longitudinal data analysis for epidemiology: a practical guide*. Cambridge university press.

Bioterrorism and Disaster Management

Suggested Readings:

- Antosia RE and Cahill JD. 2006. *Handbook of bioterrorism and disaster medicine*. Springer.ed.
- Hodgkinson PE and Stewart M. 1991. *Coping with catastrophe: A handbook of disaster management*. Taylor and Frances/ Routledge.
- Van De Walle B, Turoff M and Hiltz SR. 2014. *Information systems for emergency management*. Routledge.
- Van Oosterom P, Zlatanova S and Fendel E. 2006. *Geo-information for disaster management*. Springer Science and Business Media.Ed.

Laboratory Techniques in Veterinary Public Health

Suggested Readings:

- Bremner A and Jhonston M. *Poultry Meat Hygiene and Inspection*.
- Duncan JR and Prasse KW. 1986. *Veterinary Laboratory Medicine* (No. Ed. 2). Iowa State University Press.
- Garvin ML *Infectious Waste Management-A practical guide*.
- Gradwohl's *Clinical Lab Methods and Diagnosis*.
- Jerome KR. 2016. *Lennette's laboratory diagnosis of viral infections*. CRC (Sonnenwirth and Jarett) Press. ed.
- Prasad J and Neeraj. *Principles and Practice of Animal Health and Hygiene*.
- Rupprecht C and Nagarajan T. 2015. *Current laboratory techniques in rabies diagnosis, research and prevention* (Vol. 2). Academic Press.ed.

Ph.D. in Veterinary Public Health and Epidemiology

Advances in Veterinary Public Health and Epidemiology

Suggested Readings:

- Eldridge BF and Edman JD. eds., 2012. *Medical entomology: A textbook on public health and veterinary problems caused by arthropods*. Springer Science and Business Media
- Noordhuizen, Josephus Pieter Thérèse Maria K Frankena, Michael V Thrusfield and EA M Graat. *Application of quantitative methods in veterinary epidemiology*. Wageningen Pers, 2001.
- Schwabe CW, Riemann HP and Franti CE. 1977. *Epidemiology in veterinary practice*. Lea and Febiger.
- Thrusfield M. 2018. *Veterinary epidemiology*. John Wiley and Sons.

Emerging, Re-emerging Zoonoses and One Health

Suggested Readings:

- Calvin W Schwabe. 1984. *Veterinary Medicine and Human health*. Williams and Wilkins
- Rezza G and Ippolito G. eds. 2017. *Emerging and Re-emerging Viral Infections*. Springer.
- Singh SK. ed. 2015. *Human Emerging and Re-emerging Infections*. John Wiley and Sons.

Advances in Food Safety and Quality Control of Foods of Animal/ Aquatic

Suggested Readings:

- Marriott NG, Schilling MW and Gravani RB. 2018. *Principles of food sanitation*. Springer.
- Nollet LM and Toldrá F. eds., 2016. *Safety analysis of foods of animal origin*. CRC Press
- Paustenbach DJ. ed., 2015. *Human and Ecological Risk Assessment: Theory and Practice* (Wiley Classics Library). John Wiley and Sons.
- Toldrá F and Nollet LM. eds., 2017. *Advances in food diagnostics*. John Wiley and Sons.

Biosecurity and Occupational Health Safety

Suggested Readings:

- Fleming DO and Hunt DL. 2006. *Biological safety: principles and practices* (No. Ed. 4). ASM Press.
- Guillén J. ed. 2017. *Laboratory Animals: Regulations and Recommendations for the Care and Use of Animals in Research*. Academic Press.
- Rabinowitz PM, Lefkowitz RY, Conti LA, Redlich CA and Weigler BJ. 2015. *Occupational health of laboratory animal workers*. In *Laboratory Animal Medicine* (pp. 1381-1402). Academic Press.
- World Health Organization. 2016. *Assessment Tool for Key Processes associated with the Design, Construction, Operation, Maintenance and Regulation of BSL-3 Facilities in the WHO African Region*.

Recent Concepts in Epidemiology and Disease Forecasting

Suggested Readings:

- Beaglehole R, Bonita R and Kjellstrom T. 1993. *Basic Epidemiology*, World Health Organization, Geneva.
- Lilienfeld DE and Stolley P. 1994. *Fundamentals of Epidemiology*, 3rd ed., Oxford University Press, New York
- Noordhuizen JPTM, Frankena K, van der Hoofd CM and Graat EAM: *Application of quantitative methods in Veterinary Epidemiology*. Wageningen Pers, Wageningen, The Netherlands. 1997.
- Raj S Bhopal. 2016. *Concepts of Epidemiology: Integrating the ideas, theories, principles and methods of epidemiology*. 3rd Ed., Oxford University Press. Oxford.

Risk Analysis and Predictive Modelling

Suggested Readings:

- Haas CN, Rose JB and Gerba CP. 1999. *Quantitative microbial risk assessment*. John Wiley and Sons.
- Lelieveld HL, Holah J and Gabric D. eds., 2016. *Handbook of hygiene control in the food industry*. Woodhead Publishing.
- Pastorok RA, Bartell SM, Ferson S and Ginzburg LR. eds., 2016. *Ecological modeling in risk assessment: chemical effects on populations, ecosystems, and landscapes*. CRC Press.
- Subramaniam P and Wareing P. eds., 2016. *The stability and shelf life of food*. Woodhead Publishing.

Advances in Environmental Hygiene

Suggested Readings:

- Curtis SE. 1983. *Environmental management in animal agriculture*. Iowa State University Press.
- Frumkin H. ed., 2016. *Environmental health: from global to local*. John Wiley and Sons.
- Paustenbach DJ. ed., 2015. *Human and Ecological Risk Assessment: Theory and Practice* (Wiley Classics Library). John Wiley and Sons.
- Sparling DW. 2016. *Ecotoxicology essentials: environmental contaminants and their biological effects on animals and plants*. Academic Press.

Herd Health Management and Disease Economics

Suggested Readings:

- Dijkhuizen AA and Morris RS. 1997. *Animal health economics. Postgraduate Foundation in Veterinary Science*, University of Sydney, Sydney, Australia.
- FAO. 2016. *Economic analysis of animal diseases*. FAO Animal Production and Health Guidelines. No. 18. Rome.
- Schwabe CW. 1984. *Veterinary Medicine and Human Health*, Baltimore: Williams and Wilkins
- Rushton, Jonathan. 2009. *The economics of animal health and production*. CABI.

Epidemiology of Trans-boundary, Non-infectious and Chronic Diseases

Suggested Readings:

- Baldock C, Forman T, Geering B and Taylor B. 1999. *New Technologies in the fight against transboundary animal diseases*. In: FAO-Japan Cooperative Project: Collection of Information on Animal Production and Health. Rome, Italy: The Food and Agricultural Organization of the United Nations.
- Fernández PJ and White WR. 2016. *Atlas of transboundary animal diseases*. OIE (World Organisation for Animal Health).
- Martin SW, Meek AH and Willeberg P: *Veterinary epidemiology. Principles and methods*. 1986, IOWA State University Press/ Ames, Iowa, USA
- Noordhuizen JPTM, Frankena K, van der Hoofd CM and Graat EAM: *Application of quantitative methods in veterinary epidemiology*. Wageningen Pers, Wageningen, The Netherlands. 1997.
- Thrusfield M: *Veterinary epidemiology*. 1995. Blackwell Science Ltd. Oxford, UK.

Ecology and Animal/ Human Health

Suggested Readings:

- Norrgren L and Levengood JM. eds., 2012. *Ecology and Animal Health* (No. 2). Baltic University Press.
- Waltner-Toews, David. 2007. *The Chickens Fight Back: Pandemic Panics and Deadly Diseases that Jump from Animals to Humans*. Vancouver: Greystone Books
- World Health Organization. 2013. —*Zoonoses and Veterinary Public Health*. WHO

Diagnostic Approaches in Epidemiology

Suggested Readings:

- Boniolo G and Nathan MJ. eds., 2016. *Philosophy of molecular medicine: Foundational issues in research and practice*. Taylor and Francis.
- Pfeiffer D. 1998. *Veterinary Epidemiology. An Introduction*. Institute of Veterinary, Animal and Biomedical Sciences. Massey University, Palmerston, New Zealand.
- Stites DP, Stobo JD, Fundenberg HH and Wells JV. 1982. *Basic and Clinical Immunology*, 4th Edition. Lange Medical Publications, Los Altos, USA.
- Thrusfield M. 2018. *Veterinary Epidemiology*, John Wiley and Sons.

Surveys, Surveillance and Data Management

Suggested Readings:

- Hawker J, Begg N, Reintjes R, Ekdahl K, Edeghere O and Van Steenberg JE. 2018. *Communicable disease control and health protection handbook*. John Wiley and Sons.
- Salman M. ed., 2008. *Animal disease surveillance and survey systems: methods and applications*. John Wiley and Sons.
- Thrusfield M. *Veterinary epidemiology*. John Wiley and Sons; 2018 Apr 30.

Animal Genetics and Breeding

Suggested Readings:

- Falconer DS and Mackay TFC. 1996. *An Introduction to Quantitative Genetics*. Longman.
- Jain JP. 1982. *Statistical Techniques in Quantitative Genetics*. Tata McGraw-Hill.
- Tomar SS. 1996. *Text Book of Population Genetics*, vol. I. *Qualitative Inheritance*. Universal Publishers.
- Tomar SS. 2010. *Text Book of Animal Breeding*. Universal Publishers.
- Tomar SS. 2014. *Text Book of Population Genetics*, vol II. *Quantitative Inheritance*. Universal Publishers.

Biometrical Genetics I

Suggested Readings:

- Henderson CR. 1984. *Application of Linear Models in Animal Breeding*. University of Guelph Press.
- Mather K and Jinks JL. 1977. *Introduction to Biometrical Genetics*. Chapman and Hall.
- Searle SR. 2014. *Linear Models*. John Wiley and Sons.
- Singh RK and Chaudhary BD. 2012. *Biometrical Methods in Quantitative Genetic Analysis*. Kalyani Publishers.

Conservation of Animal Genetics Resources

Suggested Readings:

- AE, Vij RK and Tantia MS. 2000. *Animal Genetic Resources of Indian Cattle and Buffaloes*. ICAR.
- Oldenbroek K. 2007. *Utilisation and Conservation of Farm Animal Genetic Resources*. WA Publishers.
- Sahai R and Vij RK. 1997. *Domestic Animal Diversity, Conservation and Sustainable Development*. SI Publishers.
- Van Vleck LD, Pollak E and Bltenacu EAB. 1987. *Genetics for Animal Sciences*. WH Freeman.

