

# बिलासपुर विश्वविद्यालय, बिलासपुर (छत्तीसगढ़)

BILASPUR VISHWAVIDYALAYA, BILASPUR (CHHATTISGARH)

(Esiablished by Chrattisgarh Legislative Assembly Act No. 07 of 2012) पुराना हाईकोर्ट भटन, गांधी बौक के पास, बिलासपुर (छ.ग.) 495001 फोन : 07752—220031,220032,220033 फैक्स 07752—260294

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क्र *9.7.0/* परीक्षा / 2017 प्रति

बिलासपुर, दिनांक 23/01/2017

प्राचार्य.

रमस्त सम्बद्ध महाविद्यालय,

बिलासपुर विश्वविद्यालय, बिलासपुर (छ.ग.)

विषय:- बी.ए. / बी.एससी. में निर्धारित समूह के अनुसर विषयों का चयन करने बावत।

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विषयांतर्गत सत्र 2016—17 में बिलासपुर विश्वविद्यालय की स्नातक स्तर पर बी.ए. एवं बी. रू एससी. प्रथम वर्ष, द्वितीय वर्ष में अध्ययनरत नियमित/स्वाध्यायी/मूतपूर्व परीक्षार्थियों से निर्धारित पाठ्यक्रमानुसार/विषय समूह के अनुसार ही विषयों का चयन करना अनिवार्य है।

बी.ए. भाग-01 में संलग्न अध्यादेश की कंडिका (6) B के अनुसार 6 विषय समूह में से, किन्ही 3 विषय समूह का चयन करना है तथा चयन किये गये विषय समूह में से प्रत्येक समूह से केवल एक विषय का चयन करना है अर्थात केवल 3 विषयों का चयन करना है। अनिवार्य विषय - हिन्दी भाषा, अंग्रेजी भाषा एवं पर्यावरण अध्ययन है। (अध्यादेश की प्रति संलग्न है।)

बीएस सी भाग—01 में संलग्न अध्यादेश की कंडिका (c) ii ने उल्लेखित विषय सनूह के अनुसार केवल एक विषय समूह का चयन करना अनिवार्य है। अनिवार्य विषय — हिन्दी भाषा, अंग्रेजी भाषा एवं पर्यावरण अध्ययन है। (अध्यादेश की प्रति संलग्न है।)

स्नातक स्तर में हितीय एवं तृतीय वर्ष में विषय समूह / विषय में परिवर्तन मान्य नहीं होगा। अर्थात् जिस विषय समूह / विषयों का चयन स्नातक स्तर के प्रथम वर्ष में किया गया है, केवल उसी विषय समूह / विषयों का अध्ययन / चयन स्नातक स्तर के द्वितीय एवं तृतीय वर्ष में करते हुए परीक्षा में सम्मिलित होना अनिवार्य है।

अतः अनुरोध है कि उपरोक्त अध्यादेश के प्रावधानानुसार नियमित / स्वाध्यायी परीक्षार्थियों के परीक्षा आवेदन विश्वविद्यालय को अग्रेषित करना सुनिश्चित करें। अन्यथा की स्थिति में परीक्षार्थियों को विश्वविद्यालय द्वारा परीक्षा में सम्मिलित होने से विचित किया जा सकता है। कृपया इस पत्र की एक प्रति महाविद्यालय की सूचना पटल पर परीक्षार्थियों की जानकारी हेतु चस्प करावें एवं परीक्षार्थियों को सूचित करें।

संलग्न :- बी.ए. संशोधित अध्यादेश क्र. 11(पृष्ठ 1-2)

वी. एससी. संशोधित अध्यादेश क्र. 21(पृष्ठ 3-4)

सहायक कुलसचिव (परीक्षा) बिलासपुर विश्वविद्यालय, बिलासपुर (छ.ग.) बिलासपुर, दिनांक 23/01/2017

आदेशानुसार

पृ. क. 971/परीक्षा / 2017

प्रतिलिपि:--

1. माननीय कुलपति / कुलसचिव जी के सादर अवलोकनार्थ एवं सूचनार्थ।

2. सहायक कुलसचिव (अकादमी / गोपनीय), बिलासपुर विश्वविद्यालय, बिलासपुर को सूचनार्थ।

 अनुमाग अधिकारी/कक्ष अधीक्षक/कक्ष प्रभारी (अळादमी/गोपनीय/परीक्षा) को सूधनार्थ एवं आवश्यक कार्यदाही हेत् प्रस्तुत।

4 संपादक / संवाददाता, दैनिक .......समाचार पत्र को इरा अनुरोध के साथ सूचनार्थ कि छात्रहित में इस विज्ञप्ति को अपने समाचार पत्र में समाचार वृत्त के रूप में नि:शुल्क प्रकाशित करने का कष्ट करें।

सहायक कुलसचिव (परीक्षा)

#### REVISED ORDINANCE NO.11

(As per State U.G.C. Scheme)

#### BACHELOR OF ARTS

1. The three year course have been broken up in to three Parts.

Part-I Examination : at the end of the first year.

Part-II Examination : at the end of the second year and

Part-III Examination : at the end of the third year.

- A candidate who after passing (10+2) or intermediate examination of C.G. Board of Secondary Education, C.G. or any other examination recognised by the University or C.G. Board of Secondary Education as equivalent thereto, has attended a regular course of study in an affiliated college or in the Teaching Department of the University for one academic year shall be eligible for appearing at the B.A. Part-I examination.
- 3. A candidate who after passing B.A. Part-I examination of the University or any other examination recognised by the University as equivalent thereto has attended a regular course of study for one academic year in an affiliated college or in the Teaching Department of the University shall be eligible for appearing at the B.A. Part II Examination.
- 4. A candidate who after passing B.A. Part II examination of the University has completed a regular course of study for one academic year in an affiliated college or in the Teaching Department of the University shall be eligible for appearing at the B.A. Part-III examination.
- 5. Besides regular students, subject to fheir compliance with this ordinance, ex-students and non-collegiate candidates shall be eligible for admission to the examination as per provisions of Ordinance N. 6 relating to Examinations (General). Provided that non-collegiate candidates shall be permitted to offer only such subjects/papers as are taught to the regular students at any of the University Teaching Department or College.
- 6. Every candidate for the Bachelor of arts examination shall be examined in :
  - A. Foundation Course :
    - i) Group A Hindi Language
    - ii) Group B English Language
  - B. Three course subjects : One subject from any three group out of the followings six groups :
    - 1. Sociology / Ancient Indian Histroy / Anthropology
    - 2. Political Science/Home Science / Drawing & Painting / Vocational Course.
    - 3. Hindi Literature/ Sanskrit Literature/Urdu Literature/ Mathematics.
    - 4. Economics/Music/ Defence Studies/ Linguistics / নুব্

- 5. Philosophy/Psychology/ Geography/ Education/ Management.
- 6. History/English Literature/ Statistics.
- 7. Practicals (If Nece ssary) for each core subject.
- 7. Any candidate who has passed the B.A. examination of the University shall be allowed to present himself for examination in any of additional subjects prescribed for the B.A. examination and not taken by him at the degree examination. Such candidate will have to first appear and pass the B.A. Part I examination in the subject which he proposes to offer and then the B.A. Part II and Part III examination in the same subject. Successfull candidate will be given a certificate to that effect.
- 8. In order to pass at any part of the three year degree course examination, an examinee must obtain not less than 33% of the total makes in each subject/group of subjects. In subject/group of subjects, where both theory and practical examination are provided, an examinee must pass in both theory and practical parts of the examination separately.
- 9. Candidate will have to pass separately at the Part-I, Part II and part-III examination. No division shall be assigned on the result of the Part-I and Part-II examination. In determining the divisor of the Final examination, total marks obtained by the examinees, in their Part-I, Part-II and Part-III examination in the aggregate shall be taken into account. Candidate will not be allowed to change subjects after passing Part I Examination.
  - Provided in case of candidate who has passed the examination through the supplementary examination having failed in one subject only the total aggregate marks being carried over for determining the division shall include the actual marks obtained in the subject in which he appeared at the supplementary examination.
- 10. Successful exminees at the Part-III examination obtaining 60% or more marks shall be placed in the First division, those obtaining less than 60% but not less than 45% marks in the Second division and other successful examinees in the third division.

# ATAL BIHARI VAJPAYEE VISHWAVIDYALAYA BILASPUR (C.G.)



Old High Court Building, Near Gandhi Chowk, Bilaspur (C.G.)

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E-mail.: registrar@bilaspuruniversity.ac.in,

No. 164

/Acad/2021

Bilaspur, Date: 12/02/2021

# **CERTIFICATE**

This is to certified that "Govt. Mahamaya College Ratanpur, Distt. -Bilaspur (C.G.)" is affiliated to the "ATAL BIHARI VAJPAYEE VISHWAVIDYALAYA BILASPUR (C.G.)" and recognized by the University Grant Commission and the following Courses / Subjects are being taught in the said college as per approval: -

S.N.	NAME OF THE COURSE	COMBINATIONS	PRESENT INTAKE		AFFILIATION	PERIOD OF VALIDITY
			2020-21	2019-20		
1.	B.A.	Any Three subjects from following 6 subjects: Sociology, History, Geography, Economics, Hindi Lit., Pol. Science.	320	280	Permanent	2020-21
2.	B.Sc.	Chemistry, Physics, Maths	,60	60	Permanent	2020-21
		Computer science, Physics, Maths	20	20	Temporary	2020-21
		Zoology, Botany, Chemistry	100	70	Permanent	2020-21
3.	B.com.	All compulsory subjects with specialization in marketing	80	80	Permanent	2020-21
4.	M.A.	History	40	40	Permanent	2020-21
		Pol. Science	40	40	Permanent	2020-21
		Sociology	40	40	Permanent	2020-21
5.	M.Com.	All Compulsory Subjects 2020-21	20	-	Temporary	2020-21
6.	D.C.A.	All Compulsory Subjects 2020-21	40	-	Temporary	2020-21
7.	P.G.D.C.A.	All Compulsory Subjects 2020-21	40		Temporary	2020-21

REGISTRAR

REGISTRAR

ATAL BIHARÎ VAJITA VE VÎŞHWAVÎDYALAYA

BILASPUR (C.G.)



# बिलासपुर विश्वविद्यालय, बिलासपुर (छ.ग.)

पाठ्यक्रम SYLLABUS

सत्र: 2017-18

बी.एससी. भाग-3 B.Sc. PART-3

Website: - www.bilaspuruniversity.ac.in

#### MATHEMATIS

There shall be three theory papers. Two compulsory and one optional Each paper carrying 50 marks is divided into five units and each unit carry equal marks.

#### PAPER - I (Paper Code-0898)

#### ANALYSIS

#### REAL ANALYSIS

UNIT-I Series of arbitrary terms. Convergence, divergence and Oscillation. Abel's and Dirichlet's test. Multiplication of series. Double series.

Pertial derivation and differentiability of real-valued functions of two variables. Schwarz and Young's theorem. Implicit function theorem.

Fourier series. Fourier expansion of piecewise monotonic functions.

WIT-II Riemann integral. Intergrability of continuous and monotonic functions. The fundamental theorem of integral calculus. Mean value theorems of integral calculus.

Improper integrals and their convergence, Comparison tests. Abel's and Dirichlet's tests. Fullani's integral. Integral as a function of a parameter. Continuity, derivebility and integrability of an integral of a function of a parameter.

#### COMPLEX ANALYSIS

UNIT-III Complex numbers as ordered pairs. Geometric representation of Complex numbers. Stereographic projection.

Continuity and differentiability of Complex functions. Analytic functions. Cauchy-Riemann equations. Harmonic functions.

Klementary functions. Mapping by elementary functions.

Mobius transformations. Fixedpoints, Cross ratio. Inverse points and critical mappings. Conformal mappings.

