UNIVERSITY OF KOTA, KOTA



SCHEME OF EXAMINATION AND COURSES OF STUDY FACULTY OF COMMERCE M.Com. (Accounting and Finance) Degree Four Semesters Course

Session 2018-19

M.COM (ACCOUNING AND FINANCE)

The Master of commerce (Accounting and Finance) is a two years full time course. The course has been organized in IV Semesters over two years. Each year will comprise of two semesters.

Scheme of Examination:

(1) There shall be an examination at the end of each semester. The examination shall be conducted by means of written papers unless otherwise specified.

(2) Each paper will be of 100 marks. The breakup of marks will be as 70 marks for theory/numerical paper and 30 marks for internal assessment.

(3) The internal assessment marks shall be based on factors such as – Participation in seminars, Case discussions and group work activities, quizzes, individual and group oral presentations, submission of written assignment, term papers, classroom participation and attendance with maximum of 10 marks out of maximum 30 marks allocated for Internal Assessments. There will be one written class test of 20 marks in each paper except Paper Code: 304 in III Semester, 406 in IV Semester.

(4) A candidate is required to obtain 40% marks in each paper for a pass provided that in the case of paper where a practical examination is prescribed; candidates are required to pass in theory as well as in practical separately.

(5) If any candidate does not appear in any of the internal test on medical or other valid grounds, he/she may appear in defaulter class (internal) test by depositing a fee Rs.250/- per subject.

(6) A candidate who obtained at least 40% in each paper and 50% in aggregate in each semester examination, shall be Dee laud passes minimum percentage of marks required for a pass in first division, and second division 60% and 50% respectively in the aggregate of all the four semester examinations.

(7) Students are required to pass separately in internal and external examination. If one fails in internal and has passed in external, he will appear only in that paper(internal) in which he has failed and the marks of external exam will be carried forward and he/she will not be required to reappear in the exam in which he has passed and vice-versa.

(8) Pattern of question paper:

All the papers will be bi-lingual (English and Hindi). There shall be two sections, Section A (Max. Marks 20) shall comprise multiple-choice objective type 20 questions in all selecting 4 questions from each unit all being compulsory.

Section B (Max. Marks 50) shall have five questions selecting one question from each unit, any having choice of attempting any these questions.

(9) Promotion and span period:

The provisions made for MBA syllabus will be applicable for the purpose in view of total number of paper and the ratio will be accordance to that.

Attendance

A candidate appearing as a regular student shall be required to attend at the minimum 75% of the classes held in each paper including the tutorials and practical. A candidate failing to attend the above required minimum number of classes in all the papers shall be detained from appearing at the examination.

Scheme of Examinations:

The examination shall be divided into two parts in which first part is continuous assessment or internal assessment and second part is semester assessment or external assessment. The schemes for the internal and external examinations shall be as under:

- a) The assessment of the student for theory paper shall be divided into two parts in which first part is continuous assessment or internal assessment (30% of maximum marks) and second part is semester assessment or external assessment (70% of maximum marks). For practical papers there will be only one external assessment (100% of maximum marks).
- b) The internal assessment for each theory paper shall be taken by the teacher concerned in the Department during each semester. There will be two internal assessment tests each of 15% weightage, for theory papers in each semester. Each internal assessment test shall be of one hour duration for each paper and shall be taken according to academic calendar notified by the University. There will be no internal examination in the practical paper.
- c) A student who remains absent (defaulter) or fails or wants to improve the marks in the internal assessment may be permitted to appear in the desired paper(s) (only one time) in the same semester with the permission of the concerned Head of the Department. A defaulter / improvement fee of Rupees 250/- per paper shall be charged from such candidates. Duly forwarded application of such candidates by the teacher concerned shall be submitted to HOD who may permit the candidate to appear in the internal assessment after depositing the defaulter/ improvement fee. A record of such candidates shall be kept in the Department.
- d) The external assessment shall be of three hours duration for each theory paper and six hours duration for practical paper. The practical examination shall be taken by the panel of at least one external and one internal examiner at the end of each semester.
- e) The syllabus for each theory paper is divided into five independent units and each theory question paper will be divided into three sections as mentioned below:
 - Section-A shall have 01 compulsory question comprising 10 questions (maximum 20 words answer) taking two questions from each unit. Each question shall be of one mark and total marks of this section will be 10. This section will be compulsory in the paper.
 - Section-B will carry 25 marks with equally divided into five long answer type questions (answer about in 250 words) and examiners are advised to set two questions from each unit and students are instructed to attempt five questions by selecting one question from each unit.
 - Section-C will contain five long answer type questions. One compulsory question of 15 marks and four questions of 10 marks each. Students are instructed to attempt total three questions with one compulsory question (answer about in 500 words) of and any two more questions (answer about in 400 words) out of remaining four questions. Paper setter shall be instructed to design question paper covering from all five units.
- f) The pattern of question paper of internal and external shall be as follows:

(A) Continuous or Internal Assessment:

30% weightage of Maximum Marks (30 Marks out of 100 Maximum Marks)

DEPARTMENT OF COMMERCE & MANAGEMENT UNIVERSITY OF KOTA, KOTA First/Second Internal Test 20......

Duration of Exam: 1.00 Hr 15 Class: MBA/MBA (International Business)/M.Com (Accounting and Finance) Subject: No. of Students: Note: The question paper contains three sections as under:

Section-A : One compulsory question with 04 parts. Please give short answers in 20 words for each part.