Cattle and Buffalo Breeding

Suggested Readings:

- Chakravarty AK and Vohra V. 2011. *Sustainable Breeding in Cattle and Buffalo*. Satish Serial Publications.
- Lasley JF. 1972. *Genetics of Livestock Improvement*. IBH.
- Oldenbroek K and van der Waaij L. 2014. *Text book of Animal Breeding and Genetics*. Wageningen University and Research Centre (Free Online).
- Schmidt GM, Van Vleck LD and Hutjens MF. 1988. *Principles of Dairy Science*. WH Freeman.
- Van Vleck LD, Pollak EJ and Bltenacu EAB. 1987. *Genetics for Animal Sciences*. WH Freeman.

Sheep and Goat Breeding

Suggested Readings:

- Jindal SK. 2013. *Goat Production and Health Management*. New India Publishers.
- Karim SA. 2010. *Climate Change and Stress Management: Sheep and Goat Production*. Satish Serial Publications.
- Mulugeta A. 2016. *Sheep and Goat Production Text Book*. Lambert Academic Publishers.
- Prasad J. 2018. *Goat, Sheep and Pig, Production and Management*. Kalyani Publishers.
- Ross CV. 1988. *Sheep Production and Management*. Prentice-Hall.

Poultry Breeding

Suggested Readings:

- Brereton G and Roadnight S. 2000. *21st Century Poultry Breeding*. Gold Cockerel Books.
- Crawford RD. 1990. *Poultry Breeding and Genetics*. Elsevier.
- Hutt FB. 2003. *Genetics of Fowl*. Norton Greek Press.
- Muir WM and Aggrey SE. 2003. *Poultry Genetics, Breeding and Biotechnology*. CABI.
- Singh RP and Kumar J. 1994. *Biometrical Methods in Poultry Breeding*. Kalyani Publishers.

Laboratory Animal and Rabbit Breeding

Suggested Readings:

- Hafez ESE. 1970. *Reproduction and Breeding Techniques for Laboratory Animals*.

- Philadelphia.
- Peter RC, Nephi MP, Steven DL and James IM. 1987. *Rabbit Production*, 6th ed. Vero Media Inc.
- Shinde AK, Swarnkar CP and Naqvi SMK. 2013. *Sheep and Rabbit Production and Utilization Technologies*. CSWRI Publications.
- Sirosis M. 2004. *Laboratory Animal Breeding: Principles and Procedures*. Elsevier.
- Tuffery AA. 1995. *Laboratory Animals: An Introduction for Animal Experimenters*. J Wiley and Sons.
- USDA. 2014. *A Complete Hand Book of Backyard and Commercial Rabbit Production*. Peace Corps (Free Online).
- Van Vleck LD, Pollak EJ and Bltenacu EAB. 1987. *Genetics for Animal Sciences*. WH Freeman.
- Weichbrod RH, Thompson GAH and Norton JN. 2018. *Management of Animal Care and Use Programs in Research, Education, and Testing*, 2nd ed. CRC Press.

Swine Breeding

Suggested Readings:

- ATARI. 2019. *Pig Farming: Promising Agri-business in Punjab*. ATARI-I Publication (Free Online).
- Board E. 2008. *Handbook of Pig Farming*, Engineers India Research Institute Publications.
- Das A, Tamuli AK, Mohan NH and Thomas R. 2013. *Handbook of Pig Husbandry*, Today and Tomorrow Printers.
- Das A, Tamuli, MK, Thomas R and Banik S. 2012. *Scientific Pig Production Practices*, NRC on Pig Publication.
- FAO. 2009. *Farmer's Hand Book on Pig Production*. FAO Publication.
- Oldenbroek K and van der Waaij L. 2014. *Text Book of Animal Breeding and Genetics*. Wageningen University and Research Centre (Free Online).

Course Title : Pet Animal Breeding (Dogs and Cats)

Suggested Readings:

- Battaglia CL. 1990. *Dog Genetics: How to Breed Better Dogs*. TFH Publications.
- Harmer H. 1974. *Dogs and How to Breed Them*, 2nd ed. Gifford Publications.
- Hedberg K. 1992. *The Dog Owner's Manual on Selecting, Raising and Breeding Dogs*. Watermark Press.
- Moore AS. 1981. *Breeding Purebred Cats: A Guide for the Novice and Small Breeder*. Abraxes Publication.
- Robinson R. 1997. *Genetics of Cat Breeders*. Science Direct Publications.
- Vella CM and McGonagle JJ. 1997. *Breeding Pedigreed Cats*. Howell Book House.
- Vella C and Shelton L. 1999. *Genetics for Cat Breeders and Veterinarians*. Elsevier.
- Vine LL. 1977. *Breeding, Whelping and Natal Care of Dogs*. Acro Publication, NY.
- White K. 1980. *Dog Breeding: A Guide to Mating and Whelping*. Bartholomew Publications.

Course Title : Wild Animal Genetics and Breeding

Suggested Readings:

- Devera GK, Katerina VT and Charlotte KB. 2012. *Wild Animals in Captivity: Principles and Techniques of Zoo Management*. University of Chicago Press.
- Kleiman DG, Allen ME, Thompson KV and Lumpkin S. 1997. *Wild Mammals in Captivity- Principles and Techniques*. Chicago Press.
- Linda JS. 2017. *A Field Guide of Tracking Mammals in North East*. Countryman Press.
- Nicholas FW. 1987. *Veterinary Genetics*. Oxford Science Publication.
- Parragon. 2006. *The Encyclopaedia of Wildlife*. Parragon Books Service Ltd.
- Ranjitsinh MK. 2017. *A Life with Wildlife: From Princely India to the Present*, Harper Collins Publications.
- Saha GK and Mazumdar S. 2017. *Wildlife Biology: An Indian Perspective*. PHI Learning Pvt Ltd.

Course Title : Equine Breeding

Suggested Readings:

- Gianola D and Hammond K. 1990. *Advances in Statistical Methods for Genetic Improvement of Livestock*. Springer.
- Gupta SC and Kapur VK. 2014. *Fundamentals of applied statistics*. Sultan Chand and Sons.

- Gupta SC. 2016. *Fundamentals of Statistics*. Himalaya Publishing House Pvt Ltd.
- Pillai SK and Sinha HC. 1968. *Statistical Methods for Biological Workers*. Ram Prasad and Sons.
- Snedecor GW and Cochran WG. 1989. *Statistical Methods*. Wiley India Publications.

Ph.D. in Animal Genetics and Breeding

Molecular Genetics II

Suggested Readings:

- Brown TA. 2006. *Genome 3*. Garland Science Publishers
- Clark DP. 2012. *Molecular Biology*. Academic Cell
- Hugo van den Berg. 2015. *Cell Biology and Molecular Genetics*. IPO Publishers
- Pasternak JJ. 2005. *An Introduction to Human Molecular Genetics: Mechanisms of Inherited Diseases*. Wiley
- Puehler A and Timmis KN. 1984. *Advanced Molecular Genetics*. Springer
- Watson, JD, Tania AB, Bell SP, Gann A, Levine A and Losick R. 2017. *Molecular Biology of the Gene*. Pearson Education Publication

Trends in Animal Breeding

Suggested Readings:

- Brah GS. 2016. *Animal Breeding: Principles and Applications*. Kalyani Publishers.
- Lynch M and Walsh B. 1998. *Genetics and Analysis of Quantitative Traits*. Oxford University Press.
- Morde RA and Thompson R. 2014. *Linear Models for the Prediction of Animal Breeding Values*. CABI.
- Oldenbroek K and van der Waaij L. 2014. *Text book of Animal Breeding and Genetics*. Wageningen University and Research Centre (Free Online).
- Tomar SS. 2010. *Textbook of Animal Breeding*. Universal Publishers.
- Zeggini E and Morris A. 2010. *Analysis of Complex Disease Association Studies*. Academic Press.

Biometrical Genetics II

Suggested Readings:

- Choudhuri S. 2014. *Bioinformatics for Beginners*. Academic Press.
- Daniel S and Daniel G. 2012. *Likelihood, Bayesian, and MCMC Methods in Quantitative Genetics*. Springer.
- Kute N and Shinde G. 2016. *Principles of Biometrical Genetics*. Daya Publications.
- Marther K. 1997. *Biometrical Genetics*. Springer.
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- Pawar IS and Singh S. 2010. *Theory and Application of Biometrical Genetics*. CBS Publications.
- Weller JI. 2016. *Genomic Selection in Animals*. John Wiley and Sons.
- Womack JE. 2012. *Bovine Genomics*. John Wiley and Sons.

Advances in Selection Methodology

Suggested Reading

- Balakrishnan N, Nagaraja HN and Kannan N. 2007. *Advances in Ranking, Multiple Comparisons and Reliability*. Springer.
- Cameron ND. 1997. *Selection Indices and Prediction of Genetic Merit in Animal Breeding*. CABI.
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- Henderson CR. 1984. *Applications of Linear Models in Animal Breeding*. CABI.
- Legarra A, Lourenco DAL and Vitezica ZG. 2018. *Bases for Genomic Prediction*. INRA (Free Online).
- Morde RA and Thompson R. 2014. *Linear Models for the Prediction of Animal Breeding Values*, CABI.

Bioinformatics in Animal Breeding

Suggested Reading

- Attwood TK and Parry-Smith DJ. 2001. *Introduction to Bioinformatics*. Benjamin-Cummings Publishing Company.
- Bishop M. 1999. *Genetics Databases*. Elsevier.

- Jiang R, Zhang X and Zhang MQ. 2013. *Basics of Bioinformatics*. Springer.
- Luke A. 1997. *DNA Sequencing: From Experimental Methods to Bioinformatics*. BIOS Scientific Publishers.
- Ramsden J. 2009. *Bioinformatics: An Introduction*. Springer.
- Stekel D. 2003. *Microarray Bioinformatics*. Cambridge University Press.
- Wu CH and McLarty JW. 2000. *Neural Networks and Genome Informatics*. Elsevier Science.
- Xiong J. 2006. *Essential Bioinformatics*. Cambridge University Press.