#### METRIC SPACES

UNITY-IV Definition and examples of metric spaces. Neighbourhoods, Limit points, Interior points, Open and closed sets, Closure and interior. Boundary points, Sub-space of a metric space. Cauchy sequences, Completeness, Cantor's intersection theorem. Contraction principle, Construction of real numbers as the completion of the incomplete metric space of rationals. Real numbers as a complete ordered field.

UNIT-V Dense subsets. Baire Category theorem. Separable, second countable and first countable spaces. Continuous functions. Extension theorem. Uniform continuity, Isometry and homeomorphism. Equivalent metrics. Compactness, Sequential compactness. Totally bounded spaces. Finite intersection property. Continuous functions and compact sets, Connectedness, Components, Continuous functions and connected sets.

#### REFERENCES :

- T.M. Apostol, Mathematical Analysis, Narosa Publishing House, New Delhi, 1985.
- 2 R.R. Goldberg, Real Analysis, Oxford & IBH publishing Co., New Delhi, 1970.
- 3 S. Lang, Undergraduate Analysis, Springer-Verlag, New York, 1983.
- 4 D. Somasundaram and B. Choudhary, A First Coarse in Mathematical Analysis, Narosa Publishing House, New Delhi, 1997.
- 5 Shanti Narayan, A Course of Mathematical Analysis, S. Chand & Co. New Delhi.

- 6 P.K. Jain and S.K. Kaushik, An introduction to Real Analysis, S. Chand & Co., New Delhi, 2000.
- R.v. Churchill & J.W. Brown, Complex Variables and Applications, 5\*" Edition, McGraw-Hill, NewYork, 1990.
- 8 MarkJ. Ablowitz & A.S.Fokas, Complex Variables: Introduction and Applications, Cambridge University Press, South Asian Edition, 1998.
- 9. Shanti Narayan, Theory of Functions of a Complex Variable, S. Chand & Co., New Delhi.
- 10. E.t. Capson, Metric Spaces, Cambridge University Press, 1968.
- 11. P.K. Jain and K. Ahmad, Metric Spaces, Narosa Publishing House, New Delhi, 1996.
- 12. G.F. Simmons, Inroductin to Topology and Modern Analysis, McGraw-Hill, 1963.

### PART - II (Paper Code-0899) ABSTRACT ALGEBRA

- UNIT-I Group-Automorphisms, inner automorphism. Automorphism groups and their computations, Conjugacy relation, Normaliser, Counting principle and the class equation of a finite group. Center for Group of prime-order, Abelianizing of a group and its universal property. Sylow's theorems, Sylow subgroup, Structure theorem for finite Abelian groups.
- UNIT-II Ring theory-Ring homomorphism. Ideals and Quotient Rings. Field of Quotients of an Integral Domain, Euclidean Rings, Polynomial Rings, Polynomials over the Rational Field. The Risenstien Criterion, Polynomial Rings over Commutative Rings, Unique factorization domain. R unique factorization domain implies so is R [pd., x2 ..... xn] Modules, Submodules, Quotient modules, Homomorphism and Isomorphism theorems.
- UNITY-III Definition and examples of vector spaces. Subspaces. Sum and direct sum of subspaces, Linear span. Linear dependence, independence and their basic properties. Basis. Finite dimensional vector spaces. Existence theoremfor bases. Invariance of the number of elements of a basis set. Dimension. Existence of complementary subspace of a subspace of a finite dimensional vector space. Dimension of sums of subspaces. Quotient space and its dimension.
- UNITY-IV Linear transformations and their representation as matrices. The Algebra of linear transformations. The rank mullity theorem. Change of basis. Dual space. Bidual space and natural isomorphism. Adjoint of a linear transformation. Eigenvalues and eigenvectors of a linear transformation. Diagonalisation. Annihilator of a subspace. Bilinear, Quadratic and Hermitian forms.
- UNIT-V Inner Product Spaces-Cauchy-Schwarz inequality. Orthogonal vectors. Orthogonal Complements. Orthonormal sets and bases. Bessel's inequality for finite dimensional spaces. Gram-Schmidt Orthogonalization process.

#### REFERENCES 1

- I.N. Herstein, Topics in Algebra, Wiley Rastern Ltd., New Delhi, 1975.
- N. Jacobson, Basic Algebra, Vols. I & II. W.H. Freeman, 1980 (also published by Hindustan Publishing Company).
- Shanti Narayan, A Text Book of Modern Abstract Algebra, S.Chand & Co. New Delhi.
- 4 K.B. Datta, Matrix and Linear Algebra, Prentice Hall of India Pvt. Ltd., New Delhi, 2000.
- 5 P.B. Bhattacharya, S.K. Jain and S.R. Nagpal, Basic Abstract Algebra (2" Edition) Cambridge University Press, Indian Edition, 1997.

- K. Hoffmen and R. Komze, Linear Algebra, 2" Rditon, Prentice Hall. Rhglewood Cliffs, New Jersey, 1971.
- S.K. Jain, A. Gunawardena & P.B. Bhattacharya, Basic Linear Algebra with MATLAB. Key College Publishing (Springer-Verlag) 2001.
- 8 S. Eumaresan, Linear Algebra, A.Geometric Approach, Prentice-Hall of India, 2000.
- 9 Vivek Sahai and Vikas Bist, Algebra, Norosa Publishing House, 1997.
- I.S. Luther and I.B.S.Passi, Algebra, Vol. I-Groups, Vol. II-Rings. Narces Publishing House (Vol. I-1996, Vol. II-1999)
- D.S. Malik, J.N. Mordeson, and M.K. Sen, Fundamentals of Abstract Algebra, McGraw-Hill International Edition, 1997.

#### PAPER - III - (OPTIONAL)

### (I) PRINCIPLES OF COMPUTER SCIENCE (Paper Code-0900)

- UNIT-I Data Storage Storage of hits. Main Memory. Mass Storage. Coding Information of Storage. The Binary System. Storing integers, storing fractions, communication errors. Data Menipulation The Central Processing Unit. The Stored-Program Concept. Programs Execution. Other Architectures. Arithmetic/Logic Instructions. Computer-Paripheral Communication.
- UNIT-II Operating System and Networks The Evolution of Operating System. Operating System Architecture. Coordinating the Machine's Activities. Handling Operation Among Process. Networks. Networks Protocol.
  Software Engineering The Software Engineering Discipline. The Software Life Cycle.
  Modularity. Development Tools and Techniques. Documentation. Software Ownership
- UNIT-III Algorithm The Outcopt of an Algorithm, Algorithm Representation. Algorithm Discovery. Iterative Structures. Recursive Structures. Efficiency and Correctness. (Algorithms to be implemented in C++).
  - Programming Languages Historical Perspective. Traditional Programming Concepts, Program Units. Language Implementation. Parallel Computing. Declarative Computing.
- UNIT-IV Data Structures Arrays. Lists. Stacks. Queues. Trees. Customised Data Types. Object Oriented Programming.
  - File Structure Sequential Files. Text Files. Indexed Files. Hashed Files. The Hole of The Operating System.
  - Database Structure General Issues. The Layered Approach to Database Implementation. The Relational Model. Object-Oriented Database. Maintaining Database Integrity. B-R models.
- UNIT-V Artifical Intelligence Some Philosophical Issues. Image Analysis. Reasoning, Control System Activities. Using Heuristics. Artificial Neural Networks. Application of Artificial Intelligence.
  - Theory of Computation Turning Machines. Computable functions. A Non computable Function. Complexity and its Measures. Problem Classification.

#### REFERENCES

and Liability.

- J. Glen Brookshear, Computer Science: An Overview, Addition -Wesley.
- 2 Stanley B. Lippman, Josee Lojoie, C<sup>++</sup> Primer (3rd Edition), Addison-Wesley.

#### PAPER - III - (OPTIONAL)

#### (II) DISCRETE NATHEMATICS (Paper Code-0901)

UNIT-I Sets and Propositions - Cardinality. Mathematical Induction, Principle of Inclusion and exclusion.

Computability and Formal Languages - Ordered Sets. Languages. Phrase Structure Grammars. Types of Grammars and Languages. Permutations. Combinations and Discrete Probability.

UNIT-II Relations and Functions - Binary Relations, Equivalence Relations and Partitions. Postial Order Relations and Lattices. Chains and Antichains. Pigeon Hole Principle. Graphs and Planar Graphs - Basic Terminology. Multigraphs. Weighted Graphs. Paths and Circuits. Shortest Faths. Bulerian Paths and Circuits. Travelling Salesman Problem. Planner Graphs.

#### TREEC.

- UNIT-III Finite State Machines Equivalent Machines. Finite State Machines as Language Recognizers. Analysis of Algorithms - Time Complexity. Complexity of Problems. Discrete Numeric Functions and Generating Functions.
- INIT-IVI Recurrence Relations and Recursive Algorithms Linear Recurrence Relations with Constant Coefficients. Homogeneous Solutions. Particular Solution. Total Solution. Solution by the Method of Generating Functions. Brief review of Groups and Rings.
- UNIT-V Buleau Algebras Lattices and Algebraic Structures, Duality, Distributive and Complemented Lattices, Boolean Lattices and Boolean Algebras, Boolean Functions and Expressions, Prepositional Calculus, Design and Implementation of Digital Networks, Switching Circuits.

#### REPERENCES :

C.L. Liu, Elements of Discrete Mathematics, (Second Edition), McGraw Hill, International Edition, Computer Science Series, 1985.

#### PAPER - III - (OPTIONAL)

### (III) APPLICATION OF MATHEMATICS IN FINANCE AND INSURANCE (Paper Code-0902)

## Application of Mathematics in Pinance :

UNIT-I Financial Management - An overview. Nature and Scope of Financial Management. Goals of Financial Management and main decisions of financial management. Difference between risk, speculation and gambling.

Time value of Money-Interest rate and discount rate. Present value and future valuediscrete case as well as continuous compounding case. Annuities and its kinds.

- UNIT-II Meaning of return, Return as Internal Rate of Return (ER). Numerical Methods like Newton RaphsonMethod to calculate IRR, Measurement of returns under uncertainty citations. Meaning of rick. Difference between rick and uncertainty. Types of ricks. Measurement of risk. Calculation of security and Portfolio Risk and Return-Markowitz Model. Sharpe's Single Index Model Systematic Risk and Unsystematic Risk.
  - UNIT-III Taylor series and Bond Valuation. Calculation of Duration and Convenity of bonds. Firencial Derivaties - Butures. Forward. Swaps and Options. Call and But Option. Call and Put Parity Theorem. Pricing of contingent claims through Arbitrage and Arbitrage Theorem.

#### Application of Mathematics in Insurance

- UNITY-IV Insurance Aundamentals Insurance defined. Meaning of loss. Chances of loss, peril, hazard, and proximate cause in insurance. Costs and benefits of insurance to the society and branches of insurance-life insurance and various types of general insurance. Insurance loss exposuresfeature of a loss that is ideal for insurance. Life Insurance Mathematics Construction of Mortality Tables. Computation of Premium of Life Insurance for a fixed duration and for the whole life.
- UNIT-V Determination of claims for General Insurance Using Poisson Distribution and Negative Einsmial Distribution-the Polya Case.
  Determination of the amount of Claims in General Insurance - Compound Aggregate claim model and its properties, and claims of reinsurance. Calculation of a compound claim density function. F-recursive and approximate formulae for F.

#### REFERENCES :

- 1 Aswath Damodaran, Corporate Finance Theory and Practice, John Wiley & Sons Inc.
- John C. Hull, Options, Rutures, and Other Derivatives, Prentice-Hall of Indian Private Limited.
- 3 Sheldon M. Ross, An Introduction to Mathematical Finance, Cambridge University Press.
- 4 Mark S. Dorfman, Introduction to Risk Management and Insurance, Prentice Hall, Englwood Cliffs, New Jersey.
- 5 C.D. Daykin, T. Pentikainen and M. Pesonen, Fractical Risk Theoryfor Actuaries, Chapman & Hall.