Section-B : 02 questions to be attempted having answers approximately in 250 words. Section-C : 01 question to be attempted having answer in about 500 words. SECTION A

	SECTION A	
Q.1(a)		1
(b)		1
(c)		1
(d)		1
	SECTION B	
Q.2		3
Q.3		3
Q.4		3
Q.5		3
	SECTION C	
Q.6		5
Q.7		5
L		

Max. Marks:

Semester: I Paper: Teacher:

(B) Semester or External Assessment:

70% weightage of Max. Marks (70 Marks out of 100 Max. Marks) Duration of Examination: 3 Hours

Max. Marks: 70

SECTION-A: 10x1=10

	all questions)
(Two question from each unit with no internal choice) Q. No. 1	
(i)	1 Mark
(i)	1 Mark
(ii)	1 Mark
(iii)	1 Mark
(v)	1 Mark
	1 Mark
(vi)	1 Mark
(vii)	
(Viii)	1 Mark
(ix)	1 Mark
(x)	1 Mark
SECTION-B: 5x5	
(Answer all ques	•
(One question from each unit with internal choice) (Maxin	num two sub-divisions only)
Q. No. 2.	
	Or
	5 Marks
Q. No. 3.	
	Or
	5 Marks
Q. No. 4.	
	Or
	5 Marks
Q. No. 5.	
	Or
	5 Marks
Q. No. 6.	
	Or
	5 Marks
SECTION-C: 1x15 + 2x10=35	
(Answer any three questions including compulsory Q.No. 7	7)
(Maximum four sub-divisions only)	
Q. No. 7	15 Marks
Q. No. 8	10 Marks
	10 Martin
Q. No. 9	10 Marks
Q. No. 10.	10 Marks
Q. No. 11.	10 Marks
Distribution of Marks for Practical Examination	15:
Duration of Exam: Interview based	Maximum Marks: 100

Maximum Marks: 100

S. No.	Name of Exercise	Marks
1.	Project Report	40
2.	Viva-voce	60
	Total Marks	100

Rules regarding determination of results:

Each semester shall be regarded as a unit for working out the result of the candidates. The result of the each semester examination shall be worked out separately (even if he/she has appeared at the paper of the lower semester along with the papers of higher semester) in accordance with the following conditions:

- a) The candidate shall be declared as pass in a semester examination, if he/she secures at least 40% marks in each theory paper separately in external & internal examination and 50% marks in each practical paper and at least 50 % marks in project/dissertation with 50% aggregate marks in that semester.
- b) A candidate declared as fail/absent in one or more papers at any odd semester examination shall be permitted to take admission in the next higher semester (even semester) of the same academic session.
- c) A candidate may be promoted in the next academic session (odd semester) if he/she has cleared collectively at least 50% of the papers of both semesters of previous academic session with 50% of the aggregate marks. The candidate who does not fulfil the above condition will remain as an ex-student and will reappear in the due papers along with next odd/even semester exams.
- d) If any student who is provisionally admitted in higher odd semester but could not secure prescribed minimum marks in previous semesters will be treated as ex-student and his/her admission fee will be carry forwarded to the next odd semester of forthcoming academic session.
- e) If a candidate, who is declared as pass, wishes to improve his/her performance in the theory papers of previous semester, he/she may re-appear only one time in these papers in next odd/even semester examinations.
- f) Candidate shall not be permitted to re-appear or improve the marks obtained in the external examination of practical / dissertation in any condition.
- g) If the number of papers prescribed in a semester examination is an odd number, it shall be increased by one for the purpose of reckoning 50% of the papers for considering the student pass/fail.
- h) A candidate may be given only two additional chances for passing the semester thus maximum tenure for completing the two years' postgraduate course will be limited to four years, for three years postgraduate programme up to five years and so on.
- i) The marks secured in the Gen Hindi, Gen English, Elementary Computer applications and Environment studies shall not be counted in awarding the division to a candidate. The candidate shall have to clear the compulsory subjects in the additional three chances and non-appearance or absence in the examination of compulsory subjects shall be counted as chance and shall be declared fail in that examination.
- j) The grace marks scheme shall be applicable as per University norms.

Classification of Successful Candidates:

The classification of successful candidates after last semester examination shall be as under:

Description of Marks Obtained	Division / Result	
• 80% and above marks in a paper.	Distinction in that paper.	
• A candidate who has secured aggregate 60% and above marks	First Division	
• A candidate who has secured aggregate 50% and above but less than 60% marks	Second Division	

COURSE STRUCTURE

S.No.	Paper	Nomenclature	Maximum Marks		Credits
	Code		Internal	External	
1	101	Financial Management	30	70	5
2	102	Corporate Accounting	30	70	5
3	103	Management Accounting	30	70	5
4	104	Indian Financial System	30	70	5
5	105	Computerized Accounting	-	100	4
		and Communicative English			
		Total Marks (500)	120	380	24
		Semester II			
1	201	Advanced Statistical	30	70	5
		Analysis			
2	202	Cost Accounting and Cost	30	70	5
		Control			
3	203	Security Analysis, Portfolio	30	70	5
		Management and			
		Derivatives			
4	204	Research Methodology	30	70	5
5	205	Spreadsheet Applications	-	100	4
		Total Marks (500)	120	380	24
		Semester III			
1	301	Project Planning and	30	70	5
		Control			
2	302	Operation Research	30	70	5
3	303	Corporate Tax Planning and	30	70	5
		Management			
4	304	Advanced Accounting	30	70	5
5	305	Internship Report	-	100	4
		Presentation			
		Total Marks (500)	120	380	24
		Semester IV			
1	401	Ethics in Accounting	30	70	5
2	402	Indirect Taxes	30	70	5
3	403	Contemporary Auditing	30	70	5
4	404	IFRS	30	70	5
5	405	Dissertation and Viva Voce	-	100	4
		Total Marks (500)	120	380	24
		Grand Total Cred	lits	•	96

SEMESTER FIRST

101. FINANCIAL MANAGEMENT

Objective

To inculcate knowledge about basics of financial management

UNIT-1

Financial Management: Meaning, Scope, Finance function, Agency theory, Objectives of financial management, Profit maximization and Wealth maximization, Time Value of Money.

UNIT-2

Capital Structure: Meaning, Financial Structure, Leverages, Operating Leverages, Degree of operating leverages, Behavior of degrees of operating leverages, Financial Leverages and combined leverages, Capital structure plan and degree of operating leverages. Indifferences point of alternate plans. EBIT and EPS Analysis, Financial breakeven point, Cost of capital, Computation of various components of capital structure, Weighted average cost of capital,

capital structure theories. **UNIT-3**

Investment Decisions: Concept of Capital Budgeting, Features of capital budgeting and their comparative analysis, Capital budgeting under certainty & uncertainty.

