REFERENCE BOOKS FOR 3RD AND 5TH SEMESTER STUDENTS
DEPARTMENT OF MATHEMATICS
SUKANTA MAHAVIDYALAYA

3RD SEMESTER HCC

HCC–V: THEORY OF REAL FUNCTIONS AND INTRODUCTION TO METRIC SPACE

REFERENCE BOOKS:

1.R.Bartle and Sherbert, Introduction to Real Analysis, John Wiley and Sons,2003.
2.T.Apostol, Mathematical Analysis, Narosa Publishing House.
3.W.Rudin, Principles Mathematical Analysis ,Tata McGraw-Hill.
4.S.K.Mapa, Introduction To Real Analysis, Sarat Book Distributors.
5.S.C Malik and Savita Arora, Mathematical Analysis, New Age International Publishers.
6.Satish Shirali, and Harkrisha L. Vasudev, Metric Spaces, Spinger Verlag,London,2006.
7.Pawan K. Jain and Khalil Ahmed ,Metric Spaces, Narosa Publishing House.
8.Joydeep Sengupta,Metric Spaces,U.N.DHUR & SONS PRIVATE LTD.

HCC VI : GROUP THEORY 1

REFERENCE BOOKS:

1.John B. Fraleigh, A First Course in Abstract Algebra, 7th Ed., Pearson, 2002.
2.Joseph A. Gallian, Contemporary Abstract Algebra, 4th Ed., Narosa Publishing House, New Delhi, 1999.
3.I. N. Herstein, Topics in Algebra, Wiley Eastern Limited, India, 1975.
4.D. S. Malik, John M. Mordeson and M. K. Sen, Fundamentals of Abstract Algebra, Mc.Graw-Hill.
5.M.K.Sen ,Shamik Ghosh,Parthasarathi Mukhopadhyay,Topic in Abstract Algebra,edition,Universities Press.
6. .S.K.Mapa,Higher Algebra,Abstract and Linear,Sarat Book Distributors.

HCC- VII : RIEMANN INTEGRATION AND SERIES OF FUNCTIONS

REFERENCE BOOKS:

1.K. A. Ross, Elementary Analysis, The Theory of Calculus, Undergraduate Texts in Mathematics, Springer (SIE), Indian reprint, 2004.
2.R. G. Bartle D. R. Sherbert, Introduction to Real Analysis, 3rd Ed., John Wiley and Sons (Asia) Pvt. Ltd., Singapore, 2002.
3.Charles G. Denlinger, Elements of Real Analysis, Jones & Bartlett (Student Edition), 2011.
4.Santi Narayan, Integral calculus.
5.T. Apostol, Calculus I, II.
6.S.K.Mapa,Introduction To Real Analysis,Sarat Book Distributors.
7.Mainak Mukharjee,A Course in Real Analysis, Narosa Publishing House.

SE-I: LOGIC AND SETS

REFERENCE BOOKS:

1.R.P. Grimaldi, Discrete Mathematics and Combinatorial Mathematics, Pearson Education, 1998.
2.P.R. Halmos, Naive Set Theory, Springer, 1974.
3.J K Sharma ,Discrete Mathematics,Trinity Press.

OR

SE-I: C++

REFERENCE BOOKS:

1.D. Parasons, Object Oriented Programming with C++, BPB Publication.
2.BjarneStroustrup, The C++ Programming Language, 3rd Ed., Addison Welsley.
3.E. Balaguruswami, Object Oriented Programming In C++, Tata McGrawHill
4.Herbert Scildt, C++, The Complete Reference, Tata McGrawHill.

3rd SEMESTER DSC

DSC, Paper-3: REAL ANALYSIS

REFERENCE BOOKS:

1.R.Bartle and Sherbert,Introduction to Real Analysis,John Wiley and Sons,2003.
2.T.Apostol,Mathematical Analysis,NarosaPublishingHouse.
3.W.Rudin,Principles Mathematical Analysis ,Tata McGraw-Hill.
4.S.K.Mapa,Introduction To Real Analysis,Sarat Book Distributors.
5.S.C Malik and Savita Arora,Mathematical Analysis,New Age International Publishers.

SEC SEM-3 Paper-1: LOGIC AND SETS

REFERENCE BOOKS:

1.R.P. Grimaldi, Discrete Mathematics and Combinatorial Mathematics, Pearson Education, 1998.
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3rd SEMESTER GE

MATPGE2: Algebra

REFERENCE BOOKS:

1.Titu Andreescu and Dorin Andrica, Complex Numbers from A to Z, Birkhauser, 2006
2.K. B. Dutta, Matrix and linear algebra.
3.K. Hoffman, R. Kunze, Linear algebra.
4.W. S. Burnstine and A. W. Panton, Theory of equations.
5.S.K.Mapa,Classical Algebra,Higher Algebra,Abstract and Linear,Sarat Book Distributors.