#### PAPER - III - (OPTIONAL)

Theory component will have maximum marks 30.

Practical component will have maximum marks 20.

# (IV) PROGRAMMING IN C AND NUMERICAL ANALYSIS (Thoury & Practical) (Paper Code-0903)

UNIT-I Programmer's model of a computer. Algorithms. Flow Charts. Data Types. Arithmetic and input/output instructions. Decisions control structures. Decision statements. Logical and Conditional operators. Log. Case control structures. Functions. Recursions. Preprocessors. Arrays. Puppetring of strings. Structures. Printers. File formatting.

#### Numerical Analysis

- UNIT-II Solution of Equations: Hisection, Secart, Regula Falsi, Newton's Method, Roots of Polynomials: Interpolation: Lagrange and Hermite Interpolation, Divided Differences, Difference Schemes, Interpolation Rumulassing Differences. Numerical Differentiation. Numerical Quadrature: Newton-Cote's Formulas. Gauss Quadrature Formulas, Chebychev's Formulas.
- UNITAIN Linear Equations: Direct Methods for Solving, Systems of Linear Equations (Quass Elimination, IJ Decomposition, Cholesky Decomposition), Iterative Methods (Jacobi, GaussSeidel, Relaxation Methods).
  The Algebraic Eigenvalue problem: Jacobi's Method, Givens' Method, Householder's Method, Power Method, QR Method, Lanezos' Method.
- UNITY-IV Ordinary Differential Equations: Euler Method, Single-step Methods, Ringe-Kutta's Method, Multi-step Methods, Milne-Simpson Method, Methods Based on Numerical

Integration, Methods Based on Numerical Differentiation, Boundary Value Problems, Eigenvalue Problems.

Approximation: Different Types of Approximation, Least Square Polynomial Approximation, Polynomial Approximation using Orthogonal Polynomials, Approximation with Trigonometric Functions, Exponential Functions, Chebychev Polynomials, Rational Functions.

Unit-V Monte Carlo Methods Random number generation, congruential generators, statistical tests of pseudo-random numbers.

Random variate generation, inverse tranform method, composition method, acceptancerejection method, generation of exponential, normal variates, binomial and Poisson variates.

Monte Carlo integration, hit or miss Monte Carlo integration, Monte Carlo integration for improper integrals, error analysis for Monte Carlo integration.

#### REFERENCES :

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- B.W. Kernighan and D.M. Ritchie. The C Programming Language 2"d Edition, (ANSI features) Prentice Hall, 1989.
- 3 Peter A Darmel and Philip E. Margolis, C : A Software Engineering Approach, Narosa Publishing House, 1993.
- 4 Robert C. Hutehisonand Steven B. Just, Programming using C Language, McGraw Hill, 1988.
- 5 Les Hancock and Morris Krieger, The C Primer, McGraw Hill, 1988.
- 6 V. Rajaraman, Programming in C, Prentice Hall of India, 1994.
- Byron S. Gottfried, Theory and Problems of Programming with C, tata McGraw-Hill Publishing Co. Ltd., 1998.
- C.E. Froberg, Introduction to Numerical Analysis, (Second Edition), Addison-Wesley, 1979.
- James B. Scarborough, Numerical Mathematical Anasysis, Oxford and IBHPublishing Co. Pwt. Itd. 1966.
- Melvin J. Maron, Numerical Analysis A Practical Approach, Macmillan publishing Co., Inc. New York, 1982.
- M.K. Jain, 'S.R.K. lyengar, R.K. Jain, Numerical Methods Problems and Solutions, New Age International (P) Itd., 1996.
- M.K. Jain, S.R.K. lyengar, R.K. Jain, Numerical Methods for Scientific and Engineering Computation, New Age International (P) Ltd., 1999.
- 13. R.Y. Rubistein, Simulation and the Monte Carlo Methods, John Wiley, 1981.
- D.J. Yakowitz Computational Probability and Simulation, Addison-Wesley, 1977.

PAPER - III - (OPTIONAL) (IV) PRACTICAL

PROGRAMMING IN C AND NUMERICAL ANALYSIS

#### LIST OF PRACTICAL TO BE CONDUCTED ...

- 1. Write a program in C to find out the largest number of three integer numbers.
- Write a program in C to accept monthly salary from the user, find and display income tax with the help of following rules:

Monthly Salary Income Tax

9000 or more 40% of monthly salary 7500 or more 30% of monthly salary 7499 or less 20% of monthly salary

- Write a program in C that reads a year and determine whether it is a leap year or not.
- 4 Write a program in C to calculate and print the first n terms of fibroacci series using looping statement.
- 5 Write a program in C that reads in a number and single digit. It determines whether the first number contains the digit or not.
- 6 Write a program in C to computes the roots of a quadratic equation using case statement.
- 7. Write a program in C to find out the largest number of four numbers using function.
- 8. Write a program in C to find the sum of all the digits of a given number using recursion.
- 9 Write a program in C to calculate the factorial of a given number using recursion.
- 10. Write a program in C to calculate and print the multiplication of given 20 matrices.
- 11. Write a program in C to check that whether given string palindrome or not.
- Write a C function seriessum () to calculate the sum of series : 1+X+1/2! X<sup>2</sup>+1/3! X<sup>3</sup>+...... 1/n! X<sup>n</sup>
- Write a program in C to determine the grade of all students in the class using Structure.
   Where structure having following members name, age, roll, sub 1, sub2, sub3, sub4 and total.
- Write a program in C to copy one string to another using pointers. (Without using standard library functions).
- Write a program in C to store the data of five students permanently in a data file using file handling.

#### PAPER - III - (OPTIONAL)

#### (V) MATHEMATICAL MODELLING (Paper Code-0904)

#### The Process of Applied mathematics.

- UNIT-I Setting up first-order differential equations Qualitative solution sketching. Difference and differential equation growth models.
- UNIT-II Single-species population models. Population growth-An age structure model. The spread of Technological innovation.
- WHT-III Higher-order linear models A model for the detection of diabetes. Combat modes. Traffic models - Car-following models. Equilibrium speed distributions.
- UNITY-IV Nonlinear population growth models. Prey-Predator models. Epidemic growth models. Models from political science - Proportional representation-cumulative voting, comparison voting.
- UNIT-V Applications in Ecological and Environmental subject areas- Urban waste water management planning.

#### REFERENCES :

- 1 Differential equation models, Rds. Martin Braun, C.S. Coleman, D.A. Drew.
- Political and Related Models, Steven. J. Brams, W.F. Lucas, P.D. Straftir (Eds.)
- 3 Discrete and System models, W.F. Lucas, F.S. Roberts, R.M. Thrall.
- 4 Life Science Models, H.M. Roberts & M. Thompson.
- All volumes published as modules in applied Mathematics, Springer-Verlag, 1982.
- 5 Mathematical Modelling by J.N. Kapur, New Age International, New Delhi.



# SYLLABUS B.COM. PART-III

# GROUPING OF SUBJECTS AND SCHEME OF EXAMINATION

Subject			Max.	Min.
Fou	ndation Course			
l.	Hindi Language		75	26
II.	English Language		75	26
Con	npulsory Groups			
Group-I				
l.	Income Tax	<b>75</b>	450	
II.	Auditing	<b>75</b>	150	50
Group-II				
l.	Indirect Taxes	<b>75</b>	150	50
II.	Management Accounting	<b>75</b>	130	30
Group-III (	<b>Optional</b>			
Option Gr	oup A (Finance Area)			
<mark>.</mark>	Financial Management	<b>75</b>	450	
<mark>II.</mark>	Financial Market Operations	<b>75</b>	150	50
Option Gr	oup B (Marketing Area)			
<mark>.</mark>	Principles of Marketing	<b>75</b>	450	
<mark>II.</mark>	International Marketing	<b>75</b>	150	50
Option Group C (Commercial Area)				
I <mark>.</mark>	Information Technology and	<b>75</b> ]		
	its Applications in Business	}	150	50
<mark>II.</mark>	Essential of e-Commerce	<b>75</b>		
Option G	roup D (Money Banking &			
<mark>Insu</mark>	<mark>rance Area)</mark>			
<u>I.</u>	Fundamental of Insurance	<b>75</b> ]	150	50
<mark>II.</mark>	Money & Banking System	<b>75</b>	130	

# COMPULSORY CORE COURSE TITLE OF PAPER - Group-I - PAPER - I - INCOME TAX OBJECTIVE

It enables the students to know the basics of Income Tax Act and its implications.

Present syllabus	Proposed syllabus	Remark
UNIT-I Basic Concepts: Income, agricultural Income, casual	UNIT-I Basic Concepts : Income, agricultural	No change
income, assessment year,	Income, casual income, assessment year,	
previous year, gross total income, total income, person.	previous year, gross total income, total income,	
Basis of charge: Scope of total income, residence and tax	person.	
liability, income which does not form part of total income.	Basis of charge: Scope of total income, residence and	
	tax liability, income which does not form part of total	
	income.	
UNIT-II Heads of Income : Salaries; Income from house	UNIT-II Heads of Income : Salaries; Income from	No change
property.	house property.	
UNIT-III Profit and gains of business or profession, including	UNIT-III Profit and gains of business or profession,	No change
provisions relating to specific business; Capital gains, Income	including provisions relating to specific business;	
from other sources.	Capital gains, Income from other sources.	
UNIT-IV Computation of Tax Liabilty : Set-off and carry	UNIT-IV Computation of Tax Liabilty : Set-off and	Omitted
forward of losses; Deduction from gross total	carry forward of losses; Deduction from gross total	firm.
income. Aggregation of income; Computation of total income	income. Aggregation of income; Computation of total	
and tax liability of and individual, H.U.F., and firm.	income and tax liability of individual and & HUF,	
UNIT-V Tax Management : Tax deduction at source; Advance	UNIT-V Tax Management : Tax deduction at source;	Addition of
payment of tax; Assessment procedures; Tax planning for	Advance payment of tax; Assessment procedures; Tax	pratical work
individuals.	planning for individuals.	relating
Tax evasion, Tax Avoidance and Tax planning.Tax	Tax evasion, Tax Avoidance and Tax planning.Tax	important

Administration: Authorities, appeals, penalties.	Administration: Authorities, appeals, penalties.	forms.
	Preparation of return of income	
	-Manually and on line	

- 1. Singhania V.K.: Students Guide to Income Tax; Taxmann, Delhi.
- 2. Prasad, Bhagwati: Income Tax Law & Prectice; Wily Publication, New Delhi.
- 3. Mehrotra H.C.: Income Tax Law & Accounts: Sahitya Bhawan, Agra.
- 4. Girish Ahuja and Ravi Gupta : Systematic approach to income tax : Sahitya Bhawan Publications, New Delhi.
- 5. Chandra Mahesh and Shukla D.C.: Income Tax Law and Practice; Pragati Publications, New Delhi.
- 6. R.K. Jain: Income Tax & Law (Hindi & English) Shahitya Bhavan, Publication, Agra

# COMPULSORY CORE COURSE Group-II - PAPER – I - **INDIRECT TAXES WITH GST** OBJECTIVE

PAPER – II

This course aims at imparting basic knowlege about GST and apply the provisions of GST law to various situations.