UNIT -4

Investment in Current assets: Meaning of working Capital, Types of working capital, Monitoring efficiency in working capital management, Cash & Receivable Management. Inventory management determination of various levels of inventory, Economic orders Quantity (EOQ) and Re-order level under uncertainty.

UNIT -5

Dividend Decisions: Introduction, Divisible profit, Legal aspects of divisible profits, Kinds of dividends, Dividend policy, Factors affecting dividend policy, Importance of stable dividend policies, Theories of dividend. Walters Models, Gordon Model, M.M. Hypothesis.

Suggested Readings

1. Agrawal & Agrawal : Financial Management (Hindi).

2. Bhalla V.K.: Modern Working Capital Management, Anmol Pub, Delhi

- 3. Brigham E.F, Gapenski L.C., and Ehrhardt M.C: The Financial Management and Practice; Harcourt College Publishers, Singapore.
- 4. Khan M.Y.and Jain P.K: Financial Management, Text and Problems; Tata McGraw Hill, New Delhi.

5. Pandey I.M: Financial Management: VikasPublishing House, New Delhi.

6. Prasanna Chandra: Financial Management Theory and Practice; Tata McGraw Hill, New Delhi

7. Rao, Singh, Rao,: Financial Management : Apex Publishers, Udaipur

- 8. Van Home J.C: Financial Management and Policy; Prentice Hall of India, New Delhi.
- 9. Van Home J.C: Fundamentals of FinancialManagement; Prentice Hall of India, New Delhi.

102. CORPORATE ACCOUNTING

Objective

This course enables the students to develop awareness about corporate accounting in conformity with the provisions of Companies Act.

Course Contents:

Unit – I

Issue, Redemption of Shares; Issue and Redemption of Debentures. Underwriting, Acquisition of Business and Profits prior to Incorporation.

Unit – II

Final Accounts of Companies (according to companies act 2013) including Computation of Managerial Remuneration, Divisible Profits and Bonus Issues including guidelines of SEBI.

Unit – III

Valuation of Goodwill and Shares.

Unit – IV

Accounting for Amalgamation of Companies as per IND AS Accounting Standard; including Inter-company holdings.

Unit –V

Accounting for internal reconstruction schemes, elementary knowledge of IND AS.

Suggested Readings :

1. Gupta, R.L., and Radhaswamy M. : Company Accounts, Sultan Chand and Sons, New Delhi

2. Khandelwal, M.C. : Higher Accounting (Hindi). Ramesh Book Depot, Jaipur

3. Maheshwari, S.N.: Corporate Accounting. Vikas Publishing House, New Dlhi.

4. Monga, J.R., Ahuja, Girish and Sehgal, Ashok : Financial Accounting: Mayur Paper Backs, Noida.

5. Monga, Sehgal & Ahuja : Advanced Accounts.

6. Roa, N.S., Heda, B.L. and Gupta, S.L.: Corporate Accounting (Hindi) Remesh Book Depot, Jaipur

7. Shukla, M.C., Grewal, T.S. and Gupta, S.C.: Advanced Accounts. S. Chand & Co., New Delhi.

103. MANAGEMENT ACCOUNTING

Objective

This course provides the students an understanding of Management, Accounting Concepts and applications.

COURSE CONTENTS

Unit – I

Management Accounting : Meaning, Definition, Nature and Scope, Difference between Financial Accounting and Cost Accounting and Management Accounting Functions, Object, Importance and Techniques, Role of Management Accountants.

Fundamentals of Financial Statements: Nature and Subject matter of Profit & Loss Account and Balance Sheet, Limitations of Financial Statements.

Unit – II

Financial Statements Analysis : Meaning and Definition, Objectives, Importance, Type of

Financial Analysis, Tools and Techniques of Financial Analysis Limitations of Analysis, Analysis of Comparative Financial Statements and Common-size Statements, Trend Analysis.

Ratio Analysis: Meaning and Definition, Forms, Importance, Objectives and Precaution, Limitations, Classification, Calculation and Interpretation of Financial Ratios.

Unit – III

Analysis of Working Capital: Meaning, Definitions, Concepts, Type, Components, Determinants, Analysis of Working Capital, Estimation of Working Capital requirements. Cash Flow Statement as per IND AS: Concept, Meaning and definitions, objectives, importance, limitations and preparation.

Unit – IV

Management Information and Reporting System : Meaning and Definition, Importance, Installation of Management Information System, Principles of a good Information System, Information and Reporting, Essential of a good reporting System, Type of accounting reports, Limitations of reporting system.

Business Forecasting : Concept, Objectives, Importance, Methods. Exponential Smoothing UNIT-V

Analysis of Value Addition : Concept of Value addition, Meaning and Definition, Value Added Statement, Calculation of Value Added Ratios, Preparation and Interpretation of Value Added Statement.

Balanced Scorecard: Financial Perspective, Customer Perspective, Internal Business Process Perspective, Learning and Growth Perspective.

Suggested Readings :

1. Anthony, R.N.: Management Accounting, (D.B. Taraporewala & Sons Pvt.Ltd., Mumbai.

2. Garison, Ray H.: Managerial Accounting (Business Publications, Inc.)

3. Hingorani, N.L., Ramanathan & Grewal, T.S. : Management Accounting Sultan Chand & Sons, Delhi.

4. John Dearden & Bhattacharya : Management Accounting Vikas Publishing House, New Delhi.

5. Kaplan, Robert S. and Atkinson, Anthony A: Advanced Management Accounting, Pearson Education Asia.

6. Keller, I.R.: Management Accounting for Profit Control (McGraw Hill.)

7. Khandelwal, N.M.: Prabandhakiya Lekhanken, Rajasthan Hindi Granth Academy, Jaipur

8. Manmohan & Sinha : Management Accounting, Sahitya Bhawan, Agra.

9. Rao, N.S., Heda, B.L. and Gupta, S.L.: Management Accounting (Hindi), Apex publishing House, Udaipur

10. Tricker, R.L. : Management Information & Ciontrol System, John Wiley & Sons.

11. Vinayakam & Sinha : Management Accounting, Sahitya Bhawan, Agra.

104. INDIAN FINANCIAL SYSTEM

Objective

This course aims at providing students with an understanding of the structure, organization, and working of financial system in India.