Animal Cytogenetics and Immunogenetics II

Suggested Readings:

- Agarwal S and Naik S. 2008. *Fundamentals of Immunogenetics Principles and Practices*. IBD Publisher.
- Christiansen FT and Tait BD. 2012. *Immunogenetics: Methods and Applications in Clinical Practice*. Springer.
- Gersen SL and Keagle MB. 2013. *The Principles of Clinical Cytogenetics*. Springer.
- Litwin SD. 1989. *Human Immunogenetics*. CRC Press.
- Tyagi R. 2009. *Textbook of Cytogenetics*. Discovery Publishers.

Statistical Software in Animal Breeding

Suggested Readings:

- Balding DJ, Bishop M and Cannings C. 2001. *Handbook of Statistical Genetics*. J Wiley and Sons.
- Boldman K, Kriese LA, Van Vleck LD, Van Tassell CP and Kachman SD. 1995. *Manual for Use of MTDFREML*. ARS, USDA (Free online).
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- Isik F, Holland J and Maltecca C. 2017. *Genetic Data Analysis for Plant and Animal Breeding*. Springer.
- Lynch M and Walsh B. 1990. *Genetics and Analysis of Quantitative Traits*. Oxford.

Animal Nutrition

Nutritional Biochemistry

Suggested Readings:

- Cheeke PR and Dierenfeld E. 2010. *Comparative Animal Nutrition and Metabolism*. CAB International.
- D'Mello JPF. 2003. *Amino Acids in Animal Nutrition*, 2nd ed. CAB International.
- Leeson S and Summers JD. 2001. *Scott's Nutrition of The Chicken*, 4th ed. University Books.
- Maynard LA, Loosli JK, Hintz HF and Warner RG. 1987. *Animal Nutrition*. Tata McGraw- Hill.
- McDonald P, Edwards RA, Greenhalgh JFD, Morgan CA, Sinclair LA and Wilkinson RG. 2011. *Animal Nutrition*, 7th ed. Benjamin Cummings.
- Nelson DL and Cox MM. 2017. *Lehninger Principles of Biochemistry*, 7th ed. Macmillan Learning.

Energy and Protein Nutrition

Suggested Readings:

- Blaxter K. 1989. *Energy Metabolism in Animal and Man*. Cambridge University Press.
- Bondi A. 1987. *Animal Nutrition*. Wiley InterScience.
- Cheeke PR and Dierenfeld E. 2010. *Comparative Animal Nutrition and Metabolism*. CAB International.
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- Pond WG, Church DB, Pond KR and Schoknecht PA. 2004. *Basic Animal Nutrition and Feeding*, 5th ed. Wiley.

- Singh UB. 1987. *Advanced Animal Nutrition for Developing Countries*. Indo-Vision.

Minerals and Vitamin Nutrition and Feed Additives

Suggested Readings:

- McDonald P, Edwards RA, Greenhalgh JFD, Morgan CA, Sinclair LA and Wilkinson RG. 2011. *Animal Nutrition*, 7th ed. Benjamin Cummings.
- McDowell RL. 1989. *Vitamins in Animal Nutrition*. Academic Press.
- McDowell RL. 2003. *Minerals in Animal and Human Nutrition*, 2nd ed. Elsevier Science.
- Suttle NF. 2010. *Mineral Nutrition of Livestock*, 4th ed. CAB International.

Feed and Fodder Technology

Suggested Readings:

- Dryden G. 2008. *Animal Nutrition Science*. CAB International.
- Kundu SS, Mahanta SK, Singh S and Pathak PS. 2016. *Animal Feed Technology*. Satish Publishers
- Perry TW, Cullison AE and Lowrey RS. 2003. *Feeds and Feeding*, 6th ed. Pearson.
- Pond WG, Church DB, Pond KR and Schoknecht PA. 2004. *Basic Animal Nutrition and Feeding*, 5th ed. Wiley.
- Schofield EK (Ed.). 2005. *Feed Manufacturing Technology V*. American Feed Industry Association, Arlington.

Ruminant Nutrition

Suggested Readings:

- Church DC. 1988. *The Ruminant Animal: Digestive Physiology and Nutrition*, 2nd ed. Prentice-Hall.
- Dehority BA. 2003. *Rumen Microbiology*. Nottingham University Press.
- D'Mello JPF. 2003. *Amino Acids in Animal Nutrition*, 2nd ed. CAB International.
- Givens D, Axford R and Owen E. (Ed.). 2000. *Forage Evaluation in Ruminant Nutrition*. CAB International.
- Hynd PI. 2019. *Animal Nutrition: From Theory to Practice*. CAB International.
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- Moran J. 2005. *Tropical Dairy Farming: Feeding Management for Small Holder Dairy Farmers in the Humid Tropics*. Landlinks Press
- NRC. 2001. *Nutrient Requirements of Dairy Cattle*, 7th rev. ed. National Research Council. National Academies Press.
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- Pond WG, Church DB, Pond KR and Schoknecht PA. 2004. *Basic Animal Nutrition and Feeding*, 5th ed. Wiley.
- Shirley RL. 2012. *Nitrogen and Energy Nutrition of Ruminants*. Academic Press.
- Van Soest PJ. 1994. *Nutritional Ecology of the Ruminant*. Cornell University Press.

Non-Ruminant Nutrition

Suggested Readings:

- Adamo G and Costanza A (Eds.). *Rabbits Biology, Diet and Eating Habits and Disorders*. Nova Biomedical.
- Cheeke PR. 1987. *Rabbit Feeding and Nutrition*. Academic Press, Inc.
- Chiba LI (Ed.). 2012. *Sustainable Swine Nutrition*. Wiley-Blackwell.
- de Blas C and Wiseman J. (Eds.). 2010. *Nutrition of the Rabbit*, 2nd ed. CAB International.
- D'Mello JPF. 2003. *Amino Acids in Animal Nutrition*, 2nd ed. CAB International.
- Frape D. 2010. *Equine Nutrition and Feeding*, 4th ed. Wiley-Blackwell.
- Hynd PI. 2019. *Animal Nutrition: From Theory to Practice*. CAB International.
- Leeson S and Summers JD. 2009. *Commercial Poultry Nutrition*, 3rd ed. Nottingham University Press.
- Leeson S and Summers JD. 2019. *Scott's Nutrition of The Chicken*, 4th ed. CBS Publishers and Distributors.

- NRC. 2007. *Nutrient Requirements of Horses*, 6th Rev. ed. National Research Council. National Academy Press.
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- NRC. 2012. *Nutrient Requirements of Swine*, 11th Rev. ed. National Research Council. National Academy Press.
- Varga M. 2013. *Textbook of Rabbit Medicine*, 2nd ed. Butterworth-Heinemann.

Research Methodology in Animal Nutrition

Suggested Readings:

- Bate ST and Clark RA. 2014. *The Design and Statistical Analysis of Animal Experiments*. Cambridge University Press.
- Hofmann A and Clokie S (Eds.). *Wilson and Walker's Principles and Techniques of Biochemistry and Molecular Biology*, 8th ed. Cambridge University Press.
- Maynard LA, Loosli JK, Hintz HF and Warner RG. 1987. *Animal Nutrition*. Tata McGraw- Hill.
- McDonald P, Edwards RA, Greenhalgh JFD, Morgan CA, Sinclair LA and Wilkinson RG. 2011. *Animal Nutrition*, 7th ed. Benjamin Cummings.
- Pounis G. 2018. *Analysis in Nutrition Research*. Academic Press.

Companion Animal Nutrition

Suggested Readings:

- Buffington C, Holloway C, Abood S. 2004. *Manual of Veterinary Dietetics*. Elsevier.
- Case LP, Daristotle L, Hayek MG, Raasch MF. 2010. *Canine and Feline Nutrition: A Resource for Companion Animal Professionals*, 3rd ed. Elsevier.
- Case LP. 2005. *The Dog: Its Behavior, Nutrition, and Health*, 2nd ed. Blackwell Publishing.
- McNamara JP. 2013. *Principles of Companion Animal Nutrition*, 2nd ed. Pearson.
- NRC. 2006. *Nutrient Requirements of Dogs and Cats*. National Research Council. National Academy Press.

Nutrition of Laboratory, Wild and Zoo Animals

Suggested Readings:

- Barboza PS, Parker KL and Hume ID. 2008. *Integrative Wildlife Nutrition*. Springer.
- Clemons DJ and Seeman JL. 2011. *The Laboratory Guinea Pig*, 2nd ed. CRC Press/ Taylor and Francis.
- Gordon IJ and Prins HHT. 2008. *The Ecology of Browsing and Grazing*. Springer.
- Lane-Patter W and Pearson AEG. 1971. *The Laboratory Animal: Principles and Practice*, 2nd ed. Academic Press.
- NRC. 1995. *Nutrient Requirements of Laboratory Animals*, 4th rev. ed. National Research Council. National Academy Press.
- NRC. 2003. *Nutrient Requirements of Nonhuman Primates*. National Research Council. National Academy Press.
- NRC. 2011. *Guide for the Care and Use of Laboratory Animals*, 8th ed. National Research Council. National Academy Press.
- Pond WG, Church DB, Pond KR and Schoknecht PA. 2004. *Basic Animal Nutrition and Feeding*, 5th ed. Wiley.
- Robbins C. 1993. *Wildlife Feeding and Nutrition*, 2nd ed. Elsevier.
- Weichbrod RH, Thompson GAH and Norton JN (Eds.). 2018. *Management of Animal Care and Use Programs in Research, Education, and Testing*, 2nd ed. CRC Press/ Taylor and Francis.

Non-Conventional Feed Resources

Suggested Readings:

- Devendra C. 1985. *Non-conventional Feed Resources in Asia and the Pacific*, 2nd ed. APHCA, FAO.
- FAO. 1995. *Tropical Feeds and Feeding Systems*. Proceedings of the First FAO Electronic Conference. Food and Agriculture Organization of the United Nations, Rome.
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- Liner IE. 1980. *Toxic Constituents of Animal Food Stuffs*, 2nd ed. Academic Press.

- Singh UB. 1987. *Advanced Animal Nutrition for Developing Countries*. Indo-Vision.
- Speedy A and Sansoucy R. 1991. *Feeding Dairy Cows in the Tropics*. Food and Agriculture Organization of the United Nations, Rome.