Present syllabus	Proposed syllabus	Remark
UNIT-I Central Excise: Nature and scope of	UNIT-I Customs: Role of customs in international trade;	Due to –
Central Excise; Important terms and definitions	Important terms and definitions goods; Duty; Exporter;	Constitutional
under the Central Excise Act; General procedures of	Foreign going vessel; Aircraft goods; Import; Import	amendment
central excise; Clearance and	Manifest;	(change in tax
excisable goods; Concession to small scale industry	Importer; Prohibited goods; Shipping bill; Store; Bill of	structure)
under Central Excise Act.	lading; Export manifest; Letter	
	of credit; Kinds of duties - basic, auxillary, additional or	
	coutervailing; Basics of levyadvalorem, specific duties;	
	Prohibition of export and import of goods, and provisions	
	regarding notified & specified goods; Import of goods -	
	Free import and restricted import; Type of import - import	
	of cargo, import of personal baggage, import	
	ofstores.Clearance Procedure - For home consumption, for	
	warehousing for re-export; Clearance procedure for import	
	by post; Prohibited exports; Canalised exports; Export	
	against licensing; Type of exports export of cargo, export	
	of baggage; Export of cargo	
	by land, sea, and air routes.	
UNIT-II State Excise, CENVAT. Detail study of	UNIT-II State Excise, CENVAT. Detail study of State	
State Excise during calculation of Tax.	Excise during calculation of Tax.	
UNIT-III Customs: Role of customs in international	UNIT-III INTRODUCTION TO GOODS AND	

trade; Important terms and definitions goods; Duty; Exporter; Foreign going vessel; Aircraft goods; Import; Import Manifest; Importer; Prohibited goods; Shipping bill; Store; Bill of lading; Export manifest; Letter of credit; Kinds of duties - basic, auxillary, additional or coutervailing; Basics of levyadvalorem, specific duties; Prohibition of export and import of goods, and provisions regarding notified & specified goods; Import of goods - Free import and restricted import; Type of import - import of cargo, import of personal baggage, import of stores. Clearance Procedure - For home consumption, for warehousing for re-export; Clearance procedure for import by post; Prohibited exports; Canalised exports; Export against licensing; Type of exports export of cargo, export of baggage; Export of cargo by land, sea, and air routes.

SERVICES TAX (GST) -Objectives and basic scheme of GST, Meaning – Salient features of GST – Subsuming of taxes –Benefits of implementing GST, Structure of GST (Dual Model) – Central GST – State / Union Territory GST – Integrated GST GST Council: Structures Power and Functions. Provisions fro amendments.

UNIT-IV Central Sales Tax: Important terms and difinitions under the Central Sales Tax Act 1956 - Dealer, declared good, place of business, sale, sale price, turnover, year, appropriate authority; Nature and scope of Central Sales Tax Act; Provisions relating to inter-state sales; Sales in side a state; Sales/purchase in the course of imports and exports out of India. Registration of dealers and procedure thereof; Rate of tax; Exemption of subsequent sales; Determination of

## **UNIT-IV**

Registration under GST: Procedure for registration, Persons liable for registration, Persons not liable for registration, Compulsory registration. Exempted goods and services - Rates of GST.

Procedure relating to Levy: (CGST & SGST): Scope of supply, Tax liability on Mixed and Composite supply, Time of supply of goods and services, Value of taxable supply.

**Eway-Billing** 

turnover.	
UNIT-V State Commercial Tax (Chhattisgarh)	UNIT-V ASSESSMENT AND RETURNS -
Definition, Registration, Tax liability, Procedure	Input text Credit: Eligibility, Apportionment, Inputs on
of Computation & Collection of Tax, Penalties &	capital goods, Distribution of credit by Input Service
Prosicution calculation of Tax. VAT Preliminary	Distributor (ISD)
Knowledge.	Furnishing details of outward supplies and inward supplies,
	First return, Annual return and Final return.

- 1. Deloitte: GST Era Beckons, Wolters Kluwer.
- 2. Madhukar N Hiregange: Goods and Services Tax, Wolters Kluwer.
- 3. All About GST: V.S Datey Taxman's.
- 4. Guide to GST: CA. Rajat Mohan,
- 5. Goods & Services Tax Indian Journey: N.K. Gupta & Sunnania Batia, Barat's Publication
- 6. Goods & Services Tax CA. Rajat Mohan,
- 7. Goods & Services Tax: Dr. Sanjiv Agrawal & CA. Sanjeev Malhotra.
- 8. GST Law & Practice: Dr. B.G. Bhaskara, Manjunath. N & Naveen Kumar IM,
- 9. Understanding GST: Kamal Garg, Barat's Publication

# COMPULSORY CORE COURSE TITLE OF PAPER - Group-II - PAPER - II -MANAGEMENT ACCOUNTING OBJECTIVE

This course provides the students an understanding of the application of accounting techniques for management.

Present syllabus	Proposed syllabus	Remark
UNIT-I Management Accounting: Meaning, nature,	UNIT-I Management Accounting: Meaning, nature,	No change
scope, and functions of management Accounting; Role	scope, and functions of management Accounting; Role	
of managment accounting in decision making;	of managment accounting in decision making;	
Management accounting vs financial accounting; Tools	Management accounting vs financial accounting; Tools	
and techniques of management accounting; Financial	and techniques of management accounting ;Financial	
statement; Objectives and methods of financial statements	statement; Objectives and methods of financial	
analysis; Ratio analysis; Classification of ratios -	statements analysis; Ratio analysis; Classification of	
Profitability ratios, turnover ratios, liquidity	ratios - Profitability ratios, turnover ratios, liquidity	
ratios, turnover ratios; Advantages of ratio analysis;	ratios, turnover ratios; Advantages of ratio analysis;	
Limitations of accounting ratios.	Limitations of accounting ratios.	
UNIT-II Funds Flow Statement as per Indian Accounting	UNIT-II Funds Flow Statement as per Indian Accounting	
Standard 3, cash flow statement.	Standard 3, cash flow statement.	
UNIT-III Absorption and Marginal Costing: Marginal	UNIT-III Absorption and Marginal Costing: Marginal	
and differential costing as a tool for decision making -	and differential costing as a tool for decision making -	
make or buy; Change of product mix; Pricing, Break-even	make or buy; Change of product mix; Pricing, Break-	
analysis;	even analysis;	
Exploring new markets; Shutdown decisions.	Exploring new markets; Shutdown decisions.	
UNIT-IV Budgeting for profit Planning and control:	UNIT-IV Budgeting for profit Planning and control:	
Meaning of budget and budgetary control; Objectives;	Meaning of budget and budgetary control; Objectives;	
Merits and limitations; Types of budgets; Fixed and	Merits and limitations; Types of budgets; Fixed and	

flexible budgeting;	flexible budgeting;	
Control ratios; Zero base budgeting; Responsibility	Control ratios; Zero base budgeting; Responsibility	
accounting; Performance	accounting; Performance	
budgeting.	budgeting.	
UNIT-V Standard Costing and Variance Analysis:	UNIT-V Standard Costing and Variance Analysis:	
Meaning of standard cost and standard	Meaning of standard cost and standard costing;	
costing; Advantages and application; Variance analysis -	Advantages and application; Variance analysis -	
material; Labour and	material; Labour and	
overhead (Two-way analysis); Variances.	overhead (Two-way analysis); Variances.	

- 1. Arora M.N.: Cost Accounting Principles and Practice, Vikas, New Delhi.
- 2. Jain S.P. & Narang K.L.: Cost Accounting; Kalyani, New Delhi.
- 3. Anthony, Rogert & Reece, at al: Principles of Management Accounting; Richard Irwin Inc.
- 4. Horngren, Charles, Foster and Datar et al: Cost Accounting A Managerial Emphasis; Prentice Hall, New Delhi.
- 5. Khan M.Y. and Jain P.K.: Management Accounting: Tata McGraw Hill, New Delhi.
- 6. Kaplan R.S. and Atkonson A.A.: Advanced Management Accounting; Printice Hall India, New Delhi.
- 7. J.K. Agrawal & R.K. Agrawal : Jaipur (English & Hindi ).
- 8. Dr. M.R. Agrawal: Minakshi Prakashan Meruth.
- 9. Dr. S.P. Gupta Agra (Hindi & English).

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# COMPULSORY CORE COURSE TITLE OF PAPER - Group-I - PAPER - II - AUDITING OBJECTIVE

This course aims at imparting knowlege about the principles and methods of auditing and their applications.

Present syllabus	Proposed syllabus	Remark
UNIT-I Introduction : Meaning and objectives of	UNIT-I Introduction: Meaning and objectives of auditing;	No change
auditing; Types of audit; Internal audit.Audit Process:	Types of audit; Internal audit.Audit Process: Audit	
Audit programme; Audit note books; Working papers	programme; Audit note books; Working papers and	
and evidences.	evidences.	
UNIT-II Internal Check System: Internal control.	UNIT-II Internal Check System: Internal control.	No change
Audit Procedure : Vouching : Verification of assets and	Audit Procedure: Vouching: Verification of assets and	
liabilities.	liabilities.	
UNIT-III Audit of Limited Companies:	UNIT-III Audit of Limited Companies :	Added
a. Company auditor - Appointment, powers, duties, and	a. Company auditor –Qualification, Appointment, powers,	Qualificati
liabilities.	duties, Resignation and liabilities.	on and
b. Divisible profits and dividend.	b. Divisible profits and dividend.	Resignatio
c. Auditor's report - standard report and qualified report.	c. Auditor's report - standard report and qualified report.	n of
d. Special audit of banking companies.	d. Special audit of banking companies.	company
e. Audit of educational institutions.	e. Audit of educational institutions.	auditor
f. Audit of Insurance companies.	f. Audit of Insurance companies.	
UNIT-IV Investigation : Investigation; Audit of non	UNIT-IV Investigation : Investigation; Audit of non profit	No change
profit companies,	companies,	
a. Where fraud is suspected, and	a. Where fraud is suspected, and	
b. When a running a business is proposed.	b. When a running a business is proposed.	
c. Varifications & Valuation of assets.	c. Varifications & Valuation of assets.	

in II unit	signific Manage	W Recent Trends in Auditing: Nature and ance of cost audit; Tax audit; ement audit. Company auditing - Qualification, tment, Resignation and es.	UNIT-V Recent Trends in Auditing : Nature and significance of cost audit; Tax audit; Management audit .	Omitted company auditing - Qualification , Appointment , Resignation and Liabilities and merge it in Il unit
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- 1. Gupta KaPal : Contemporary Auditing : Tata Mcgraw Hill, New Delhi.
- 2. Tandon B.N.: Principles of Auditing: S. Chand & Co., New Delhi.
- 3. Pagare Dinkar: Principles and Practice of Auditing: Sultan Chand, New Delhi.
- 4. Sharma T.R.: Auditing Principles and Problems, Sahitya Bhawan, Agra.
- 5. Shukla S.M.: Auditing Shahitya Bhavan, Agra, (Hindi)
- 6. Batliboy: Auditing.

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# OPTIONAL GROUP A (Finance Area) TITLE OF PAPER - FINANCIAL MANAGEMENT OBJECTIVE

PAPER - I

The objective of this course is to help students understand the conceptual framework of financial management.

Present syllabus	Proposed syllabus	Remark
UNIT-I Financial Management : Financial goals; Profit vs	UNIT-I Financial Management : Financial goals; Profit vs	No change
wealth maximization; Financial	wealth maximization; Financial	
functions-investment, financing, and dividend decisions;	functions-investment, financing, and dividend decisions;	
Financial planning.	Financial planning.	
UNIT-II Capital Budgeting: Nature of investment decisions,	UNIT-II Capital Budgeting : Nature of investment	
Investment evaluation criteria, payback period, accounting	decisions, Investment evaluation criteria, payback period,	
rate of return, net present value, internal rate of return	accounting rate of return, net present value, internal rate	
profitability index; NPV and IRR comparison.	of return	
	profitability index; NPV and IRR comparison.	
UNIT-III Cost of Capital: Significance of cost of capital;	UNIT-III Cost of Capital: Significance of cost of capital;	
Calculating cost of debt; Preference	Calculating cost of debt; Preference	
shares, equity capital, and retained earnings; Combined	shares, equity capital, and retained earnings; Combined	
(weighted) cost of capital. Operating and financial Leverage:	(weighted) cost of capital. Operating and financial	
Their measure; Effects on profit, analyzing alternate financial	Leverage: Their measure; Effects on profit, analyzing	
plans, combined financial and operating leverage.	alternate financial plans, combined financial and	
	operating leverage.	
UNIT-IV Capital Structure : Theories and determinates.	UNIT-IV Capital Structure : Theories and determinates.	
Dividend Policies: Issues in dividend policies; Walter's	Dividend Policies : Issues in dividend policies; Walter's	
model; Gordon's model; M.M. Hypothesis, forms of	model; Gordon's model; M.M. Hypothesis, forms of	
dividends and stability in dividends, determinats.	dividends and stability in dividends, determinats.	
UNIT-V Management of Working Capital: Nature of	UNIT-V Management of Working Capital: Nature of	

working capital, significance of working capital, operating	working capital, significance of working capital,	
cycle and factors determining of working capital	operating cycle and factors determining of working	
requirements,	capital requirements,	
Management of working capital - cash, recevables, and	Management of working capital - cash, recevables, and	
inventories.	inventories.	