Course Contents:-

UNIT-I

Indian Financial system: Nature and role of financial system; Constituents of Indian Financial system. Financial system and economic development;

UNIT-II

Financial Markets: Money and capital markets; Money market: meaning, constituents, functions of money market; Money market instruments; Recent trends in Indian money market; Capital market: primary and secondary markets;

Financial Services: Types of financial services, fund based and fee based; Risk Regulatory framework for Financial Services in India

UNIT-III

Indian Banking System: RBI, Commercial Banking - Meaning, functions, management and investment policies, Development Banking - Concept, objectives and functions of development banks, Credit Creation and Credit Control.

Non-Banking Financial Institutions: Concept and role of non-banking financial institutions; Sources of finance; Functions of non-banking financial institutions; Investment policies and non-banking financial institutions in India.

UNIT-IV

Merchant Banking: Concept, functions and growth; Government policy and merchant banking services, SEBI guidelines; Future of merchant banking in India.

Hire Purchase and Leasing concept and objectives,

UNIT-V

Mutual Funds: Concept, performance appraisal and regulation of mutual funds (with special reference to SEBI guidelines); Designing and marketing of mutual funds schemes; Latest mutual fund schemes in India; an overview.

Credit Rating objectives and scope, Functions of credit Rating Agencies, credit Rating agencies in India, Benefits and Limitations of credit Rating,

Suggested Readings

1. Avadhani: Investment and Securities Markets in India, Himalaya Publications, Delhi.

- 2. Averbach, Robert D.: Money, Banking and Financial Markets; MacMillan, London
- 3. Bhole, L.M.: Financial Markets and Institutions, Tata McGraw Hill, Delhi
- 4. Ghosh, D.: Banking Policy in India, Allied Publications, Delhi
- 5. Giddy, I.H.: Global Financial Markets, A.I.T.B.S., Delhi
- 6. Khan, M.Y.: Indian Financial System, Tata McGraw Hill, Delhi.
- 7. Reserve Banks of India, Various Reports, RBI Publication, Mumbai

8. Srivastava R.M.: Management of Indian Financial Institution; Himalaya Publishing House, Delhi

9. Varshney, P.N.: Indian Financial System, Sultan Chand & Sons, New Delhi

10. Verma J.C.: Guide to Mutual Funds and Investment Portfolio, Bharat Publishing House, New Delhi.

11. Babu G. Ramesh, Financial Services in India, Concept Publishing Company, New Delhi.

12. Bater G.S., Financial Services and Markets, Deep & Deep Publications, New Delhi.

13. Bhasin Niti, Banking & Financial Markets in India, New Century Publications, New Delhi

14. Desai Vasant, India Financial Systems, Himalaya Publishing House, New Delhi.

15. Gordan & Natarajan, Financial Markets and Services, Himalaya Publishing House, New Delhi.

105. COMPUTERISED ACCOUNTING and COMMUNICATIVE ENGLISH

Objective

To impart the knowledge of implementing accounting procedure with the use of computers **COURSE CONTENTS:-**

UNIT-I

Software based Accounting: Present Scenario Tally, Features, Company Creation, Tally Configuration, Split Company Data, Backup, and Restore.

Charts of Accounts, Reserved Groups and Ledgers, Account Masters. Account Voucher, Vouchers Types and Classes

UNIT -II

Invoicing, Budgets & Scenario Management, Enable Cheque Printing. Trial Balance, P&L A/C, Balance Sheet, Audit Trail, Other Books of Accounts Housekeeping and Security **UNIT-III**

Inventory : Configuration, Masters, Stock Items, Inventory Vouchers, Invoice, Challan, Summary Statements, Inventory features: Storage and Classification, Order Processing,

Invoicing, Purchase Management, Sales Management

UNIT-IV

Parts of Speech; Noun, Pronoun, Adjectives, Verbs and Adverbs

UNIT-V

Tenses: Present, Past and Future, Active and Passive Voice

Grill Exercises, Handling telephonic interviews and Group Discussion.

Suggested Readings:

- 1. Bangiz Reamesh: Learning Tally 9
- 2. Blyton Enid : Mystery of Tall
- 3. Bhargava Rita : Tally 7.2 including VAT TDS under new tax system
- 4. Maidasani Dinesh : Straight to the point tally 9/0
- 5. Nadhani, A.K. and Nadhani, K.K. : Implementing Tally 9 Comprehensive Guide
- 6. Nadhani, A.K. and Nadhani, K.K. : Simple Tally 9
- 7. Singh, Vishnu Priya : Quick Learn Tallly Version 9.0

Note: Latest version of Tally software shall be implemented which is available before the commencement of semester.

SPECIAL RULES AND SCHEME OF EXAMINATION FOR PAPER CODE 105: **COMPUTERIZED ACCOUNTING AND COMMUNICATIVE ENGLISH**

1. The examination in this paper shall consist of two parts:

• Computerized Accounting (I TO III UNIT): Max. Marks: 60 2 hrs Max. Marks: 40 1hrs

Time

• Communicative English (IV & V):

Candidate shall have to pass separately in both the parts.

2. Examination of computerized accounting shall consist of one practical lab exam and shall be conducted by a board of examiners having one external (to be appointed by the university) and one internal examiner.

3. Viva Voce for Communicative English shall consist of one practical lab exam and shall be conducted by a board of examiners having one external (to be appointed by the university) and one internal examiner.

SEMESTER SECOND

201. ADVANCED STATISTICAL ANALYSIS

Objective:-

To enable the students to gain understanding of statistical techniques as per requirements of business.