5th SEMESTER HCC

HCC-XI: GROUP THEORY II

REFERENCE BOOKS:

1.John B. Fraleigh, A First Course in Abstract Algebra, 7th Ed., Pearson, 2002.
2.Joseph A. Gallian, Contemporary Abstract Algebra, 4th Ed., Narosa Publishing House, New Delhi, 1999.
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HCC-XII –:NUMERICAL METHODS

REFERENCE BOOKS:

1.Brian Bradie, A Friendly Introduction to Numerical Analysis, Pearson Education, India, 2007.
2.M.K. Jain, S.R.K. Iyengar and R.K. Jain, Numerical Methods for Scientific and Engineering Computation, 6th Ed., New age International Publisher, India, 2007.
3.C.F. Gerald and P.O. Wheatley, Applied Numerical Analysis, Pearson Education, India, 2008.
4.Uri M. Ascher and Chen Greif, A First Course in Numerical Methods, 7th Ed., PHI Learning Private Limited, 2013.
5.John H. Mathews and Kurtis D. Fink, Numerical Methods using Matlab, 4th Ed., PHI Learning Private Limited, 2012.
6.Atkinson, K. E., An Introduction to Numerical Analysis, John Wiley and Sons, 1978.
7.S.A.Mollah,Numerical Analysis and Computational Procedure,Books and Allied(P) Ltd.
8.Yashavant Kanetkar, Let Us C , BPB Publications

****NUMERICAL METHODS LAB (INTERNAL)

DSE-I: PROBABILITY & STATISTICS

REFERENCE BOOKS:

1.Robert V. Hogg, Joseph W. McKean and Allen T. Craig, Introduction to Mathematical Statistics, Pearson Education, Asia, 2007.
2.Sheldon Ross, Introduction to Probability Models, 9th Ed., Academic Press, Indian Reprint, 2007.
3.Alexander M. Mood, Franklin A. Graybill and Duane C. Boes, Introduction to the Theory of Statistics, 3rd Ed., Tata McGraw- Hill, Reprint 2007.
4.A. Gupta, Ground work of Mathematical Probability and Statistics, Academic publishers.
5.A.banerjee,S.K. de and S.sen,Mathematical Probability, U.N.DHUR & SONS PRIVATE LTD.

OR

DSE-I: LINEAR PROGRAMMING

REFERENCE BOOKS:

1.Mokhtar S. Bazaraa, John J. Jarvis and Hanif D. Sherali, Linear Programming and Network Flows, 2nd Ed., John Wiley and Sons, India, 2004.
2.F.S. Hillier and G.J. Lieberman, Introduction to Operations Research, 9th Ed., Tata McGraw Hill, Singapore, 2009.
3.Hamdy A. Taha, Operations Research, An Introduction, 8th Ed., Prentice-Hall India, 2006.
4.G. Hadley, Linear Programming, Narosa Publishing House, New Delhi, 2002.
5.P.M.Karak.Linear Programming and Theory of Game,New Central Book Agency(P)Ltd.

DSE-II: NUMBER THEORY

REFERENCE BOOKS:

1.Elements of Number Theory, John Stillwell, springer, 2003.
2.An introduction to theory of numbers, Niven and Zuckerman, Wiley 1991.
3.David M. Burton, Elementary Number Theory, 6th Ed., Tata McGraw-Hill, Indian reprint, 2007.
4.Neville Robinns, Beginning Number Theory, 2nd Ed., Narosa Publishing House Pvt. Ltd., Delhi, 2007.

5.Ajay Kr. Chaudhuri,Introduction to Number Theory, New Central Book Agency(P)Ltd.

OR

DSE-II: MECHANICS

REFERENCE BOOKS:

1. Loney, S. L., An Elementary Treatise on the Dynamics of particle and of Rigid Bodies, Loney Press.
2. Loney, S. L., Elements of Statics and Dynamics I and II.
3. Ghosh, M. C, Analytical Statics.
4. Verma, R. S., A Textbook on Statics, Pothishala, 1962.
5. Matiur Rahman, Md., Statics.
6. Ramsey, A. S., Dynamics (Part I).

5th SEMESTER DSC

DSE Paper 1: Group Theory and Linear Algebra.

REFERENCE BOOKS:

1.D. S. Malik, John M. Mordeson and M. K. Sen, Fundamentals of abstract algebra,Mc.Graw-Hill
2.M.K.Sen ,Shamik Ghosh,Parthasarathi Mukhopadhyay,Topic in Abstract Algebra,edition,Universities Press.
3.S.K.Mapa,Higher Algebra,Abstract and Linear,Sarat Book Distributors.

SEC SEM 5 Paper 1: Probability and Statistics

REFERENCE BOOKS:

1.Robert V. Hogg, Joseph W. McKean and Allen T. Craig, Introduction to Mathematical Statistics, Pearson Education, Asia, 2007.
2.Sheldon Ross, Introduction to Probability Models, 9th Ed., Academic Press, Indian Reprint, 2007.
3.Alexander M. Mood, Franklin A. Graybill and Duane C. Boes, Introduction to the Theory of Statistics, 3rd Ed., Tata McGraw- Hill, Reprint 2007.
4.A. Gupta, Ground work of Mathematical Probability and Statistics, Academic publishers.
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OR

SEC SEM 5 Paper 1: Differential Geometry

REFERENCE BOOKS:

1.T.J. Willmore, An Introduction to Differential Geometry, Dover Publications, 2012.
2.B. O'Neill, Elementary Differential Geometry, 2nd Ed., Academic Press, 2006.
3.C.E. Weatherburn, Differential Geometry of Three Dimensions, Cambridge University Press2003.
4.D.J. Struik, Lectures on Classical Differential Geometry, Dover Publications, 1988.
5.S. Lang, Fundamentals of Differential Geometry, Springer, 1999.
6.B. Spain, Tensor Calculus: A Concise Course, Dover Publications, 2003