- 1. Van Home J.C.: Financial Management and Policy; Prentice Hall of India, New Delhi.
- 2. Khan M.Y. and Jain P.K.: Financial Management, Text and Problems; Tata McGrow Hill, New Delhi.
- 3. Prasanna Chandra L Financial Management Theory and practice; Tata McGrow Hill, New Delhi.
- 4. Pandey I.M.: Financial Management Vikas Publishing Hous, New Delhi.
- 5. Brigham E.F. Gapenski L.C., and Ehrhardt M.C.: Financial Management Theory and Practice; Harcourt College Publishers, Singapore.
- 6. Bhalla V.K.: Modern Working Capital Management, Anmol Pub. Delhi.

OPTIONAL GROUP A (Finance Area)
TITLE OF PAPER - FINANCIAL MARKET OPERATIONS
OBJECTIVE

PAPER – II

This course aims at acquainting the students with the working of financial markets in India.

Present syllabus	Proposed syllabus	Remark
UNIT-I Money Market : Indian money market's	UNIT-I Money Market: Indian money market's	No change
composition and structure; (a) Acceptance	composition and structure; (a) Acceptance	
houses, (b) Discount houses and (c) Call money market;	houses, (b) Discount houses and (c) Call money market;	
Recent trends in Indian money market.	Recent trends in Indian money market.	
UNIT-II Capital Market : Security market - (a) New	UNIT-II Capital Market : Security market - (a) New	Omitted over
issue market, (b) Secondary market;	issue market, (b) Secondary market;	the counter
Functions and role of stock exchange; listing procedure	Functions and role of stock exchange; listing procedure	exchanges and
and legal requirements; Public	and legal requirements; Public	added Bombay
issue - pricing and marketing; Stock exchanges -	issue - pricing and marketing; Stock exchanges -	stock exchange
National Stock Exchange and over the counter	National Stock Exchange ,Bombay stock exchange	
exchanges.		
UNIT-III Securities contract and Regulations Act : Main	UNIT-III Securities contract and Regulations Act : Main	No change
provgisions. Investors Protection:	provgisions. Investors Protection: Grievancesconcerning	
Grievancesconcerning stock exchange dealings and their	stock exchange dealings and their removal; Grievance	
removal; Grievance cells in stock exchanges; SEBI;	cells in stock exchanges; SEBI; Company Law Board;	
Company Law Board; Press;	Press;	
Rmedy through courts.	Rmedy through courts.	
UNIT-IV Functionaries on Stock Exchanges : Brokers,	UNIT-IV Functionaries on Stock Exchanges : Brokers,	No change
sub brokers, market makers, jobbers,portfolio	sub brokers, market makers, jobbers,portfolio	
consultants, institutional investors, and NRIs.	consultants, institutional investors, and NRIs.	
UNIT-V Financial Services : Marchant banking -	UNIT-V Financial Services : Marchant banking -	No change

Functions and roles; SEBI guide-lines; Credit rating -	Functions and roles; SEBI guide-lines; Credit rating -	
concept, functions, and types.	concept, functions, and types.	

- 1. Chandler M.V. and Goldfeld S.M.: Economics of money and Banking, Harper and Row, New Delhi.
- 2. Gupta Suraj B. Monetary Economics; s. chand and Co. New Delhi.
- 3. Gupta Suraj B. Monetary Planning in India; Oxford, Delhi.
- 4. Bhole L.M.: Financial Markets and Institutions: Tata McGrow Hill, New Delhi.
- 5. Hooda R.P.: Indian Securities Market Investors view point; Excell Books, New Delhi.
- 6. R.B.I.: Functions and Working.
- 7. R.B.I.: Report in Currency and Finance.
- 8. R.B.I.: Report of the Committee to Review the working of the Monetary system Chakravarty committee.
- 9. R.B.I.: Report of the Committee on the Financial System, Narsimham Committee.

OPTIONAL GROUP B (Marketing Area)

TITLE OF PAPER - PRINCIPLES OF MARKETING

PAPER – I

# **OBJECTIVE**

The Objective of this course is to help students to understand the concept of marketingand its applications.

	141.141. 75	
Present syllabus	Proposed syllabus	Remark
UNIT-I Introduction : Nature and scope of marketing;	UNIT-I Introduction : Nature and scope of marketing;	No change
Importnace of marketing as a business function, and in	Importnace of marketing as a business function, and in the	
the economy; Marketing concepts - traditional and	economy; Marketing concepts - traditional and modern;	
modern; Selling vs. marketing; Marketing mix;	Selling vs. marketing; Marketing mix; Marketing	
Marketing environment.	environment.	
UNIT-II Consumer Behaviour and Market Segmentation	UNIT-II Consumer Behaviour and Market Segmentation:	No change
: Nature, scope, and significance of consumer behaviour;	Nature, scope, and significance of consumer behaviour;	
Market segmentation - concept and importance; Bases	Market segmentation - concept and importance; Bases for	
for	market segmentation.	
market segmentation.		
UNIT-III Product : Concept of product, consumer, and	UNIT-III Product : Concept of product, consumer, and	No change
industrial goods; Product planning and development;	industrial goods; Product planning and development;	
Packaging role and functions; Brand name and trade	Packaging role and functions; Brand name and trade mark;	
mark; after sales service; Product life cycle concept.	after sales service; Product life cycle concept. Price:	
Price: Importance of price in the marketing mix; Factors	Importance of price in the marketing mix; Factors affecting	
affecting price of a product/	price of a product/service; Discounts and rebates.	
Service; Discounts and rebates.		
UNIT-IV Distributions Channels and Physical	UNIT-IV Distributions Channels and Physical Distribution;	No change
Distribution; Distribution channels - Concept and	Distribution channels - Concept and role; Types of	
role; Types of distribution channels. Factors affecting	distribution channels. Factors affecting choice of a	

choice of a distribution channel;Retailer and holesaler;	distribution channel;	
Physical distribution of goods; Transportation,	Retailer and holesaler; Physical distribution of goods;	
Warehousing,	Transportation, Warehousing,	
Inverntory control; Order processing.	Inverntory control; Order processing.	
UNIT-V Promotion : Methods of promotion; Optimum	UNIT-V Promotion : Methods of promotion; Optimum	Added
promotion mix; Advertising media – their ralative merits	promotion mix; Advertising media – their ralative merits and	Recent
and limitations; Characteristics of an effective	limitations; Characteristics of an effective advertisement;	trends in
advertisement; Personal selling; Selling as a career;	Personal selling; Selling as a career; Classification of	marketing
Classification of successful sales person; Functions of	successful sales person; Functions of salesman.	
salesman.	Recent development in marketing –social marketing, online	
	marketing, Direct marketing, Services marketing, Green	
	marketing.	

- 1. Philip Kotler: Marketing Management Englewood Cliffs; Prentice Hall, N.J.
- 2. William M. Pride and O.C. Ferrell: Marketing: Houghton Mifflin Boston.
- 3. Stanton W.J. Etzel Michael J., and Walker Bruce J. Fundamentals of Marketing; McGraw Hill, New York.
- 4. Lamb Charies W., Hair Joseph F. and McDaniel Carl: Principles of Marketing; South- Western-Publishing, Cincinnati, Ohio.
- 5. Cravens David W. Hills Gerald E., Woodruff Robert B: Marketing management: Richard D. Inwin, Homewood Illinois.
- 6. Kotler Philip and Armstrong Gary: Principles of Marketing; Prentice Hall of India, New Delhi.
- 7. Dr. R.C. Agrawal, Agra.
- 8. Dr. S.C. Saxena Agra.
- 9. Dr. S.K. Jain, Hindi Granth Academi. M.P.
- 10. Dr. N.C. jain

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OPTIONAL GROUP B (Marketing Area)
TITLE OF PAPER - INTERNATIONAL MARKETING
OBJECTIVE

PAPER – II

This course aims at acquainting student with the operations of marketing in international environment.

Present syllabus	Proposed syllabus	Remark
UNIT-I International Marketing : Nature, definiton, and	UNIT-I International Marketing : Nature, definiton, and	No change
scope of international marketing;	scope of international marketing;	
Domestic marketing vs. International marketing;	Domestic marketing vs. International marketing;	
International environment external and internal.	International environment external and internal.	
UNIT-II Identifying and Selecting Foreign Market: Foreign	UNIT-II Identifying and Selecting Foreign Market:	No change
market entry mode decisions. Product Planning for	Foreign market entry mode decisions. Product Planning	
international Market: Product designing; Standardization	for international Market: Product designing;	
vs. adaptation; Branding and packaging; Labeling and	Standardization vs. adaptation; Branding and	
quality issues; After sales service. International Pricing:	packaging; Labeling and quality issues; After sales	
Factors Influenceing International price; Pricing process-	service. International Pricing: Factors Influenceing	
process and methods; International price quotation and	International price; Pricing process-process and	
payment terms.	methods; International price quotation and payment	
	terms.	
UNIT-III Promotion of Product/Services Abroad : Methods	UNIT-III Promotion of Product/Services Abroad :	No change
of international promotion; Direct	Methods of international promotion; Direct	
mail and sales literature; Advertising; Personal selling;	mail and sales literature; Advertising; Personal selling;	
Trade fairs and exhibitions.	Trade fairs and exhibitions.	
UNIT-IV International Distribution : Distribution channels	UNIT-IV International Distribution : Distribution	No change
and logistics decisions; Selection and	channels and logistics decisions; Selection and	
appointment of foreign sales agents.	appointment of foreign sales agents.	
UNIT-V Export Policy and Practices in India: Exim policy	UNIT-V Export Policy and Practices in India: Exim	Added
- an overview; Trends in India's foreign trade; Steps in	policy - an overview; Trends in India's foreign trade;	Marketing

starting an export business; Product selection; Market	Steps in starting an export business; Product selection;	Control
selection; Export pricing; Export finance; Documentation;	Market	Process
Export procedures; Export	selection; Export pricing; Export finance;	
assistance and incentives.	Documentation; Export procedures; Export	
	assistance and incentives.	
	Marketing Control Process	

- 1. Bhattacharya R.L. and Varshney B.: International Mrketing Management; Sultan Chand, New Delhi.
- 2. Bhattacharya B.: Export Marketing Strategles for Success; Global Press, New Delhi.
- 3. Keegan W.J.: Multinational Marketing Management; Prentice Hall, New Delhi.
- 4. Kriplani V.: International marketing; Prentice Hall New Delhi.
- 5. Taggart J.H. and Moder Mott. M.C.: The Essence of International Business; Prentice Hall New Delhi.
- 6. Kotler Phillip: Principles of Marketing; Prentice Hall New Delhi.
- 7. Fayer Weather John: International Marketing; Prentice Hall N.J.
- 8. Caterora P.M. and Keavenay S.M.: Marketing an international Perspective; Erwin Homewood, Illinois.
- 9. Paliwala, Stanely J. The Essence of International marketing; Prentice Hall, New Delhi.