Course Contents:-

Unit – I

Moments and Kurtosis,

Probability: addition, Multiplication theorem, Conditional Probability, Mathematical expectations, Bayesian Approach, Theoretical frequency distribution.

Unit – II

Test of Significance – T test, F-test, z test, chi square test, ANOVA (One way & Two way) Unit – III

Non-parametric Tests: Sign test, Run Test, Signed Rank Test, Kruskal Wallis Test, Interpolation and Extrapolation

Unit – IV

Partial and multiple correlation and regression, Association of attributes (Two attribute situations).

Unit – V

Statistical Decision Theory, An overview of SPSS.

Recommended Books:

- 1. Sancheti and Kapoor Statistics.
- 2. Hooda, R.P. Statistics for Business and Economics.
- 3. Gupta, S.P. Statistics.
- 4. Gupta, B.N. Statistics.
- 5. Nagar, K.N. Sakhyiki ke Mool Tatva, Meenakshi Prakashan, Agra.

202. COST ACCOUNTING AND COST CONTROL

Objective:-

This course aims at apprising the student of advanced topics in the subject.

Course Contents:-

Unit – I

Budgetary Control System: Major features, need and advantages, Role of Accountant in BCS, Types of Budget, Steps and process of Budgeting, Dimensions in budgeting, Kaizen Budgeting, Activity Based Budgeting, Responsibility and Accountability, Human Aspects in Budgeting.

Unit – II

Uniform Costing: Concept, Meaning, Definition, Objectives, Scope and Limitations, Uniform Costing and Inter-firm comparisons, Uniform Costing and Managerial Decisions for inter harmonization and competition.

Unit – III

Activity Based Costing: Concepts, Nature, Scope, Significance, objectives and Limitations of ABC, Basic characteristics of ABC, Difference between Traditional,

Target and Activity Based Costing, Product Life Cycle and its Stages, ABC Umbrella Management, Cost Driver Analysis, Levels of costs, Product Profitability Analysis, Benefits and Criticism of Activity Based Costing.

Unit – IV

Cost Audit: Concept, Meaning, Nature and Scope, Comparison, Cost Audit Vs Financial

Audit, Proprietary Vs Efficiency Audit, Aspects of Cost Audit, Types of Cost Audit.

Unit – V

Auditing techniques, Audit Reports, Cost Audit Programme, Cost Audit Rules, Regulatory mechanism of cost audit, Introduction to Cost Accounting Standards in India.

Suggested Readings:

1. Arora, M.N. – Cost Accounting, Himalaya Publishing Company, New Delhi.

2. Barfield, J.T., Raiborn, C.A. and Kinney, M.R. – Cost Accounting: raditions and Innovations, South Western College Publishing Co., Cincinnati, OH 45227.

3. Bhar, B.K. – Cost Accounting.

4. Gordon Shilling law – Cost Accounting: Analysis and Control, D.B.Taraporevala Sons & Co. (Pvt.) Ltd., Bombay.

5. Horngren, C.T., Foster, G. and Datar, S.M. – Cost Accounting: AManagerial Emphasis, Prentice Hall of India, New Delhi

6. Jain, D.C., Khandelwal, M.C. and Pareek, H.S. – Cost Accounting, Amjera Book Company, Jaipur.

7. Khan, M.Y. and Jain, P.K – Cost Accounting and Financial Management, Tata McGraw Hill Pub. Co. Ltd., New Delhi.

203. SECURITY MARKET OPERATIONS and PORTFOLIO MANAGEMENT

Objective

The objective of this course is to impart knowledge about operations in security markets and other related institutions and enable students learn various methods of building portfolios evaluation and revision under various economic environmental constraints.

Course Contents:-

Unit-I

Security Markets: Primary and secondary market; Primary market: its role and functions; methods of selling securities in primary market; new financial instruments.

Unit-II

Brokers, registrars and managers, bankers, etc., Listing of securities; Depository: Introduction, role and need; Share Price Indices: Need and importance; Compiling of index numbers and interpretation.

Unit-III

Portfolio Management: Meaning, importance, objectives and various issues in portfolio construction, revision of portfolio: an evaluation

Portfolio Analysis: Estimating rate of return and standard deviation of portfolio returns; Effects of Combining securities; Markowitz risk-return optimization solution.

Single Index Model: Portfolio total risk, portfolio market risk and unique risk; Sharpe optimization solution.

Capital market Theory: Capital market line, security market line; Risk free lending and borrowing; recent developments.

Unit-IV

Factor Models: Arbitrage pricing theory, Principle of Arbitrage, arbitrage portfolios, two factor and multi-factor models.

Portfolio Construction: Techniques of portfolio construction.

Portfolio Performance Evaluation: Measure of return, risk adjusted measures performance evaluation, Techniques sharpe, method of treynor, jenson, market timing, evaluation criteria and procedures.

Unit-V

Derivative Trading: Future and forwards: concept, meaning and importance;

Futures: Hedgers and speculators; Future contract; Future markets: clearing house, margins, Mark to Market margins, Future Trading; Future Pricing;.

Options: Types of options; Valuation of options; Binomial Option Pricing Model; Black-Scholes model; Futures vs. options

Suggested Readings

1. Barua, Raghunathan and Verma: Portfolio Management, Tata McGraw Hill, Delhi

2. Clark, James and Francis: Investment Analysis and Management, McGraw Hill, International Edition, New York.

3. Elton Edwin J., Gumber Martin J.: Modern J: Modern Portfolio Theory and Investment Analysis, John Wiley, New York.

4. Fabozzi, Frank J: Investment Management, Prentice Hall, International Edition, New York.5. Fischer, D.E. and Jordan R.J.: Security Analysis and Portfolio Management, Prentice Hall, Delhi.