Introductory Clinical Nutrition

Suggested Readings:

- Constable P, Hinchcliff KW, Done S and Gruenberg W. 2016. *Veterinary Medicine*, 11th ed. Saunders Ltd.
- Knight AP and Walter R. 2001. *A Guide to Plant Poisoning of Animals in North America*. Teton NewMedia.
- McDowell RL. 2012. *Nutrition of Grazing Ruminants in Warm Climates*. Academic Press.
- Select articles from Journals

Rumen Biotechnology

Suggested Readings:

- Dehority BA. 2003. *Rumen Microbiology*. Nottingham University Press.
- Dijkstra J, Forbes J and France J. 2005. *Quantitative Aspects of Ruminant Digestion and Metabolism*. CAB International.
- Kebreab E, Dijkstra J, Bannink A, Gerrits W and France J. 2006. *Nutrient Digestion and Utilization in Farm Animals*. CAB International.
- Millen DD, Arrigoni MDB and Pacheco RDL. (Eds.). 2016. *Rumenology*. Springer Nature.
- Van Soest PJ. 1994. *Nutritional Ecology of the Ruminant*. Cornell University Press.

Ph.D. in Animal Nutrition

Modern Concepts in Feeding of Ruminants

Suggested Readings:

- D'Mello JPF. 2003. *Amino Acids in Animal Nutrition*, 2nd ed. CAB International.
- McDonald P, Edwards RA, Greenhalgh JFD, Morgan CA, Sinclair LA and Wilkinson RG. 2011. *Animal Nutrition*, 7th ed. Benjamin Cummings.
- McDowell RL. 2012. *Nutrition of Grazing Ruminants in Warm Climates*. Academic Press.
- NRC. 2001. *Nutrient Requirements of Dairy Cattle*, 7th rev. ed. National Research Council. National Academies Press.
- NRC. 2016. *Nutrient Requirements of Beef Cattle*, 8th rev. ed. National Academies of Sciences, Engineering, and Medicine. National Academies Press.

Forages in Animal Nutrition

Suggested Readings:

- Givens D, Axford R and Owen E. (Ed.). 2000. *Forage Evaluation in Ruminant Nutrition*. CAB International.
- McDowell RL. 2012. *Nutrition of Grazing Ruminants in Warm Climates*. Academic Press.
- Minson D. 1990. *Forage in Ruminant Nutrition*. Academic Press.
- Shirley RL. 2012. *Nitrogen and Energy Nutrition of Ruminants*. Academic Press.

Recent Concepts in Feeding of Non-Ruminants

Suggested Readings:

- Chiba LI (Ed.). 2012. *Sustainable Swine Nutrition*. Wiley-Blackwell.
- D'Mello JPF. 2003. *Amino Acids in Animal Nutrition*, 2nd ed. CAB International.
- Hendriks WH, Verstegen MWA and Babinszky L. (Eds.). 2019. *Poultry and Pig Nutrition: Challenges of the 21st Century*. Wageningen Academic Publishers.
- Leeson S and Summers JD. 2001. *Scott's Nutrition of The Chicken*, 4th ed. University Books.
- Lewis AJ and Southern LL. 2000. *Swine Nutrition*, 2nd ed. CRC Press.

Advances in Rumen Metabolism

Suggested Readings:

- Dehority BA. 2003. *Rumen Microbiology*. Nottingham University Press.
- Dijkstra J, Forbes J and France J. 2005. *Quantitative Aspects of Ruminant Digestion and Metabolism*. CAB International.
- Kebreab E, Dijkstra J, Bannink A, Gerrits W and France J. 2006. *Nutrient Digestion and Utilization in*

Farm Animals. CAB International.

- Millen DD, Arrigoni MDB and Pacheco RDL. (Eds.). 2016. *Rumenology*. Springer Nature.
- Van Soest PJ. 1994. *Nutritional Ecology of the Ruminant*. Cornell University Press.

Advances in Mineral and Vitamin Nutrition

Suggested Readings:

- McDowell RL. 1989. *Vitamins in Animal Nutrition*. Academic Press.
- McDowell LR. 2003. *Minerals in Animal and Human Nutrition*, 2nd ed. Elsevier Science B.V.
- Suttle N. 2010. *The Mineral Nutrition of Livestock*, 4th ed. CAB International.

Advanced Clinical Nutrition

Suggested Readings:

- Cheeke PR and Dierenfeld E. 2010. *Comparative Animal Nutrition and Metabolism*. CAB International.
- Constable P, Hinchcliff KW, Done S and Gruenberg W. 2016. *Veterinary Medicine*, 11th ed. Saunders Ltd.
- Naylor JM and Ralston SL. 1991. *Large Animal Clinical Nutrition*. Mosby Inc.
- Walker S, Beckett G, Rae P and Ashby P. 201. *Clinical Biochemistry: Lecture Notes*, 9th ed. Wiley-Blackwell

Advanced Techniques in Nutritional Research

Suggested Readings:

- Kaneko J, Harvey J, Bruss M.(Eds.) 2008. *Clinical Biochemistry of Domestic Animals*, 6th ed. Academic Press.
- Krishna 2012. *Livestock Nutrition- Analytical Techniques*. New India Publishing Agency.

Advances in Feed Technology

Suggested Readings:

- Langham J. 2013. *Recent Advances in Animal Feed Technology*. Random Exports.
- Moughan PJ and Hendricks WH. (Eds.). 2018. *Feed Evaluation Science*. Academic publishers.
- Perry TW, Cullison AE and Lowrey RS. 2003. *Feeds and Feeding*, 6th ed. Pearson.
- Schofield EK (Ed.). 2005. *Feed Manufacturing Technology V*. American Feed Industry Association, Arlington.

Toxicants and Anti-Metabolites in Animal Nutrition

Suggested Readings:

- Cheeke PR and Shull LR. 1985. *Natural Toxicants in Feeds And Poisonous Plants*. AVI Publishing Company Inc.
- FAO. 2004. *Assessing Quality and Safety of Animal Feeds*. Food and Agriculture Organization of the United Nations, Rome.
- Gremmels JF (Ed.). 2010. *Animal Feed Contamination Effects on Livestock and Food Safety*. Woodhead Publishing Ltd.
- Keeler RF, Van Kampen KR and James LF. 1978. *Effects of Poisonous Plants on Livestock*. Academic Press.
- Knight AP and Walter R. 2001. *A Guide to Plant Poisoning of Animals in North America*. Teton NewMedia.
- Liner IE. 1980. *Toxic Constituents of Animal Food Stuffs*, 2nd ed. Academic Press.
- Osweiler G. (Ed.) 2011. *Ruminant Toxicology. An issue of Veterinary Clinics: Food Animal Practice*. Elsevier.

Nutrigenomics in Animal Nutrition

Suggested Readings:

- Carlberg C, Ulven SM and Molnár F. 2016. *Nutrigenomics*. Springer
- Caterina RDE, Martinez, JA and Kohlmeier M.(Eds.) 2020. *Principles of Nutrigenetics and Nutrigenomics*. Elsevier Inc.
- Dodds JW and Laverdure DR. 2015. *Canine Nutrigenomics - The New Science of Feeding Your Dog for Optimum Health*. Dogwise Publishing.
- Select articles from Journals

Equine Nutrition

Suggested Readings:

- Frape D. 2010. *Equine Nutrition and Feeding*, 4th ed. Wiley-Blackwell.
- Geor R, Harris P and Coenen M (Eds). 2013. *Equine Applied and Clinical Nutrition*. Saunders, Elsevier.
- NRC. 2007. *Nutrient Requirements of Horses*, 6th Rev. ed. National Research Council. National Academy Press.
- Pagan JD. (Ed.). 2009. *Advances in Equine Nutrition IV*. Kentucky Nutrition Research.

M.V.Sc. in Livestock Production and Management

Cattle and Buffalo Production Management

Suggested Readings:

- Arora SP. 1997. *Feeding of Dairy Cattle and Buffaloes*. Kalyani Publication.
- Dutta G. 1994. *Care and Management of Dairy Cattle and Buffaloes*, 3rd ed. ICAR.
- Flanders F and Gillespie J. 2015. *Modern Livestock and Poultry Production*, 9th ed. Delmar Cengage Learning Edition.
- Gupta PR. 2017. *Dairy India-2017*, 7th ed. Dairy India Yearbook, Thomson Press Ltd.
- ICAR. *Livestock Production and Management - ICAR eCourse PDF eBook* (online free).
- Phillips CJC. 2011. *Principles of Cattle Production*. CABI Publishing.
- Sastry NSR. 2016. *Livestock Production Under Diverse Constraints - Indian Experience in its Management*. ISAPM Publication.
- Thomas CK, Sastry NSR and Ravikiran G. 2012. *Dairy Bovine Production*, 2nd ed. Kalyani Publishers.
- Tyler HD and Ensminger ME. 2006. *Dairy Cattle Science*, Pearson Prentice Hall Publishing.
- Selected articles from journals.

Sheep and Goat Production Management

Suggested Readings:

- Bhat PN and Khan BU. 2009. *Goat Production*. Studium Press (India) Pvt. Ltd.
- Bhatt PN and Arora CL. 2009. *Sheep Production*. Studium Press (India) Pvt. Ltd.
- Devendra C and McLeroy GB. 1982. *Goat and Sheep Production in Tropics*. Longman.
- Devendra C and Burns M. 1983. *Goat Production in the Tropics*. CABI Publishing.
- Gupta JL. 2006. *Sheep Production and Management*. BS Publ.
- ICAR. 2014. *Handbook of Animal Husbandry*, 3rd ed. ICAR.
- Jindal SK. 2013. *Goat Production and Health Management*. New India Publishing Agency.
- Kaushik SK. 2017. *Sheep Production*. ICAR Publ.
- Peacock CP. 1996. *Improving Goat Production in the Tropics: A Manual for Development Workers*, OXFam, UK.
- Sastry NSR. 2016. *Livestock Production Under Diverse Constraints - Indian Experience in its Management*. ISAPM Publication.
- Solaiman SG. 2010. *Goat Science and Production*. Wiley-Blackwell.
- Selected articles from journals.

Swine Production Management

Suggested Readings:

- Acharya RM and Puneet Kumar. 2017. *Pig Production*. Satish Serial Publishing, Delhi
- Beyno N. 2014. *Pigs: A Guide to Management*, 2nd ed. Replika Press Ltd.
- Boden E. 1995. *Swine Practice*. WB London.
- ICAR. 2014. *Hand Book of Animal Husbandry*, 3rd ed. ICAR
- Sastry NSR. 2016. *Livestock Production Under Diverse Constraints - Indian Experience in its Management*. ISAPM Publication.
- Sharda DP. 2000. *Swine Production*. ICAR publication

Climatology and Livestock Production

Suggested Readings:

- Collier RJ and Collier JL. 2012. *Environment Physiology of Livestock*. Wiley-Blackwell Co.