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OPTIONAL GROUP C (Commercial Area)

TITLE OF PAPER - INFORMATION TECHNOLOGY AND ITS APPLICATIONS IN BUSINESS

PAPER – I

**OBJECTIVE** 

The objective of the course is to famillatize the students with the innovation information technology and how it affects business. An understanding of the group rules of these technologies will enable the students to appreciate the nitty-gritty Commerce.

	<b>T</b>	
Present syllabus	Proposed syllabus	Remark
UNIT-I Information Revolution and information	UNIT-I Information Revolution and information	No change
Technology (IT): Deployment of Business; Basic features	Technology (IT): Deployment of Business; Basic features	
of IT; Impact of IT on business environment and social	of IT; Impact of IT on business environment and social	
fabric; Invention of writing; Written books; Printing Press	fabric; Invention of writing; Written books; Printing Press	
and movable type Gutenberg's invention; Radio; telephone,	and movable type Gutenberg's invention; Radio;	
wireless and satelite communication computing and	telephone, wireless and satelite communication computing	
dissemination of information and knowledge and	and dissemination of information and knowledge and	
convergence technologies (Internet with Wireless- WAP).	convergence technologies (Internet with Wireless-WAP).	
UNIT-II Fundamentals of Computer: Data, information and	UNIT-II Fundamentals of Computer : Data, information	
EDP: Data, information and	and EDP: Data, information and	
concept of data and information; Levels of information from	concept of data and information; Levels of information	
data; processing;	from data; processing; Electronic data processing;	
Electronic data processing; Electronic machines;	Electronic machines;	
a. Number Systems and Codes: Different number systems -	a. Number Systems and Codes: Different number systems	
binary, octal decimal,	- binary, octal decimal,	
hexagonal, and their conversion codes used in computers;	hexagonal, and their conversion codes used in computers;	
Bed, EBCDIC, ASCII; Gray and conversions.	Bed, EBCDIC, ASCII; Gray and conversions.	
b. Computer Arithmetic and Gates: Binary arithmetic,	b. Computer Arithmetic and Gates: Binary arithmetic,	

complements, addition subtraction; Conversion from one system to another; Logic Gates, truthtable and

applications minimisation, and K-maps.

c. Computer Processing System : Definition of computer; Hardware/Software

concepts; Generation of computers; Types of computers; Elements of computer; CPU and its functions, Various computer systems.

- d. I/O devices: Basic concepts of I/O devices; Various input devices Keyboard,mouse; MICR, OCR, microphones.
- e. Various output devices : VDU, printer, plotter, spooling, L.S.
- f. Storage Devices: Primary and secondary memory; Types of memory capacity and its enhancement; Memory devices and comparisons; Auxiliary storage, tapes, disks (magnetic and potical); various devices and their comparison.
- g. System Software Roale of Software, Different System Software : O.S.,utilization element of O.S. Its types and variations; DOS and windows.
- h. Computer and Networks : Need of communication; Data transmission; Baud;

Bandwidth; Communication Channel; Multiplexing; Basic network concepts; O.S.I. model; Types of topologies; LAN, WAN, Client server concept.

complements, addition

subtraction; Conversion from one system to another; Logic Gates, truthtable and

applications minimisation, and K-maps.

c. Computer Processing System : Definition of computer; Hardware/Software

concepts; Generation of computers; Types of computers; Elements of computer; CPU and its functions, Various computer systems.

- d. I/O devices: Basic concepts of I/O devices; Various input devices Keyboard, mouse; MICR, OCR, microphones.
- e. Various output devices : VDU, printer, plotter, spooling, L.S.
- f. Storage Devices: Primary and secondary memory; Types of memory capacityand its enhancement; Memory devices and comparisons; Auxiliary storage, tapes, disks (magnetic and potical); various devices and their comparison.
- g. System Software Roale of Software, Different System Software : O.S., utilization element of O.S. Its types and variations; DOS and windows.
- h. Computer and Networks : Need of communication; Data transmission; Baud;

Bandwidth; Communication Channel; Multiplexing; Basic network concepts; O.S.I. model; Types of topologies; LAN, WAN, Client server concept.

UNIT-III Computer-based Business Applications

a. Word Processing: Meaning and role of word processing

UNIT-III Computer-based Business Applications

a. Word Processing: Meaning and role of word processing

in creating of documents,	in creating of documents,	
editing, formatting, and printing documents, using tools	editing, formatting, and printing documents, using tools	
such as spelling check,	such as spelling check,	
thesaurus, etc. in word processors (MS-Word).	thesaurus, etc. in word processors (MS-Word).	
b. Electronic Spreadsheet : Structure of spreadsheet and its	b. Electronic Spreadsheet : Structure of spreadsheet and its	
applications toaccounting, finance, and marketing functions	applications toaccounting, finance, and marketing	
of business; Crating a dynamic/sensitive worksheet;	functions of business; Crating a dynamic/sensitive	
Concept of absolute and relative cell reference; Using	worksheet; Concept of absolute and relative cell	
builtin functions; Goal seeking and solver tool; Using	reference; Using builtin functions; Goal seeking and solver	
graphics and formatting of	tool; Using graphics and formatting of	
worksheet; Sharing data with other desktop applications;	worksheet; Sharing data with other desktop applications;	
Strategies of crating error-free worksheet (MS-Excel, Lotus	Strategies of crating error-free worksheet (MS-Excel,	
123). Practical knowledge on WingsAccounting (Software).	Lotus 123). Practical knowledge on WingsAccounting	
c. Programming under a DBMS environment : The concept	(Software).	
of data base management system; Data field, records, and	c. Programming under a DBMS environment : The	
files, Sorting and indexing data; Searching records,	concept of data base management system; Data field,	
designing queries, and reports; Linking of data files	records, and files, Sorting and indexing data; Searching	
;Understanding programming environment in DBMS;	records, designing queries, and reports; Linking of data	
Developing menu drivenapplications in query language	files ;Understanding programming environment in DBMS;	
(MS-Access).	Developing menu drivenapplications in query language	
	(MS-Access).	
UNIT-IV Electronic Data Interchange (EDI)	UNIT-IV Electronic Data Interchange (EDI)	
Introduction to EDI; Basics of EDI; EDI standards;	Introduction to EDI; Basics of EDI; EDI standards;	
Financial EDI (FEDI); FEDI for	Financial EDI (FEDI); FEDI for	
international trade transaction; Applications of EDI;	international trade transaction; Applications of EDI;	
Advantages of EDI; Future of EDI.	Advantages of EDI; Future of EDI.	
UNIT-V The Internet and its Basic Concepts Internet-	UNIT-V The Internet and its Basic Concepts Internet-	
concept, history development in India; Technological	concept, history development in India; Technological	
foundation of internet;	foundation of internet;	
Tourisation of internet,	Toundation of Internet,	

Distributed computing; Client-server computing; Internet protocol suite; Application of distributed computing; Client-server computing; Internet protocol suite in the internet environment; Domain Name System (DNS(; Domain Name Service (DNS); Generic top-lelvel domian (gTLD); Country code top-level domain (ccTLD); - India; Llocation of second-level doomains; IP addresses; Internet protocol; Applications of Internet in business, education, governance, etc.Information System Audit Basic idea of information audit; Difference with the traditional concepts of audit; Conduct and applications of IS audit in internet environment.

Distributed computing; Client-server computing; Internet protocol suite; Application of distributed computing; Client-server computing; Internet protocol suite in the internet environment; Domain Name System (DNS(; Domain Name Service (DNS); Generic top-lelvel domian (gTLD); Country code top-level domain (ccTLD); - India; Llocation of second-level domains; IP addresses; Internet protocol; Applications of Internet in business, education, governance, etc.Information System Audit Basic idea of information audit; Difference with the traditional concepts of audit; Conduct and applications of IS audit in internet environment.

# Suggested Reading:

- 1. Agrawala Kamlesh N. and Agarwala Deeksha: Business on the Net Introduction to Ecommerce, Macmillan India, New Delhi.
- 2. Agarwala Kamlesh, N. and Agarwala Deeksha: Bulls, Bears and The mouse; and introduction to On-line Service Market Trading; Macmillan India, New Delhi.
- 3. Agarwala Kamlesh, N. and Agarwala Prateek Amar; WAP the Net; An Introduction on Wireless Application Protocol; Macmillan India, New Delhi.
- 4. Bajaj Kamlesh K. and Nag Debjanl : E-Commerce; The cutting Edge of Business; Tata McGraw Hill, New Delhi.
- 5. Edwards, Ward and Bytheway: The Essence of Information Systems; Prentice Hall, New Delhi.
- 6. Garg & Srinivasan: Work Book on Systems Analysis & Design; Prentice Hall New Delhi.
- 7. Kanter: Managing with Information; Prentice Hall New Delhi.
- 8. Minoli Daniel, Minoli Emma: Web Commerce Technology Handbook; Tata McGraw Hill,

# New Delhi.

- 9. Minoli Daniel: Internet & Internet Engineering; Tata McGrow Hill, New Delhi.
- 10. Yeats : Systems Analysis & Design; Macmillan India, New Delhi.
- 11. Goyal: Management information System; Macmillan India, New Delhi.
- 12. Timothi J O'Leary: Microsoft Office 2000; Tata McGrow Hill, New Delhi.

OPTIONAL GROUP C (E-Commerce Area)
TITLE OF PAPER - ESSENTIAL OF E-COMMERCE
OBJECTIVE

PAPER – II

The objective of this course is to familiarize the students with the basics of e-commerce and to comprehend its potential.

Present syllabus	Proposed syllabus	Remark
UNIT-I Internet and Commerce : Business operations; E-	UNIT-I Internet and Commerce : Business operations; E-	No change
Commerce practices; Concepts b2b,b2c, b2g, g2h; Benefits	Commerce practices; Concepts b2b,b2c, b2g, g2h; Benefits	
of e-commerce to organization, consumers, and society;	of e-commerce to organization, consumers, and society;	
Limitation of e-commerce; Management issues relating to e-	Limitation of e-commerce; Management issues relating to	
commerce.	e-commerce.	
Operations of E-Commerce : Credit card transaction; Secure	Operations of E-Commerce : Credit card transaction;	
Hypertext Transfer	Secure Hypertext Transfer	
Protocol (SHTP); Electronic payment systems; Secure	Protocol (SHTP); Electronic payment systems; Secure	
electronic transaction (SET);	electronic transaction (SET);	
Set's encryption; Process; Cybercash; Smart cards; Indian	Set's encryption; Process; Cybercash; Smart cards; Indian	
payment models.	payment models.	
UNIT-II Applications in B2C : Consumer's shopping	UNIT-II Applications in B2C : Consumer's shopping	No change
procedure on the internet; Impact on	procedure on the internet; Impact on	
disintermediation and re-inermediation; Global market;	disintermediation and re-inermediation; Global market;	
Strategy of traditional	Strategy of traditional	
department stores; Products in b2c model; Success factors of	department stores; Products in b2c model; Success factors	
e-brokers; Broker based	of e-brokers; Broker based	
services on-line; Online travel tourism services; Benefits and	services on-line; Online travel tourism services; Benefits	
impact of e-commerce	and impact of e-commerce	
on travel industry; Real estate market; Online stock trading	on travel industry; Real estate market; Online stock trading	
and its benefits; Online	and its benefits; Online	

banking and its benefits; Online financial services and their	banking and its benefits; Online financial services and their	
future; Educations	future; Educations	
benefits, implementation, and impact.	benefits, implementation, and impact.	
UNIT-III Applications in B2B; Applications of b2b, Key	UNIT-III Applications in B2B; Applications of b2b, Key	No change
technologies for b2b; Architectural	technologies for b2b; Architectural	
models of b2b; Characteristics of the supplier-oriented	models of b2b; Characteristics of the supplier-oriented	
marketplace, buyer-oriented	marketplace, buyer-oriented	
marketplace, and intermediary-oriented marketplace;	marketplace, and intermediary-oriented marketplace;	
Benefits of b2b on procurement	Benefits of b2b on procurement	
re-engineering; Just in Time delivery in b2b; Internet-based	re-engineering; Just in Time delivery in b2b; Internet-based	
EDI from traditional EDI;	EDI from traditional EDI;	
Integrating EC with back-end information systems;	Integrating EC with back-end information systems;	
Marketing issues in b2b.	Marketing issues in b2b.	
UNIT-IV Applications in Governance : EDI in governance;	UNIT-IV Applications in Governance : EDI in governance;	No change
E-government; E-governance	E-government; E-governance	
applications of the internet; Concept of government to	applications of the internet; Concept of government to	
business, business to	business, business to	
government and citizen-to-government; E-governance	government and citizen-to-government; E-governance	
models; Private sector interface	models; Private sector interface	
in e-governance.	in e-governance.	
UNIT-V Emerging Business Models : Retail model; Media	UNIT-V Emerging Business Models : Retail model; Media	Added
model; Advisory model, Mode-toorder manufacturing model;	model; Advisory model, Mode-toorder manufacturing	Security
Do-it yourself model; Information service model; Emerging	model; Do-it yourself model; Information service model;	and Legal
hybrid models; Emerging models in India.	Emergin	aspects of
	hybrid models; Emerging models in India.	E-
	Security and Legal aspects of E-commerce.	commerce.