6. Sharpe, Willam F., Gordon J. Alexander and J.V. Bailly: Investments, Prentice Hall, Delhi.

7. Chandrate, K.R., et al: Capital Issue, SEBI & Listing; Bharat Publishing House, New Delhi

8. Dalton, John M.: How the stock Market Works, Prentice Hall, New Delhi

9. Donald E. Fisher, Ronald J. Jordan: Security Analysis and Portfolio Management; Prentice all, New Delhi.

10. Gupta, L.C.: Stock Exchange Trading in India; Society for Capital Market Research and Development, Delhi.

- 11. Machi Raju, H.R.: Working of Stock Exchanges in India; Eastern Ltd., New Delhi.
- 12. Raghunathan, V.: Stock Exchanges and Investments; Tata McGraw Hill, New Delhi.
- 13. Website of bseindia.com, nseindia.com
- 14. Chance, Don M.: An Introduction to Derivatives, Dryden Press, International Edition.
- 15. Chew, Lilian: Managing Derivative Risk, John Wiley, New Jersey
- 16. Das, Satyajit: Swap & Derivative Financing, Probus
- 17. Hull, J.: Options, Futures and other Derivatives, Prentice Hall, New Delhi.
- 18. Kolb, Robert W.: Understanding Futures Markets, Prentice Hall Inc., New Delhi.
- 19. Kolb, Robert: Financial Derivatives, New York Institute of Finance, New York.
- 20. Marshall, John F. and V. K. Bansal: Financial Engineering A complete Guide to Financial Innovation, Prentice Hall Inc., New Delhi.
- 21. Report of Prof. L.C. Gupta: Committee on Derivatives Trading.
- 22. Report of Prof. J.C. Verma: Committee Report on Derivatives Trading.
- 23. Barua, Raghunathan and Verma: Portfolio Management, Tata McGraw Hill, Delhi
- 24. Clark, James and Francis: Investment Analysis and Management, McGraw Hill, International Edition, New York.

25. Elton Edwin J., Gumber Martin J.: Modern J: Modern Portfolio Theory and Investment Analysis, John Wiley, New York.

26. Fabozzi, Frank J: Investment Management, Prentice Hall, International Edition, New York.

27. Fischer, D.E. and Jordan R.J.: Security Analysis and Portfolio Management, Prentice Hall, Delhi.

28. Sharpe, Willam F., Gordon J. Alexander and J.V. Bailly: Investments, Prentice Hall, Delhi.

29. Chandrate, K.R., et al: Capital Issue, SEBI & Listing; Bharat Publishing House, New Delhi

30. Dalton, John M.: How the stock Market Works, Prentice Hall, New Delhi

31. Donald E. Fisher, Ronald J. Jordan: Security Analysis and Portfolio Management; Prentice Hall, New Delhi.

32. Gupta, L.C.: Stock Exchange Trading in India; Society for Capital Market Research and Development, Delhi.

- 33. Machi Raju, H.R.: Working of Stock Exchanges in India; Eastern Ltd., New Delhi.
- 34. Raghunathan, V.: Stock Exchanges and Investments; Tata McGraw Hill, New Delhi.
- 35. Website of bseindia.com, nseindia.com

204. RESEARCH METHODOLOGY

Objective:-

This Course aims at providing an overview of research methodlogy and certain quantitative techniques.

Course Contents:-

Unit – I

Research: Definition, Importance, Types, Steps in Research Methodology, Defining Research Problem; Research Design.

Unit – II

Sampling Design: Types of Sample, Purpose and advantages of sampling, Measurement and Scaling, Multi-dimensional scaling.

Unit – III

Types of Data: Primary, Secondary; Techniques of Data Collection: Questionnaire, Interview and Schedule and their formats.

Unit – IV

Hypothesis Formulation: Meaning, Nature, types, characteristics of a useful hypothesis, importance of a Hypothesis, testing hypothesis.

Unit – V

Multivariate Analysis: Factor Analysis, Discriminant Analysis,

Research Report Writing, Referencing: APA and MLA, Bibliography.

Recommended

- 1. Beri, G.C. Marketing Research
- 2. Boyd et al. Marketing Research
- 3. Kothari, C.R. Research Methodology
- 4. Sharma, K.R. Business Research Methods

205. SPREADSHEET APPLICATIONS

Objective

This course focuses at providing a comprehensive input on the subject.

GENERAL OBJECTIVES:

This course provides the student with the knowledge to organize, analyze, and Evaluate spreadsheet data.

COURSE OUTLINE:

A. Introduction to Excel

- 1. Define worksheets and workbooks
- 2. Enter and edit data in cells
- 3. Describe and use symbols and the order of precedence
- 4. Display cell formulas
- 5. Use cell ranges: move, copy, paste, paste special, AutoFill
- 6. Manage and format worksheets
- 7. Select Page setup options
- 8. Work with existing templates, themes, and styles
- 9.. Create and apply custom styles for advanced formatting

10. Create and use a template

- **B.** Formulas and Functions
- 1. Create and copy formulas
- 2. Use relative and absolute cell addresses
- 3. Use AutoSum
- 4. Insert basic statistical functions
- 5. Use date functions
- 6. Use the IF function
- 7. Use the VLOOKUP function
- 8. Use the PMT function
- 9. Use the FV function

C. Charts

- 1. Choose a chart type
- 2. Create a chart
- 3. Modify a chart
- 4. Enhance charts with graphic shapes
- 5. Embed charts
- 6. Print charts

D. Working with Large Worksheets and Tables

- 1. Freeze rows and columns
- 2. Hide and unhide rows, columns, and worksheets
- 3. Protect a cell, a worksheet, and a workbook
- 4. Control calculations
- 5. Print large worksheets
- 6. Explore basic table management
- 7. Sort data
- 8. Filter and total data

E. Date to Information

- 1. Design tables based on data table theory
- 2. Import data from text files and other sources
- 25 | P a g e
- 3. Apply conditional formatting
- 4. Apply advanced filtering and sorting methods
- 5. Create and use range names
- 6. Use database functions

- 7. Create a macro with the Macro Recorder
- 8. Create macro buttons
- 9. Work with macro security

Suggested Readings

1. Robert T. Grauer and Maryann Barber. *Exploring Microsoft Excel*.Prentice Hall. Current Edition.

SEMESTER THIRD

301. PROJECT PLANNING AND CONTROL

Objective

The objective of this course is to enable students learn the process and issues relating to preparation, appraisal, review and monitoring of projects.