- Lal DS. 1998. *Climatology*. Sharda Pustak Bhavan, Allahabad.
- McDowell RE. 1972. *Improvement of Livestock Production in Warm Climates*. WH Freeman.
- Payne WJ and Wilson RT. 1999. *An Introduction to Animal Husbandry in the Tropics*. Blackwell Publishing, USA.
- Rainwater MCF. 1962. *Animal Climatology*. Indian Veterinary Research Institute, Izatnagar.
- Sejian V, Gaughan J, Baumgard L and Prasad C. 2015. *Climate Change Impact on Livestock: Adaptation and Mitigation*, 5th ed. Springer.
- Siddhartha K and Roger B. 1996. *Atmosphere, Weather and Climate*. ELBS.
- *Selected articles from journals.*

Behaviour and Welfare of Farm Animals

Suggested Readings:

- Agarwal VK. 2013. *Animal Behaviour* (Ethology) S. Chand and Company
- Albright JL and Arave CW. 1997. *The Behaviour of Cattle*. CAB International.
- Arora MP. 1995. *Animal Behaviour*. WB London.
- Benson BJ and Rollin BE. 2004. *The Well-being of Farm Animals: Challenges and Solutions*. Blackwell Publishing, USA.
- Bouenger EG. 1994. *Animal Behaviour*. WB London.
- Broom DM and Fraser AF. 2007 *Domestic Animal Behaviour and Welfare*, 4th ed. CABI.
- Fraser AF and Broom DM. 1990. *Farm Animal Behaviour and Welfare*. CAB international
- Hafez ESE. 1969. *The Behaviour of Domestic Animals*, 2nd ed. Balliere, Tindall and Cassell.
- Houpt KA. 2018. *Domestic Animal Behavior for Veterinarians and Animal Scientists*. 6th ed. Wiley Blackwell.
- Kumar V. 1996. *Animal Behaviour*. WB London.
- Selected articles from journals.

Equine Production Management

Suggested Readings:

- Blanchard T, Varner D, Love C, Brinsko S, Rigby R and Schumacher J. 2002. *Manual of Equine Reproduction*. Mosby.
- Brown JH and Powell-Smith V. 1984. *Horse and Stable Management*. Blackwell Science.
- Frape D. 1986. *Equine Nutrition and Feeding*. Blackwell.
- Kacker RN and Panwar BS. 1996. *Text Book of Equine Husbandry*. Vikas Publ.
- Mills DS and Nankervis KJ. 1998. *Equine Behaviour: Principles and Practice*. Blackwell.
- Panwar BS and Yadav KN. 2010. *Equine Husbandry and Equestrian Sports*. IBDC Publishers.
- Pilliner S. 1994. *Care of the Competition Horse*. BT Batsford.
- Rose RJ and Hodgson DR. 2000. *Manual of Equine Practice*. WB Saunders.

Companion Animal Production Management

Suggested Readings:

- Case LP, Daristotle L, Hayek MG and Raasch MF. 2011. *Canine and Feline Nutrition: A Resource for Companion Animal Professionals*. 3rd ed. Mosby Elsevier Publishing.
- Chakrabarti A. 2006. *Train Your Dog: At Work and Show*, 2nd ed. Kalyani Publishers.
- Chakrabarti A. 2014. *Dogs their Care and Treatment*, 4th ed. Kalyani Publishers.
- Sharma MC, Pathak NN and Bhat PN. 1993. *Dogs, Breeding, Nutrition, Diagnosis, and Health Management*. CBS Publishers and Distributors.
- Smith FWK. 2012. *Veterinary Medical Guide to Dog and Cat Breeds*. Teton New Media, NY.

Farm Hygiene and Waste Management

Suggested Readings:

- Baba MD. 2007. *Environmental Changes and Natural Disasters*. New India Publ.
- Overcash MR. 1983. *Livestock Waste Management*. CRC Press.
- Thapliyal DC and Misra DS. 1996. *Fundamentals of Animal Hygiene and Epidemiology*. International Book Distr. Co.

Integrated Livestock Farming Systems

Suggested Readings:

- Ghosh B. 2007. *Integrating Crops and Livestock*, 1st ed. Gene-Tech Books.
- Little DC and Edwards P. 2003. *Integrated Livestock-fish Farming Systems*. FAO.
- Mukherjee TK, Moi PS, Panandam JM and Yang YS. (Eds.) 1992. *Integrated Livestock Fish Production Systems*. FAO/ IPT Workshop on Integrated Livestock-Fish Production Systems, University of Malaya, Kuala Lumpur.
- Raman KV and Balaguru T. (Eds.). 1992. *Farming Systems Research in India: Strategies for Implementation*. NAARM, Hyderabad.
- Rana SS. 2015. *Recent Advances in Integrated Farming Systems*. CSK HPKV, Palampur.
- Rangasamy A and Annadurai K. 2002. *Farming System in the Tropics*. Kalyani Publishers.
- Renard C. (Ed.). 1997. *Crop Residues in Sustainable Mixed Crop/ Livestock Farming Systems*. CABI.
- Speirs M and Opsen O. 1992. *Indigenous Integrated Farming System in the Sahel*. World Bank.
- Sunil Kumar and DR Palsaniya DR and Kiran Kumar T. 2017. *Farming systems: Issues and Strategies*. Satish Serial Publishing, New Delhi.
- Selected articles from journals.

Management and Conservation of Wild and Zoo Animals

Suggested Readings:

- Agrawal KC. 2000. *Wildlife of India: Conservation and Management*. Nidhi Publishers.
- Berwick SH and Saharia VB. (Eds.). 1995. *The Development of International Principles and Practices of Wildlife Research and Management*. Oxford University Press.
- Bobbins CT. 1983. *Wildlife Feeding and Nutrition*. Daya Publ. House.
- Giles RH, Jr. 1978. *Wildlife Management*. WH Freeman.
- Giles RH, Jr. 1984. *Wildlife Management Techniques*, 3rd ed. Wildlife Society, Washington, DC.
- Hosetti BB. 2005. *Concepts in Wildlife Management*, 2nd ed. Daya Publ. House.
- Saha GK and Mazumdar S. 2017. *Wildlife Biology: an Indian Perspective*. PHI Learning Pvt. Ltd.
- Santra AK. 2008. *Handbook on Wild and Zoo Animals: A Treatise for Students of Veterinary, Zoology, Forestry and Environmental Science*. International Book Distributing Co.
- Sinclair ARE, Fryxel JM and Caughley G. 2006. *Wildlife Ecology, Conservation and Management*, 2nd ed. Blackwell.
- Singh SK. 2005. *Text Book of Wildlife Management*. International Book Distributing Co.
- Wildlife (Protection) Act 1972 (as amended up to 1991). Natraj Publ.
- Selected articles from journals.

Laboratory Animal Production Management

Suggested Readings:

- Anonymous. 1993. *Rabbit Management*. IBH and Oxford
- Banday MT, Shrivastava HP and Hamdani H. 2014. *Rabbit Production and Management*. New India Publishing Agency.
- Chakrabarti A and Biswas S. 2014. *Rabbit Health and Production*. Kalyani Publishers.
- Hau J and Van Hoosier GL, Jr. 2002. *Handbook of Laboratory Animal Science*, 2nd ed. CRC Press.
- ICAR. 2014. *Hand Book of Animal Husbandry*, 3rd ed. ICAR, New Delhi.
- NRC. 2011. *Committee for the Update of the Guide for the Care and Use of Laboratory Animals. Guide for the Care and Use of Laboratory Animals*, 8th ed. National Research Council, National Academy Press, Washington, DC.
- Rao TKS, Chauhan IS and Chauhan A. 2018. *Handbook of Laboratory Animal Production Management*. Kalyani Publishers.
- Reddy DV. 2007. *Applied Nutrition: (Livestock, Poultry, Human, Pet, Rabbit and Laboratory Animal Nutrition)*. IBH and Oxford.
- Ronald N and Penman S. 1991. *A Manual for Small Scale Rabbit Production*. South Asia Publ.
- Sastry NSR. 2016. *Livestock Production Under Diverse Constraints - Indian Experience in its Management*. ISAPM Publication.
- Selected articles from journals.

Livestock Business Management

Suggested Readings:

- Acharya RM and Kumar P. 2013. *Dairy Production and Business Management*. Satish Serial Publishing, New Delhi.
- Bardhan D. 2013. *Textbook on Livestock Economics, Marketing and Business*. Satish Serial Publishing House.
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- Das N. 2009. *Forage for Sustainable Livestock*. Satish Serial Publishing House.
- Gangadhar KS. 2009. *Livestock Economics: Marketing, Business Management and Accountancy*. New India Publishing Agency.
- George RP and Raj Kamal PJ. 2015. *Farm Economics, Entrepreneurship and Marketing*. Satish Serial Publishing, New Delhi.
- Kahan D. 2008. *Economics for Farm Management Extension*. FAO, Rome.
- Koontz H and O'Donnel C. 1999. *Essentials of Management*. Tata McGraw Hill.
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- Maheswari SN. 1998. *Management Accounting*. Tata McGraw Hill.
- Massie JL. 1995. *Essential of Management*. Prentice Hall of India.
- Moran J. 2009. *Business Management for Tropical Dairy Farmers*. Land Links Publishing.
- Srinivasan NP. 1998. *Management Accounting*. Sterling Publications.
- Selected articles from journals.

Livestock Farm Machinery Management

Suggested Readings:

- Kutz M. 2007. *Handbook of Farm, Dairy, and Food Machinery*. William Andrew Inc.
- Malhotra K. 2012. *Handbook of Farm, Dairy, and Food Machinery*. Centrum Press.
- Selected articles from journals.