Suggested Reading:
1. Agarwala Kamlesh. N. and Agarwala Deekhsa: Bridge to Online Storefornt; Macmillan India, New Delhi.

- 2. Agarwala Kamlesh. N. and Agarwala Deeksha: Business on the Net Introduction to the E-commerce; Macmillan India New Delhi.
- 3. Agarwala Kamlesh N. and Agarwala Deeksha: Bulls, Bears and The Mouse: An Introduction to Online Stock Market Trading; Macmillan India New Delhi.
- 4. Tiwari Dr. Murli D.: Eductaion and E-Governance; Macmillan India, New Delhi.
- 5. Minoli Daniel, Minoli Emma: Web Commerce Technology Handbook; Tata McGraw Hill, New Delhi.
- 6. Minoli Deniel, Internet & Internet Engineering: Tata McGrow Hill, 1999.
- 7. Bhatnagar Subhash and Schware Robert (Eds): Information and Communication Technology in Development; Sage Publications India, New Delhi.
- 8. Amor, Daniel: E-business R evealuation, The: Living and Working in an Interconnected World; Prentice Hall, U.S.
- 9. Afuah, A., and Tuccu, C.: Internet usiness models and Strategies; McGraw Hill, New York.

#### **B.COM PART III**

# OPTIONAL GROUP D (Money Banking & Insurance Area) TITLE OF PAPER FUNDAMENTAL OF INSURANCE OBJECTIVE

PAPER – I

This course enables the students to know the fundamentals of insurance.

M.M. 75

Present syllabus	Proposed syllabus	Remark
UNIT-I Introduction to Insurance : Purpose and need of insurance;	UNIT-I Introduction to Insurance : Purpose and need of	No change
Insurance as a social security tool; Insurance and economic	insurance; Insurance as a social security tool; Insurance and	
development.	economic development.	
UNIT-II Fundamentals of Agency Law: Definiton of an agent;	UNIT-II Fundamentals of Agency Law: Definiton of an	No change
Agents regulations; Insurance intermediaries; Agents Compensation.	agent; Agents regulations; Insurance intermediaries; Agents	
	compensation.	
UNIT-III Procedure for Becoming an Agent : Prerequisite for	UNIT-III Procedure for Becoming an Agent : Prerequisite	No change
obtaining a license; Duration of license; Cancellation of incense;	for obtaining a license; Duration of license; Cancellation of	
Revocation or suspension/termination of agent appointment; Code	incense; Revocation or suspension/termination of agent	
of conduct; Unfair practices. Functions of the Agent: Proposal form	appointment; Code of conduct; Unfair practices. Functions	
and other forms for grant of cover; Financial and medical	of the Agent: Proposal form and other forms for grant of	
underwriting; Material information; Nomination and assignment;	cover; Financial and medical underwriting; Material	
Procedure regarding settlement of policy claims.	information; Nomination and assignment; Procedure	
	regarding settlement of policy claims.	
UNIT-IV Company Profile : organizational set-up of the company;	UNIT-IV Company Profile : organizational set-up of the	No change
Promotion strategy; Market share; Important activities; Structure;	company; Promotion strategy; Market share; Important	
Product; Actuarial profession; Product pricing actuarial aspects;	activities; Structure; Product; Actuarial profession; Product	
Distribution channels.	pricing actuarial aspects; Distribution channels.	
UNIT-V Fundamentals/Principles of Life insurance/ Marine /Fire	UNIT-V Fundamentals/Principles of Life insurance/ Marine	Added
/Medical/General Insurance; Contracts of various kinds; Insurable	/Fire /Medical/General Insurance; Contracts of various	Online
Interest.	kinds; Insurable Interest.	insurance
	Online insurance procedure	procedure

#### Suggested Reading:

- 1. Mishra M.N.: Insurance Principle and Practice; S. Chand and Co., New Delhi.
- 2. Insurance Regulatory Development Act. 1999.
- 3. Life Insurance Corporation Act. 1956.
- 4. Gupta OS: Life Insurance; Frank brothers, New Delhi.
- 5. Vinayakam N., Radhaswamy and Vasudevan SV: Insurance Principles and Practice,
- S. Chand and Co. New Delhi.
- 6. Mishra MN: Life Insurance Corporation of India, Vols I, II & III; Raj Books, Jaipur.
- 7. Balchand Shriwastava, Agra.
- 8. Dr. M.L. Singhai, RAmesh Book Depot, Jaipur.

#### **B.COM PART III**

OPTIONAL GROUP D
TITLE OF PAPER - MONEY & BANKING SYSTEM
OBJECTIVE

(Money Banking & Insurance Area) PAPER – II

This course enables the students to know the working of the Indian Money & banking system.

M.M. 75

Present syllabus	Proposed syllabus	Remark
UNIT-I Money: Function, Alternative Measures to money	UNIT-I Money: Function, Alternative Measures to	No change
supply in India - their different components. Meaning and	money supply in India - their different components.	
changing relative importance of each.	Meaning and changing relative importance of each.	
UNIT-II Indian Banking System : Structure and organization	UNIT-II Indian Banking System : Structure and	No change
of banks; Reserve Bank of India; Apex banking Institutions;	organization of banks; Reserve Bank of India; Apex	
Commercial banks; Regional rural banks; Cooperative banks;	banking Institutions; Commercial banks; Regional rural	
Development banks.	banks; Cooperative banks; Development banks.	
UNIT-III Banking Regulation Act, 1947: History; Social	UNIT-III Banking Regulation Act, 1947 : History;	No change
control; Banking Regulation Act as applicable to banking	Social control; Banking Regulation Act as applicable to	
companies and public sector banks; Banking Regulation Act	banking companies and public sector banks; Banking	
as applicable to Cooperative banks.	Regulation Act as applicable to Cooperative banks.	
UNIT-IV Regional Rural and Cooperative Banks in India:	UNIT-IV Regional Rural and Cooperative Banks in	No change
Functions; Role of regional rural and cooperative banks in	India: Functions; Role of regional rural and	
rural India; Progress and performance.	cooperative banks in rural India; Progress and	
	performance.	
UNIT-V Reserve Bank of India: Objectives; Organization;	UNIT-V Reserve Bank of India: Objectives;	Added
Functions and working; Monetary policy; Credit control	Organization; Functions and working; Monetary	Internet
measures and their effectiveness. State Bank of India, Project	policy; Credit control measures and their effectiveness.	banking
History, Objectives, Functions & Organization working	State Bank of India, Project History, Objectives,	system
& progress.	Functions & Organization working & progress.	
	Internet banking system	

#### Suggested Reading:

- 1. Basu A.K.: Fundamentals of Banking-Theory and Practice; A Mukherjee and Co., Calcutta.
- 2. Sayers R.S.: Modern Banking: Oxford University Press.
- 3. Panandikar S.G. And Mithani D.M.: Banking in India; orient Longman.
- 4. Reserve Bank of India: Functions and Working.
- 5. Dekock: Central Banking; Crosby lockwood Staples, London.
- 6. Tannan M.L.: Banking Law and Practice in India: India Law House, New Delhi.
- 7. Knubchandani B.S.: Practice and Law of Banking; Macmillan, New Delhi.
- 8. Shekhar and Shekhar: Banking Theory and Practice; Vikas Publishing House, New Delhi.
- 9. Harishchandra Sharma.
- 10. M.L. Singhai.

B. Com race III year Computer Stellication

### COMPUTER APPLICATION

MARKS DISTRIBUTION

Theory Paper Paper - I Total Marks - 50

Paper - II

Total Marks - 50

Every unit of Theory Paper will consists of 10 Marks.

Practical Paper

Total Marks - 50

Practical Marks Distribution:

Internal 15

10

25

Practical

Practical Test will consist of 3 Hrs.

Total Marks - 150

#### PAPER - I

#### PROGRAMMING IN VISUAL BASIC

(Paper Code-1165)

#### UNIT-I Introduction to Visual Basic, Programs, Variables

Editions of Visual Basic, Event Driven Programming, Terminology, Working environment, project and executable files, Understanding modules, Using the code editor window, Other code navigation features, Code documentation and formatting, environment options, code formatting option automatic code completion features. Introduction to objects, Controlling objects, Properties, methods and events, Working with forms, interacting with the user: MsgBox function, ImputBox function, Code statements, Managing forms, Creating a program in Visual Basic, Printing, Overview of variables, Vser-defined data types, constants working with procedures, Working with dates and times, Using the Format Function, Manipulating text stringe.

#### UNIT-II Controlling Program Execution, Working with Control

Comparison and logical operators, If...Them statements, Select Case Statements looping structures, Using Do....Loop structures, For....Next statement, Exiting a loop. Types of controls, Overview of standard controls, ComboBox and ListBox, OptionButton and Frame controls Menu, Status bars, Toolbars, Advanced standard controls, ActiveX controls, Insertable objects, Arrays, Dynamic Arrays.

#### UNIT-III Procedure, Function Error Trapping & Debugging

Procedure, Function, call by value, call by reference, Type definition, with object, Validation, Overview of run-time errors, error handling process, The Err object, Errors and calling chain, Errors in an error-handling routine, Inline error handling, Error handling styles, General error-trapping options Type of errors, Break mode Debug toolbar, Watch window, Immediate window, Local window, Tracing Program flow with the Call Stack.

B.Com.-Part-III

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#### UNIT-IV Sequential and Random Files :

Saving data to file, basic filling, data analysis and file, the extended text editor, File organization Random access file, The design and coding, File Dialog Box, Picture Box, Image box, Dialog Box, using clipboard, Copy, Cut, Paste of Text & Picture in Clipboard, Use of Grid Control Multiple document interface, Single document interface.

### UNIT-V Data Access Unsing the ADO Data Control & Report Generation

Overview of ActiveX data Objects, Visual Basic data access features, Relational database concepts Using the ADO Data control to access data, Overview of DAO, RDO, Data Control, structured query language (SQL), Manipulating data Using Data Form Wizard. Overview of Report, Data Report, Add groups, Data Environment, Connection to database Introduction to Crystal Report Generator.

#### BOOK REFERENCE :

- Visual Basic Programming Reeta Sahu, B.P.B. Publication.
- Mastering in Visual Basic By BPB Publications.
- Visual Basic Programming Mark Brit.

#### PAPER - II

#### SYSTEM ANALYSIS, DESING & MIS

(Paper Code-1166)

#### UNIT-I Introduction -

Systems Concepts and the information systems environment : Definition of system, Characteristics of system, elements of system, types of system, The system Development life cycle : consideration of candidates system. The Role of system Analyst : Introduction, the multiphase role of the analyst, the analyst / user interface, the place of the analyst in the MIS Organization.