Course Contents

UNIT I

Identification of Investment Opportunities: Project ideas, screening of ideas; Environment scanning and opportunity analysis; Government regulatory framework.

Market and Demand Analysis: Information required for market and demand analysis;

Sources of information: primary and secondary; Demand forecasting.

UNIT II

Technical Analysis: Materials and inputs; Production technology; Product mix; Plant location and layout; Selection of plant and equipment.

Cost of Project and Means of Financing: Major cost components; Means of financing; Planning capital structure; Various financing schemes of financial institutions.

UNIT III

Profitability, Financial Projections and Tax Considerations: Cost of production; Break even analysis; Project balance sheet, profit and loss account and cash flows statement; Provisions and considerations for computing taxable income.

Appraisal Criteria and Appraisal Process: Methods of appraisal under certainty, risk and uncertainty; Investment appraisal in practice; Process followed by financial institutions; Project appraisal techniques.

UNIT IV

Social Cost Benefit Analysis: Rationale for social cost benefit analysis; Methodology of

SCBA; L&M approach and UNIDO approach; Measurement of the impact on distribution: SCBA in India.

UNIT V

Network Techniques for Project Implementation, Monitoring and Control: PERT and CPM techniques; Critical path, event stacks and activity floats; Scheduling to match availability of manpower, Measures of variability and probability of completion by a specified date; Project implementation practices in India.

Suggested Readings

□ Bryce, M.C.: Industrial Development, McGraw Hill (Int. Ed.), New York

□ Chandra, Prasanna: Project Preparation, Appraisal and Implementation, Tata McGraw Hill, Delhi.

Chaudhary, S.: Project Management, Tata McGraw Hill, New Delhi

□ I.D.B.I.: Manual of Industrial Project Analysis in Developing Countries.

□ Little I.M.D. and Mirrlees J.A.: Project Appraisal and Planning for Developing Countries, Heinemann Education Books, London.

□ O.E.C.D.: (i) Manual for Preparation of Industrial Feasibility Studies, (ii) Guide to Practical Project Appraisal.

- □ Pitale, R.L.: Project Appraisal Techniques, Oxford and IBH.
- □ Planning Commission: Manual for Preparation of Feasibility Report
- Timothy, D.R. and W.R. Sewell: Project Appraisal and Review, Macmillan, India

302. OPERATIONS RESEARCH

Objective

To provide an overview of all operations research techniques to the students.

Course Contents

Unit – I

Operations Research: Concept, Significance, Models, Techniques, Approaches, and Limitations. Linear Programming: Characteristics, Need and Importance, Graphic Method, Simplex Method, Duality, Sensitivity Analysis.

Unit – II

Transportation Problem: Initial feasible solution, Determining optimal solution, Assignment Problems: Unbalanced Problems.

Unit – III

Inventory Planning and Control: Objectives, Inventory costs, Inventory levels, Economic order quantity, selective inventory control. Goal programming, Integer Programming (Elementary).

Unit – IV

Queuing Theory: Assumptions, Main elements, Problems. Game Theory: Two person zero sum game, Mixed strategies.

Unit – V

Network Analysis: CPM, PERT, Time-cost Trade off, Simulation: Monte Carlo Approach.

Suggested Readings:

1. Agrawal, N.P. – Operations Research.

- 2. Kapoor, V.K. Operations Research.
- 3. Kothari, C.R. Operations Research.
- 4. Vohra, N.D. Operations Research.

303. CORPORATE TAX PLANNING AND MANAGEMENT

Objective :- To aim at selected aspects of the subject.

Course Contents:-

Unit – I

Introduction to Tax Management: Concept of Tax Planning, Tax Avoidance and Tax Evasion, Corporation Taxation and Dividend Tax, Tax Planning for New Business – Tax Planning with reference to Location, Nature and form of Organisation of New Business.

Unit – II

Tax Planning for Financial Management Decisions: Tax Planning relating to Capital Structure Decision, Dividend Policy, Inter Corporate Dividend and Bonus Shares.

Unit – III

Tax Planning for Managerial Decision: Tax Planning in respect of Own or Lease, Sale of assets used for Scientific Research, Make or Buy Decisions, Repair, Replace, Renewals or Renovation and Shut Down or Continue Decisions.

Unit – IV

Special Tax Provision: Tax Provision relating to Free Trade Zones, Infrastructure Sector and Backward Areas, Tax Incentives for Exporters, Tax Planning with reference to Amalgamation of companies.

Unit – V

Tax Payment: Return of Income and Assessment, Penalties and Prosecution, Appeals and Revision, Tax Deduction and Collection at source, Advance Payment of Tax.

Suggested Readings:

1. Manoharan, T.N. – Income Tax, Snow White, Mumbai, 2010.

2. Mehrotra, H.C. – Income Tax: Law and Accounts: Sahitya Bhawa Publication, 2010-11.

- 3.. Singhania, Vinod, K. and Singhania, Kapil Direct taxes: Taxman, New Delhi, 2010-11
- 4. Singhania, Vinod, K. etc. Direct Taxes Planning and Management: Taxman, 2010-11.

5. Tandon, O.C. – Taxation's Income Tax Rules, 1962, Bhargava, New Delhi, 2010.

304. ADVANCED ACCOUNTING

OBJECTIVE

To provide knowledge about advanced topics in accounting.

Course Contents

Unit – I

Amalgamation, Absorption and Reconstruction of companies including intercompany holdings, preparation and implementation of reconstruction scheme (along with tax and social aspects).

Unit – II

Liquidation of companies: Consequences, List 'B' contributories, preferential creditors, liquidators and receivers final statements and preparation of statement of affairs and List 'H'. **Unit – III**

Accounts of Holding Companies: provisions of Companies Act, 2013 preparation of consolidated P&L a/c and B/s including intercompany.