Poultry Farm and Hatchery Management

Suggested Readings:

- Ensminger ME. 1992. *Poultry Science*. International Book Distr. Co.
- Hued LM. 2003. *Modern Poultry Farming*. Greenworld.
- Powell-Owen W. 2008. *Poultry Farming and Keeping*. Daya Books.
- Prasad J. 2005. *Poultry Production and Management*. Kalyani Publication
- Singh RA. 1996. *Poultry Production*. 3rd ed. Kalyani Publication

Ph.D. in Livestock Production and Management

Recent Developments in Large Ruminants Production Management

Suggested Readings:

- Clarence HE. 2007. *Dairy Cattle and Milk Production*. Daya Publ. House.
- Moran J and Chamberlain P. 2017. *Blueprints For Tropical Dairy Farming: Milk Production in Developing Countries*. CSIRPO Publishing.
- Moran J. 2013. *Tropical Dairy Farming: Feeding Management for Small Holder Dairy Farmers in the Humid Tropics*. Landlinks Press.
- Singh U, Kumar S, Kumar A, Deb R and Sharma A. 2013. *Advances in Cattle Research*. Satish Serial Publishing House, New Delhi.
- Thomas CK, Sastry NSR and Ravi Kiran. 2012. *Dairy Bovine Production*, 2nd ed. Kalyani Publishers.

Recent Developments in Small Ruminants Production Management

Suggested Readings:

- Devendra C and McLeroy GB. 1983. *Goat and Sheep Production in the Tropics*. Agrodok.
- Gupta JL. 2006. *Sheep Production and Management*. CBS.
- Jansen C and van den Burg K. 2004. *Goat Production in the Tropics*. 4th ed. © Agromisa Foundation, Wageningen.
- Karim SA. 2008. *Small Ruminant Production in India*. Satish Serial Publishing, New Delhi.
- Sastry NSR. 2016. *Livestock Production Under Diverse Constraints - Indian Experience in its Management*. ISAPM Publication.

- Selected articles from journals

Recent Developments in Swine Production Management

Suggested Readings:

- Katingi E. 2012. *Raising Pigs – Manuals and Other Useful Resources*. ICARDA and ILRI Publications.
- <https://livestockfish.cgiar.org/2012/06/13/raising-pigs-manuals-and-other-useful-resources/>
- Selected articles from journals.

Livestock and Environment Suggested Reading

Suggested Readings:

- Cheeke PR. 1993. *Impacts of Livestock Production on Society, Diet/ health, and the Environment*. Interstate Publishers.
- FAO. 2009. *Livestock in the Balance*, FAO, Rome.
- ICAR. 2014. *Handbook of Animal Husbandry*. ICAR, New Delhi.
- Mudgal VD, Singhal KK and Sharma DD. 2003. *Advances in Dairy Animal Production*, 2nd ed. International Book Distributing Co.
- Sastry NSR. 2016. *Livestock Production Under Diverse Constraints - Indian Experience in its Management*. ISAPM Publication.
- Sejain V, Naqvi SMK, Ezeji T, Lakritz J and Lal R. 2012. *Environmental Stress and Amelioration in Livestock Production*. Springer
- Sirohi SK, Walli TK, Singh B and Singh N. 2013. *Livestock Greenhouse Gas: Emissions and Options For Mitigation*. Satish Serial Publishing, New Delhi.
- Selected articles from journals

Organic Livestock Production

Suggested Readings:

- Balasubramaniam R, Balakrishnan K and Sivasubramaniam K. 2013. *Principles and Practices of Organic Farming*. Satish Serial Publishing House, New Delhi.
- ICAR. 2014. *Handbook of Animal Husbandry*. ICAR, New Delhi.
- Paajanen T. 2011. *The Complete Guide to Organic Livestock Farming*. Atlantic Publishing Group Inc.
- Katherine M. 2009 *The Organic Dairy Handbook*. Northeast Organic Farming Association.
- Sastry NSR. 2016. *Livestock Production Under Diverse Constraints - Indian Experience in its Management*. ISAPM Publication.
- Singh M, Sharma DK and Mishra UK. 2011. *Organic Dairy Farming*. Satish Serial Publishing House, New Delhi.
- Selected articles from journals

Recent Developments in Welfare of Farm Animals

Suggested Readings:

- George RP and Raj Kamal PJ. 2015. *Farm Economics, Entrepreneurship and Marketing*. Satish Serial Publishing, New Delhi.
- Kahan D. 2012. *Entrepreneurship in Farming*. FAO, Rome.
- Zama MMS, Rashid M and Kumar S. 2014. *Handbook of Livestock Entrepreneurship*. Narendra Publishing House.
- *Selected articles from journals.*

Precision Livestock Farming

Suggested Readings:

- Halachmi I. 2015. *Precision Livestock Farming Applications*. Wageningen Academic Pub.
- Sastry NSR. 2016. *Livestock Production Under Diverse Constraints - Indian Experience in its Management*. ISAPM Publication.
- *Selected articles from journals.*

Recent Developments in Poultry Production Management

Suggested Readings:

- DAHD. 2015. *Poultry Farm Manual: A Reference Guide for Central and State Poultry Farms*. 2014-15. Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture and Farmers

Welfare, Government of India.

- FAO. 2003. Live bird marketing. In: *Egg Marketing - A Guide for the Production and Sale of Eggs*. <http://www.fao.org/3/Y4628E/y4628e09.htm#bm9>
- Sreenivasaiah PV. 2006. *Scientific Poultry Production: A Unique Encyclopaedia*. International Book Distribution Co. *Selected articles from journals*.

M.V.Sc. in Livestock Products Technology

Abattoir Practices and Meat Plant Operations

Suggested Readings:

- Collins DS and Huey RJ. 2015. *Gracey's Meat Hygiene*, 11th Ed. John Wiley and Sons Ltd., UK.
- Jensen WK, Devine C and Dikeman M. 2004. *Encyclopaedia of Meat Sciences* Vol. I, II and III, 1st ed. Elsevier Academic Press, UK.
- Kerry J, Kerry J and Ledward D. 2005. *Meat Processing- Improving Quality*. Woodhead Publishing Ltd., UK.
- Sahoo J, Sharma DK and Chatli M. 2011. *Practical Handbook on Meat Science and Technology*, 1st ed., Daya Publishing House.
- Swatland HJ. 2004. *Meat Cuts and Muscle Foods*. Nottingham Univ. Press.
- Warriss P. 2010. *Meat Science: An Introductory Text*, 2nd ed. Oxford Press.

Fresh Meat Technology

Suggested Readings:

- Aberle ED, Forest JC, Gerrard DE and Mills E. 2013. *Principles of Meat Science*, 5th ed., Kendall Hunt Publishing Company, IOWA.
- Bender A. 1992. *Meat and Meat Products in Human Nutrition in Developing Countries*. FAO, Rome.
- Carlson CW, Greaser ML and Jones KW. 2001. *The Meat We Eat*, 14th ed. Interstate Publishers, INC.
- Jensen WK, Devine C and Dikeman M. 2004. *Encyclopaedia of Meat Sciences* Vol. I, II and III, 1st ed. Elsevier Academic Press, UK.
- Lawrie RA and Ledward DA. 2006. *Lawrie's Meat Science*, 7th ed. Woodhead Publishing Limited, Cambridge, England.
- Pearson AM. 1994. *Quality Attributes and their Measurement in Meat, Poultry and Fish Products*. Springer, New York.
- Swatland HJ. 2004. *Meat Cuts and Muscle Foods*. Nottingham University Press.

Processing and Preservation of Meat

Suggested Readings:

- Aberle ED, Forest JC, Gerrard DE and Mills E. 2013. *Principles of Meat Science*, 5th ed. Kendall Hunt Publishing Company, Iowa.
- Amerine MA, Pangborn RM and Roessler EB. 1965. *Principles of Sensory Evaluation of Food*. Academic Press, New York.
- Barbut S. 2005. *Poultry Products Technology*. CRC Press.
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- Lawless HT and Heymann H. 2010. *Sensory Evaluation of Food - Principles and Practices*, 2nd ed, Springer-Verlag, New York Inc.
- Mountney GJ and Parkhurst CR. 2017. *Poultry Products Technology*, 3rd ed. Food Products Press, New York.
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- Sharma BD, Wani S and Sharma N. 1997. *Sensory Evaluation Manual for Meat and Meat Products*. IVRI Publication.
- Toldrá F. 2010. *Handbook of Meat Processing*. Wiley-Blackwell.

Processing of Milk and Milk Products

Suggested Readings:

- Aneja RP, Mathur BN, Banerjee AK and Chandan RC. 2002. *Technology of Indian Milk Products*. Dairy India.

- Chandan RC, Kilara A and Shah NP. 2008. *Dairy Processing and Quality Assurance*, 1st ed. Willey–Blackwell.
- Davis JG. 2010. *Milk Testing: A Laboratory Control of Milk*. Agribios.
- MIF. 2005. *Analysis of Milk and its Products: A lab Manual*, 2nd ed. Milk Industries Foundation. Biotech Books, Delhi
- Singh S. 2014. *Dairy Technology*, Vol. 1 and 2. New India Publishing Agency.
- Spreer E. 1993. *Milk and Dairy Products*. Marcel Dekker.
- Varnam AH and Sutherland JP. 1994. *Milk and Milk Products Technology*. Chapman and Hall, UK.
- Walstra P, Wouters JTM and Geurts, TJ. 2006. *Dairy Science and Technology*, 2nd ed. Taylor and Francis Group.
- Web BH, Johnson AH and Alford JA. 1987. *Fundamental of Dairy Chemistry*, 3rd ed. Westport AVI Publ.

Packaging and Marketing of Livestock Products

Suggested Readings:

- Aberle ED, Forrest JC, Gerrard DE and Mills EW. 2013. *Principles of Meat Science*, 5th ed. Kendall Hunt Publishing Company, Iowa.
- Fuquay JW, Fox PF and McSweeney PLH. 2011. *Encyclopaedia of Dairy Sciences*, 2nd ed. Elsevier Academic Press, UK.
- Jensen WK, Devine C and Dikeman M. 2004. *Encyclopaedia of Meat Sciences*, Vol. I, II and III, 1st ed., Elsevier Academic Press, UK.
- Robertson GC. 2012. *Food Packaging- Principles and Practices*, 3rd ed. CRC Press.
- *Selected Articles from Journals*.