#### UNIT-II System Analysis, Tools of Structured Analysis, Feasibility Study-

System Planning and initial investigation: Basis for planning in systems analysis, initial investigation, fact finding, fact analysis, determination of feasibility. Information Gathering: Kind of information, Information gathering tools.

Structured Analysis, Flow chart, DFD, Data Dictionary, Decision Tree, Structured English, Decision Table. System Performance, Feasibility Study. Data Analysis.

#### UNIT-III System Design & System Implementation -

The process of Design Methodologies. Input Design, Output Design, Form Design, File Structure, File organization, data base design, System Testing, the test plan, quality assurance, data processing auditor. Conversion, Post implementation review, Software Maintenance.

Dr. Dung ay known (Dr. A.K. Daivedi) (L. K. Gavel) Hair Mandan Promoter of the Mandan Promo

#### UNIT-IV Introduction to MIS & Other Subsystem-

Evolution of MIS, Need of MIS, Definition & Benefits of MIS, Characteristic, Role component of Information system, data base as a future of MIS, Decision making, logic of Management Information system. Structure of MIS.

#### UNIT-V Information System Concept -

Difference between Transaction Processing. System (TPS) and Management Information System, How MIS works, MIS and Information Resource Management, Quality information Building Blocks for the information system, information system concept, Other system characteristic (Open & Closed System), difference between MIS & Strategic System, Adaptive system, Business function information system.

#### BOOK REFERENCE :

- System Analysis and Design Elias M. Awad.
- System Analysis and Design Alan Dennis & Barbara Haley Wixo.
- Management Information systems C.S.V. Murthy, Himalaya Publication House.

#### PAPER - III

#### PRACTICAL EXERCISES BASED ON PAPER I & II

#### Practicals to be done -

- 1 At least 20 practical exercises covering the contents of paper I (e.g. Designing calculator, sorting of elements, Generating Fibbonacci series)
- Design the Project on one of the following Application Software / Website Design/ Accounting software / Inventory control System / System Software & othter (e.g. Library Management System, Medical management, Stock Management, Hotel Management, Website for your institute / Website of any Organization)
- 3. The Project Report cover the following topic Objective, Hardware & Software Requirements, Analysis, Design, Coding, input forms, testing, Reports, Future enhancement of s/w.
- Practical exam is based on the Project Demonstration & report.

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### अटल बिहारी वाजपेयी विश्वविद्यालय, बिलासपुर फलीसगढ़

### सेमेस्टर पाव्यकम एम.ए. इतिहास

टींप :- एम.ए इतिहास चेमेस्टर पद्धित में सेमेस्टर । एवं ॥ में तीन अनिवार्य प्रश्न महीं के अतिरिक्त परीक्षर्थियों को कोई एक वैकल्पक प्रश्न एवं का क्यन करना होगा। प्रत्येक प्रश्न पत्र 100-100 अंकों का होगा। 100 अंकों में 80 अंक सैद्धारीक एवं 20 अक वालरिक मूल्याकन वं होगे।

प्रथम सेमेस्टर SEMESTER।

IV (B) History of China & Japan 1840-19:1	प्रश्न पत	SEMESTERI प्रकृत पृथ्व का नाम	पूर्णावः	संद्वातिक	आंतरिक मृज्यां कन
अंग्डुनिक विश्व (अनिवार्ग) 100 80 20   Modern world (Computsory)   100 80 20   Ancient and Medieval Chhattisgarh (Computsory)   100 80 20   20   20   20   20   20   20	1		100	.80	20
III प्राचीन एवं पत्पकासीन क्योग्गय (शनिवार्य) 100 80 20 Ancient and Medieval Chhattisgarh (Compulsory)  PHONAL रेट ब्रिटेन क इतिहास 1815–1885 100 80 20 IV (A) History of Great Eritain 1815-1885  PHONAL पीन और जागन क इतिहास 1800–1911 100 80 20 IV (B) History of China & Japan 1800-1911 100 80 20 IV (C) मध्यकालीन Women in Indian History in Ancient Wedieval Period	31	बाबुनिक विश्व (अनिवार्ग)	100	80	
PROPERTY   100   80   20     IV (A)	III	प्राचीन एवं परप्रकासीन छचीसगढ़ (अनिवार्य) Ancient and Medieval Chinattisgart	100	80	
IV (A) History of Great Eritain 1815-1885  OPTIONAL ग्रीन और जामान का इतिहास 1800-19:1 100 80 20  IV (B) History of China & Japan 1800-19:1 100 80 20  OPTIONAL भागतीर इतिहास में नारी-प्राचीन एवं 100 80 20  IV (C) मध्यकालीन Women in Indian History in Ancient Wedleyed Period	OPTIONAL	ोट ब्रिटेन क इतिहास १८१५-१८६५	100	80	20
SPTIONAL भीन और जापान का इतिहास 1800—19:1 100 80 20 IV (B) History of China & Japan 1800-19:1 100 80 20 IV (C) भव्यकालीन Women in Indian History in Ancient Wedlevel Period		History of Great Eritain 1815-1885			
DPTIONAL भागतीर इतिहास में नारी—प्राचीन एवं 100 00 20 IV (C) मध्यकालीन Women in Indian History in Ancient Verticeal Period	OPTIONAL IV (B)	चीन और जागान का इतिहास1800-19:1	100		Labore
TOTAL 400	OPTIONAL	भावतीर इतिहास में नारी-प्राचीन एव मध्यकालीन Women in Indian History in Ancient	100		
		1 Degration with		TOTAL	400

forta diazz SEMESTER II.

प्रश्न पन	र SEMESTER II प्रश्न पत्र का नाम	र्वेजाक	सेद्धारिक	्यांतनिक मृख्यांकन
1	इतिहान लेखन (अनिवाय)	100	00	20
11	Historigraphy (Compulsory) समकातीन विश्व (अनिवार)	100	60	20
-111	Contemporary world (Compelsory) आयुनिक छशासगढ (अनिवार्य)	100	00	20
OPTIONAL	Modern Chhattisgarh (Compulsory) आधुनिक इन्तेण्ड 1885—1966	100	90	20
IV (A) OPTIONAL	Modern England 1885-1956 चीन और जपान का इतिहास 1911- 1950	100	80	20
IV (B)	History of China & Japan 1911-1950	100	80	20
IV (C)	आयुनिक भारत में नारी Woman in Modern Inda	2500	1.1.138	400
HOLLOW, CO.			TOTAL	340,000



## अटल बिहारी वाजपेयी विश्वविद्यालय, बिलासपुर(छत्तीसगढ़)

#### सेमेस्टर पाठ्यकम एम.ए. इतिहास

टीप :— एम.ए. इतिहास सेमेस्टर पद्धित में सेमेस्टर III एवं IV में परीक्षार्थियों को निम्निविधित खण्ड—अ एवं खण्ड—4 में से किसी एक खण्ड का चयन कर उसके दोनों प्रश्न पत्नों को हल करमा होगा। उपसेक्त 4 वैकल्पिक प्रश्न पत्नों में से परीक्षार्थियों को सरल क्रमांक 1, 3 में से कोई एक एवं 2, 4 में से कोई एक पैकल्पिक प्रश्न पत्नों का चयन करना होगा। सभी प्रश्न पत्नों में 100−100 अंक होंगे। 100 अंकों में 80 अंक सैद्धांतिक एवं 20 अंक आंतरिक मूल्यांकन के होंगे।

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प्रश्न पत्र	प्रश्न पत्र का नाम	पूर्णाक	सैद्धांतिक	आंतरिक मुल्यांकन
	ध्यकालीन भारत			No order
SECTION .	A : MEDIEVAL INDIA			
	सल्तनतकालीन भारतीय राजनय एवं अर्थव्यवस्था (1200 से 1526 ई. तक) Indian polity and economy in Sultanate period (1200-1526 A.D.)	100	80	20
"	सत्तनत कालीन समाज एवं शंस्कृति (1200 से 1526 ई.) Society and culture in Sultanate Period (1200-1526 A.D.)	100	80	20
	ाधुनिक भारत B : MODERN INDIA			
	आधुनिक भारत 1757 ई. से 1857 ईतक (राजनीतिक, प्रशासनिक) Modern India 1757 A.D. to 1857 A.D. (Political, Administrative)	100	80	20 .
II	आधुनिक भारत 1757 ई. से 1857 ई. तक (आर्थिक, सामाजिक, सांस्कृतिक) Modern India 1757 A.D. to 1857 A.D. (Economic, Social, Cultural)	100	80	20
वैकल्पिक प्रश	न पत्र (OPTIONAL PAPER)			
OPTIONAL I	भारतीय राष्ट्रीय आंदोलन का इतिहास (1857 से 1922 ई. तक) History of National Movement (1857 to 1922 A.D.)	100	80	20
OPTIONAL II	भारत का सांस्कृतिक इतिहास (प्रारंभ से 1528 ई. तक)	100	80	20
	Cultural History of India (Begining to 1526 A.D.)			
OPTIONAL	भारतीय संविधान और शासन व्यवस्था Indian Constitution and Administrative System	100	80	20
OPTIONAL IV	पर्यटन सिद्धांत Tourism Theory	100	80	20

# अटल बिहारी वाजपेयी विश्वविद्यालय, बिलासपुर(छत्तीसगढ़)

सेमेस्टर पाठ्यकम एम.ए. इतिहास

TOTAL 400

टीप :— एम.ए. इतिहास सेमेस्टर पद्धति में सेमेस्टर III एवं IV में परीक्षार्थियों को निम्नलिखित खण्ड−अ एवं खण्ड−य में से किसी एक खण्ड का चयन कर उसके दोनों प्रश्न पत्रों को इल करना होगा। उपरोचत 4 वैकल्पिक प्रश्न पत्रों में से परीक्षार्थियों की सरल क्रमांक 1, 3 में से कोई एक एवं 2, 4 में से कोई एक वैकल्पिक प्रश्न पत्रों का चयन करना होगा। सभी प्रश्न पत्रों में 100−100 अंक होंगे। 100 अर्कों में 80 अंक सैद्धांतिक एवं 20 अंक आंतरिक मूल्यांकन के डोंगे।

ातुख समस्ट ११न पन	र SEMESTER IV प्रशन पश्र का नाम	पूर्णाक	सैद्धातिक	आंतरिक मल्बोकन
	1400			Real Property
पुष्य अ : म	ह्यकालीन भारत A : MEDIEVAL INDIA			
SECTION				
1	मुगलकालीन भारतीय राजनय एवं अर्थव्यवस्था (१५२६ से १७५० ई. तक) Indian polity and economy in Mughal period (1526-1750 A.D.)	100	80	20
н	मुगलकालीन समाज एवं संस्कृति (1526 सं 1750 ई.) Society and culture in Mughal period (1526- 1750 A.D.)	100	80	20
Sente W :	आधुनिक भारत		-	1
SECTION	R - MODERN INDIA			
I I	आधुनिक भारत 1858 ई. से 1964 ई.सक . (राजनीतिक, प्रशासनिक) Modern India 1858 A.D. to 1964 A.D. (Political, Administrative)	100	80	20
н	आधुनिक भारत 1858 ई. रो 1964 ई. तक (आर्थिक, सामाजिक, सांस्कृतिक) Modern India 1858 A.D. to 1964 A.D. (Economic, Social, Cultural)	100	80	20
AndAssa	प्रशत पत्र (OPTIONAL PAPER)			75=±±25 ×
OPTION	Commence of the same of	100	80	20
OPTION	A.D.) AL भारत का सांस्कृतिक इतिहास (1526 से 1960 र Cultural History of India (Begining to 1526 AI	100	80	20
OPTION	AL भारतीय की केन्द्रीय तथा प्रांतीय शासन व्यवस्था Central and State Administrative System o	6.800	80	20
OPTION	India Committee of wearf	Ä 100	80	20
13	of History	810	TOTA	400