Microbiology and Quality Control of Livestock Products

Suggested Readings:

- Aberle ED, Forrest JC, Gerrard DE and Mills EW. 2013. *Principles of Meat Science*, 5th ed. Kendall Hunt Publishing Company, Iowa.
- Bell C, Neaves P and Williams AP. 2005. *Food Microbiology and Laboratory Practices*, 1st ed. Blackwell Publishing.
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- Jay JM, Loessner MJ and Golden DA. 2006. *Modern Food Microbiology*, 7th ed. Springer.
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- Kerry J, Kerry J and Ledward D. 2005. *Meat Processing-Improving Quality*. Woodhead Publishing Ltd., UK.
- Pearson AM and Dutson TR. 1995. *Quality Attributes and their Measurement in Meat, Poultry and Fish Products*. Aspen Publishers, Inc, Maryland, USA.

Slaughterhouse By-products Technology

Suggested Readings:

- Aberle ED, Forrest JC, Gerrard DE and Mills EW. 2013. *Principles of Meat Science*, 5th ed. Kendall Hunt Publishing Company, Iowa.
- Jensen WK, Devine C and Dikeman M. 2004. *Encyclopaedia of Meat Sciences*, Vol. I, II and III, 1st ed., Elsevier Academic Press, UK.
- Mann I. 1962. *Animal By-products: Processing and Utilization*. FAO, Rome. Ockerman HW and Hansen CL. 1999. *Animal By-product Processing and Utilization*. CRC Press.

Egg and Egg Products Technology

Suggested Readings:

- Romanoff AL and Romanoff AJ. 1949. *Avian Egg*. John Wiley and Sons.
- Stadelman WL and Cotterill OJ. 2002. *Egg Science and Technology*, 4th ed. CBS.

Market Milk Processing and Dairy Plant Practices

Suggested Readings:

- FAO. 2013. *Milk and Dairy Products in Human Nutrition*. FAO, Rome.
- Fuquay JW, Fox PF and McSweeney PLH. 2011. *Encyclopaedia of Dairy Sciences*, 2nd ed. Elsevier Academic Press, UK.
- Walstra P, Wouters JTM and Geurts, TJ. 2006. *Dairy Science and Technology*, 2nd ed., Taylor and Francis Group.

Processing and Marketing of Wool

Suggested Readings:

- Bergen WV. 1963. *Wool Hand Book*, Vols. I and II. Interscience.
- Houck MM. 2009. *Identification of Textile Fibres*. Woodhead Publishing Limited, Cambridge, England.
- Johnson NAG and Russell IM. 2009. *Advances in Wool Technology*. Woodhead Publishing Limited, Cambridge, England.

M.Sc. Horticulture

FSC 501 Tropical Fruit Production

- Holbrooke M. 2022. *Handbook of Horticulture: Principles and Practices*. Bookfort, Turkey.
- Vanangamudi K. 2023. *A Handbook of Horticultural Sciences Volume 01: Principles and Practices of Horticulture and Fruit Science*, NIPA publications, New Delhi.
- Walia U. 2023. *Modern Techniques in Crop Management*. NIPA publications, New Delhi
- Bose TK, Mitra SK and Sadhu MK. 1991. *Propagation of Tropical and Subtropical Horticultural Crops*. Naya Prokash, Kolkatta.
- Davies FT, Geneve RL and Wilson SB. 2018. *Hartmann and Kester's Plant Propagation-Principles and Practices*. Pearson, USA/ PrenticeHall of India. New Delhi.
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- Jain S and Ishil K. 2003. *Micropropagation of Woody Trees and Fruits*. Springer.
- Jain S and Hoggmann H. 2007. *Protocols for Micropropagation of Woody Trees and Fruits*. Springer.
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- Peter KV, eds. 2008. *Basics of Horticulture*. New India Publishing Agency, New Delhi.
- Rajan S and Baby LM. 2007. *Propagation of Horticultural Crops*. NIPA, New Delhi.
- Sharma RR. 2014. *Propagation of Horticultural Crops*. Kalyani Publishers, New Delhi.
- Sharma RR and Srivastav M. 2004. *Propagation and Nursery Management*. Intl. Book Publishing Co., Lucknow.
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- Singh RS. 2014. *Propagation of Horticultural Plants: Arid and Semi-Arid Regions*. NIPA, New Delhi.
- Tyagi S. 2019. *Hi-Tech Horticulture*. Vol I: *Crop Improvement, Nursery and Rootstock Management*. NIPA, New Delhi

FSC 504 Breeding of Fruit Crops

- Ryler C. 2022. *Advances in Biotechnology of Fruit and Nut Crops*. Educo Publisher, Canada.
- Ram HH. 2023. *Principles of Plant Breeding*. NIPA publications, New Delhi
- Ram HH. 2023. *Principles of Plant Breeding*. NIPA publications, New Delhi
- Abraham Z. 2017. *Fruit Breeding*. Agri-Horti Press, New Delhi.
- Badenes ML and Byrne DH. 2012. *Fruit Breeding*. Springer Science, New York.
- Dinesh MR. 2015. *Fruit Breeding*, New India Publishing Agency, New Delhi.
- Ghosh SN, Verma MK and Thakur A. 2018. *Temperate Fruit Crop Breeding- Domestication to Cultivar Development*. NIPA, New Delhi.
- Hancock JF. 2008. *Temperate Fruit Crop Breeding: Germplasm to Genomics*. Springer Science, New York.
- Jain SN and Priyadarshan PM. 2009. *Breeding Plantation and Tree Crops: Tropical Species*. Springer Science, New York.
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- Ray PK. 2002. *Breeding Tropical and Subtropical Fruits*. Narosa Publ. House, New Delhi.

FSC 505 Systematics of Fruit Crops

- Ryler C. 2022. *Advances in Biotechnology of Fruit and Nut Crops*. Educo Publisher, Canada.
- Ram HH. 2023. *Principles of Plant Breeding*. NIPA publications, New Delhi
- Sharma PC. 2023. *Horticultural Crops Practical and Theoretical Aspects: Series on Value Addition of Agricultural Produce (Vol-2)*. NIPA publications, New Delhi
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- Pareek OP and Sharma S. 2017. *Systematic Pomology*. Scientific Publishers, Jodhpur.
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- Zielinski QB. 1955. *Modern Systematic Pomology*. Wm. C. Brown Co., Iowa, USA

FSC 506 Canopy Management of Fruit Crops

Suggested Readings:

- Watson A. 2022. *Advances in Agronomy of Tropical Fruit and Vegetable Crops*, Bookfort, Turkey.
- Singh N, Sharma DP and Sankhyan N. 2023. *Basic Concept in Fruit Science*. NIPA publications, New Delhi
- Holbrooke M. 2022. *Handbook of Horticulture: Principles and Practices*. Bookfort, Turkey.
- Vanangamudi K. 2023. *A Handbook of Horticultural Sciences Volume 01: Principles and Practices of Horticulture and Fruit Science*, NIPA publications, New Delhi.
- Bakshi JC, Uppal DK and Khajuria HN. 1988. *The Pruning of Fruit Trees and Vines*. Kalyani Publishers, New Delhi.
- Chadha KL and Shikhamany SD. 1999. *The Grape, Improvement, Production and Post Harvest Management*. Malhotra Publishing House, Delhi.
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- Pradeep kumar T. 2008. *Management of Horticultural Crops*. NIPA, New Delhi.
- Singh G. 2010. *Practical Manual on Canopy Management in Fruit Crops*. Dept. of Agriculture and Co-operation, Ministry of Agriculture (GoI), New Delhi.
- Srivastava KK. 2012. *Canopy Management in Fruits*. ICAR, New Delhi

FSC 507 Growth and Development of Fruit Crops

• Suggested Readings:

- Haldavanekar P. 2023. *Basic Concepts in Horticulture*. NIPA publications, New Delhi
- Singh V. 2023. *Biodiversity: Concepts, Crisis and Conservation*. NIPA publications, New Delhi
- Prasad MVR. 2023. *Dryland Agriculture*. NIPA publications, New Delhi
- Bhatnagar P. 2017. *Physiology of Growth and Development of Horticultural Crops*. Agrobios (India).
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- Prakash M. 2013. *Nutritional Disorders in Fruit Crops: Diagnosis and Management*. NIPA, New Delhi.
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- Westerman RL. 1990. *Soil Testing and Plant Analysis*, 3rd Ed. Soil Science Society of America, Inc., Madison, WI.
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FSC 509 Biotechnology of Fruit Crops

- Ryler C. 2022. *Advances in Biotechnology of Fruit and Nut Crops*. Educo Publisher, Canada.
- Vanangamudi K. 2023. *A Handbook of Horticultural Sciences Volume 01: Principles and Practices of Horticulture and Fruit Science*. NIPA publications, New Delhi.
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- Keshavachandran R and Peter KV. 2008. *Plant Biotechnology: Tissue Culture and Gene Transfer*. Orient & Longman, Universal Press, US.
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- Parthasarathy VA, Bose TK, Deka PC, Das P, Mitra SK and Mohanadas S. 2001. *Biotechnology of Horticultural Crops*. Vols. I–III. Naya Prokash, Kolkata.
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FSC 510 Organic Fruit Culture

Suggested Readings:

- Krasteva J. 2022. *Farming and Gardening of Vegetable and Fruits*. Bookfort, Turkey.
- Prasad MVR. 2023. *Dryland Agriculture*. NIPA publications, New Delhi
- Claude A. 2004. *The Organic Farming Sourcebook*. Other India Press, Mapusa, Goa, India.
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- Deshpande MS. 2003. *Organic Farming with respect to Cosmic Farming*. Mrs. Pushpa Mohan Deshpandey, Kolhapur, Maharashtra.
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FSC 511 Export Oriented Fruit Production

Suggested Readings:

- Vanangamudi K. 2023. *A Handbook of Horticultural Sciences Volume 01: Principles and Practices of Horticulture and Fruit Science*. NIPA publications, New Delhi.
- Walia U. 2023. *Modern Techniques in Crop Management*. NIPA publications, New Delhi
- Singh N, Sharma DP and Sankhyan N. 2023. *Basic Concept in Fruit Science*. NIPA publications, New Delhi
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- Islam, C.N. 1990. *Horticultural Export of Developing Countries: Past Preferences, Future Prospects and Policies*. International Institute of Food Policy Research, USA.

FSC 512 Climate Change and Fruit Crops

Suggested Readings:

- Haldavanekar P. 2023. *Basic Concepts in Horticulture*. NIPA publications, New Delhi
- Singh V. 2023. *Biodiversity: Concepts, Crisis and Conservation*. NIPA publications, New Delhi
- Prasad MVR. 2023. *Dryland Agriculture*. NIPA publications, New Delhi
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- Dhillon WS and Aulakh PS. 2011. *Impact of Climate Change in Fruit Production*. Narendra Publishing House, New Delhi.
- Peter KV. 2008. *Basics in Horticulture*. New India Publishing Agency, New Delhi.
- Ramirez F and Kallarackal J. 2015. *Responses of Fruit Trees to Global Climate Change*. Spinger- Verlag.
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- Rao GSLHV, Rao GGSN, Rao VUM and Ramakrishnan YS. 2008. *Climate Change and Agriculture over India*. ICAR, New Delhi.
- Schafer B and Anderson P. 1994. *Handbook of Environmental Physiology of Fruit Crops*. Vol. 1 & 2. CRC Press. USA.

FSC 513 Minoor Fruit Production

Suggested Readings:

- Holbrooke M. 2022. *Handbook of Horticulture: Principles and Practices*. Bookfort, Turkey.
- Vanangamudi K. 2023. *A Handbook of Horticultural Sciences Volume 01: Principles and Practices of Horticulture and Fruit Science*. NIPA publications, New Delhi.
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SAF 513 Nutrient and Weed Management in Oduction Forestry

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Masters of Fisheries Science (M.F.Sc.)

M.F.Sc. Aquaculture

AQC 501

SUSTAINABLE AQUACULTURE

2+1

Suggested Readings

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- **Suggested Readings**

AQC 502 SOIL AND WATER QUALITY MANAGEMENT IN AQUACULTURE 2+1

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AQC 503

NUTRITION AND FEED TECHNOLOGY

2+1

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AQC 504 AQUATIC ANIMAL HEALTH MANAGEMENT

2+1

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AQC 505 SEED PRODUCTION AND HATCHERY OF FINFISHES

2+1

▪ Suggested Readings

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AQC 506

**SEED PRODUCTION AND HATCHERY
MANAGEMENT OF SHELLFISHES**

1+1

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AQC 507

APPLIED GENETICS IN AQUACULTURE

2+1

▪ **Suggested Readings**

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AQC 508

NON-FOOD AQUACULTURE

1+1

▪ **Suggested Readings**

- Saxena A. (Ed.). 2003. *Aquarium Management*. Daya Publ.
- ICAR. 2006. *Handbook of Fisheries and Aquaculture*.
- Axelrod HR & Vorderwinkler W. 1978. *Encyclopaedia of Tropical Fishes*. TFH Publ.
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AQC 509

COASTAL AQUACULTURE

2+1

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- Bardach EJ, Rhyther JH & Mc Larney WO. 1972. *Aquaculture the Farming and Husbandry of Freshwater and Marine Organisms*. John Wiley & Sons.
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- Shepherd J & Bromage N. 1990. *Intensive Fish Farming*. B.S.P. Professional Books.

AQC 510

FRESHWATER AQUACULTURE

2+1

○ **Suggested Readings**

- K K Marx, J K Sundaray, A Rathipriya and M Mathuabishzag. 2019. *Broodstock Management and Quality Fish Seed Production in Freshwater Fishes*, HB Narendra Publishing House.
- D Sarma and Neetu Shahi. 2020. *Coldwater Fisheries and Aquaculture*, Narendra Publishing House
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AQC 511 LARVAL NUTRITION AND CULTURE OF FISH FOOD ORGANISMS 1+1

○ **Suggested Readings**

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AQC 512

AQUACULTURE ENGINEERING

2+1

○ **Suggested Readings**

- John Wiley & Sons. Ivar LO. 2007. *Aquaculture Engineering*. Daya Publ. House.
- A K Verma and M. H. Chandrakanth. 2018. *Aquacultural Engineering: Principles & Practices*, HB Narendra Publishing House.
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M.F.Sc. Fishereis Resource Management

FRM 501

INLAND FISHERIES RESOURCES

2+1

▪ **Suggested Readings**

- N Jayakumar, B Ahilan and S Felix. 2019. *Inland Fisheries*, Narendra Publishing House
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- Jhingran VG & Sehgal KL. 1978. *Cold Water Fisheries of India*. J. Inland. Fish. Soc. India. Sp. Publ.
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FRM 502

MARINE FISHERIES RESOURCE MANAGEMENT 2+1

▪ **Suggested Readings**

- Chandra P. 2007. *Fishery Conservation, Management and Development*. SBS Publ.
- Dholakia AD. 2004. *Fisheries and Aquatic Resources of India*. Daya Publ. House.
- Peter BM & Joseph JC. Jr. 2000. *Fishes- An Introduction to Ichthyology*. 4th Ed. Prentice Hall.
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FRM 503

MARINE ECOSYSTEMS, BIODIVERSITY AND CONSERVATION

2+1

▪ **Suggested Readings**

- Duxbury AC, Duxbury AB & Sverdrup KA. 2000. *An Introduction to the World's Oceans*. 6th Ed. McGraw Hill.
- Castro P & Huber ME. 1997. *Marine Biology*. 2nd Ed. Mc-Graw Hill.
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- Gross G. 1993. *Oceanography: A View of the Earth*. 6th Ed. Prentice Hall.
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- Sverdrup HV, Johnson MW & Fleming RH. 1959. *The Oceans - Their Physics, Chemistry and General Biology*. Prentice Hall.

FRM 504

TROPICAL FISH STOCK ASSESSMENT

2+1

○ **Suggested Readings**

- Beverton RJH & Holt SJ. 2004. *On the Dynamics of Exploited Fish Population*. The Blackburn Press.
- Callucci VG, Saila SB, Gustafson DJ & Rothschild BJ. 1996. *Stock Assessment, Quantitative Methods and Applications for Small Scale Fisheries*. Lewis Publ.
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- Sparre P & Venema SC. 1998. *Introduction to Tropical Fish Stock Assessment*. Part 1 Manual. FAO. Fisheries Tech. Paper No. 301, Rome.

FRM 505

FISHERIES REGULATIONS

2+1

Suggested Readings

- Anon. 1998. *Maritime Law of India in the International Context*. Bhadarkar Publ.
- Henkin L, Pugh RC & Smit H. 1993. *International Law: Cases and Materials*. West Publ. Co.
- Brahtz JFP. 1972. *Coastal Zone Management*. U.N. International Economic and Social Affairs, New York.
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- Sinha RK. (Ed.). 1996. *Marine Resources and Applicable Laws* (World Environmental Series - 009). Commonwealth Publ.
- Verghese CP. 1989. *Fishing Regulation in India's Territorial Waters*. World Fishing.

● **FRM 506** **REMOTE SENSING AND GIS FOR FISHERIES** **1+1 MANAGEMENT**

● **Suggested Readings**

- Valavanis VD. 2002. *GIS System in Oceanography and Fisheries*. Taylor & Francis.
- Decker D. 2000. *GIS Data Sources*. Riley & Sons.
- Jeff Thurston Thomas K Poiker & J Patrick Moore. 2000. *Integrated Geospatial Technology - A Guide to GPS, GIS and Data Logging*. John Wiley & Sons.
- Kraak MJ & Ferjan O. 2003. *Cartography, Visualization of Spatial Data*. Prentice Hall.
- Meaden GJ & Kaptisky JM. 1991. *Geographical Information Systems and Remote Sensing in Inland Fisheries and Aquaculture*. FAO Fisheries Tech. Paper No. 318, Rome.
- Patel AN & Singh S. 1992. *Remote Sensing – Principles and Applications*. Scientific Publ.

FRM 507 **INTEGRATED COASTAL ZONE MANAGEMENT** **2+1**

○ **Suggested Readings**

- David S & Jeremy P. 2001. *Inshore Fisheries Management. Methods and Technologies in Fish Biology and Fisheries*. Vol. II. Kluwer.
- Khanna BK. 2000. *All You Wanted to Know About Disasters*. New India Publ. Agency.
- Brahtz JFP. 1972. *Coastal Zone Management*. U. N. Department of International Economic and Social Affairs, New York.
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- *Coastal Area Management and Development*. 1982 U. N. Department of International Economic and Social Affairs, New York.

FRM 508 **AQUATIC FLORAL RESOURCES** **2+1**

○ **Suggested Readings**

- Chaudhuri AB. 2007. *Biodiversity of Mangroves*. Daya Publ. House.
- Richmond A. (Ed.). 2004. *Handbook of Microalgal Culture*. Blackwell.
- Chapman VJ & Chapman DJ. 1980. *Seaweeds and Their Uses*. Chapman & Hall.
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● **FRM 509 FEEDING AND REPRODUCTIVE BIOLOGY OF FINFISH 2+1**

● **Suggested Readings**

- A K Jaiswar and S K Chakraborty. 2018. *Methods in Fishery Biology*, Narendra Publishing House
- Maria JR, Augustine A &. Kapoor BG. 2006. *Fish Reproduction*. Science Publ.
- Adiyodi KG & Adiyodi RG. 2000. *Reproductive Biology of Invertebrates: Vol. X. Part B. Progress in Developmental Endocrinology*. John Wiley & Sons.
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● **FRM 510 DEVELOPMENTAL BIOLOGY OF FINFISH AND SHELLFISH 2+1**

● **Suggested Readings**

- Jobling M. 1995. *Environmental Biology of Fishes*. Chapman & Hall. Khan SA, Raffi SM & Lyla PS. 2003. *Larvae of Decapod Crustaceans*.
 - Centre of Advanced Study in Marine Biology, Parangipettai, Tamil Nadu.
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● **FRM 511 FISHING AND ALLIED TECHNOLOGIES 2+1**

● **Suggested Readings**

- K. P. Biswas, 2013. *Advance in Fishing Technology*, Daya Publishing House.
- John S. 1996. *Commercial Fishing Methods - An Introduction to Vessels and Gear*. Fishing News Books.
- Duncan A. 1980. *A Fisherman's Guide to Ecosounding and Sonar Equipment. Acoustic Fish Detection Instruments*. University of Rhode Island. Marine Bull. 41.
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- **Suggested Readings**

- Dr. Gopal Krishna, 2019. Application of Fish Taxonomy and Tools for Identification of Fishes, ICAR –Central Institute of Fisheries Education, Mumbai.
- FAO. 2000. *DNA Based Molecular Diagnostic Techniques*.
- Cooksey K. 1997. *Molecular Approaches to the Study of the Oceans*. Chapman & Hall.
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- Whitmore DH. 1990. *Electrophoretic and Isoelectric Focusing Techniques in Fisheries Management*. CRC Press.