Unit – IV

Accounts of Banking Companies: Provisions, schedule format, classification of assets, provisioning norms, income recognition.

Unit – V

Accounting systems for service sector companies: Hotels and Restaurants, Hospitals, Travel Companies, Micro Finance Companies.

Recommended Books:

1. Gupta, R.L. and Radhaswami, M. - Advanced Accounts Vol. II (English & Hindi).

- 2. Khandelwal, M.C. Higher Accounting (English & Hindi).
- 3. Maheshwari, S.N. Advanced Accountancy Vol. II (English).
- 4. Sehgal Ashok and Sehgal Deepak Advance Accounting Vol. II (English).
- 5. Shukla, M.C. and Grewal, T.S. Advanced Accounts Vol. II (English & Hindi).

305. INTERNSHIP REPORT AND PRESENTATION

Student has to undergo a one month summer internship in a business enterprise immediately after second semester exams. The report shall be prepared under supervision of a faculty member. At least before a month from commencement of Third semester examination, the student shall be required to submit the training report and make presentation before a panel of examiners comprising one internal and one external expert (to be appointed by the university), who would jointly conduct evaluation.

SEMESTER FOURTH

401. ETHICS IN ACCOUNTING

Objective:

To provide knowledge about ethical issues in accounting

Course Contents:-

Unit – I

Nature, Scope and Purpose of Ethics, Relevance of Values, Importance of Ethics and Moral Standards, Sources of Ethics, types of Ethics, Ethical Dilemma, Ethics and its relation to accounting and auditing.

Unit – II

Indian Ethos: Concept, Need, Purpose and Relevance of Indian Ethos, Sources of Indian Ethos, Salient Features (Brain Stilling, Total Quality mind, Intuition, Triguna Theory, Sanskaras, Self Management, Yoga and Meditation, Holistic Approach.

Unit – III

Shri Bhagvad Gita and Self-Management: Overview of Geeta, Kith and Kin Dilemma, Karma Yoga, Leadership through conduct, self management, Guna Theory, White-Collar Crime and Cooking the Books: Enron, Arther-Anderson, Satyam Cases.

Unit – IV

Work Ethics: Concept, Four P's of Work Ethics, Ways and Means to improve Work Ethic, Work Ethics at various levels.

Theory of Swadharma, Gandhian Ethical Values, Theory of Trusteeship.

Unit – V

Corporate Governance: Introduction, Concept, purpose of Corporate Governance, International Practices or Models of CG, Best CG practices clause 49 of companies act – role of SEBI, benefits and barriers in effective CG in India.

Corporate Social Responsibility: Introduction, Concept of CSR, various areas of CSR, arguments for and against CSR, barriers in CSR implementation, CSR accounting and auditing, CSR scenario in India and emerging trends.

ICAI Code of Conduct Recommended Books:

1. Albrecht, W.S. – Ethical Issues in Practice of Accounting (South Western)

- 2. Chattopadhyay, P- Sins of Multinational Companies (IAA Research Foundation).
- 3. Gupta, Dipankar Ethics Incorporated (Response Books)
- 4. Khandelwal, N.M.

5. Raju, M.K. – Managerial Challenges, CMK Raju Consultants Pvt. Ltd.

402. INDIRECT TAXES Objective This course aims at imparting basic knowledge about major indirect tax laws. **COURSE CONTENTS**

Unit – I

CGST/SGST- Important terms and definitions under Central Goods and Service Tax Act, 2017 and State Goods and Service Tax Act, 2017, Basic of GST, Meaning and scope of supply, Levy and collection of tax.

Unit – II

CGST/SGST- Time and value of supply of goods and/ or services, Input Tax Credit, Transitional Provisions, Registration under CGST/SGST Act, Filing of Returns and Assessment, Payment of Tax including Payment of tax on reverse charge basis, Refund under the Act.

Unit – III

CGST/SGST- Maintenance of Accounts and Records, Composition scheme, Job work and its procedure, Various Exemptions under GST, Demand and recovery under GST, Miscellaneous provisions under GST.

Unit – IV

IGST- Scope of IGST, Important terms and definitions under Integrated Goods and Service Tax Act, 2017. Levy and collection of IGST, Principal for determining the place of supply and Place of supply of goods and services, Zero rated Supply.

Unit – V

Custom Duty Act : Introduction and definitions, Officers of Customs and their powers. Tax Liabilities and Valuation of Goods, Computation of Custom duty, Penalties and Prosecution.

Book Recommended:

Abhishek Rastogi: Professionals guide to GST Ideation to reality (2017)

Custom Act 1962 and Rules

Datey V.S.:GST Ready Reckoner, Taxman Publication, New Delhi

Patel, Chaudhary: Indirect Taxes, Chaudhary Publication, Jaipur

Commercial GST, Commercial law publisher (India) Pvt Ltd, New Delhi.

Rajat Mohan: illustrated guide to GST (2017)

403. CONTEMPORARY AUDITING

Objective:-

This Course aims at provide a exposure about contemporary and advance topics on the subject.

Course Contents:-

Unit – I

Audit of Limited Companies: Auditors responsibility, , Audit of branches and Joint Audit. Concept of true and fair, concept of materiality in the context of audit companies.

Unit – II

Rights, Duties and Liabilities of Auditors; Non-financial Audit, Management Audit, Propriety Audit, and Efficiency Audit.

Unit – III

Audit under different provisions of Income Tax Act, Special features of audit of banks, Insurance companies and Cooperatives Society.

Unit – IV

Auditor's Report: Certificate and Report, Types of Audit Report, special reports on prospectus, dividends and divisible profits and depreciation.

Unit-V

Cost Audit: Meaning, Qualification, Rights, duties and liabilities of cost auditor.

Suggested Reading:

1. Jha Aruna – Students Guide to Auditing.

2.Gupta Kamal– Contemporary Auditing.

3. T.R. Sharma – Higher Auditing

4. Tandon B.N. – A Handbook of Practical Auditing.

404. INTERNATIONAL FINANCIAL REPORTING STANDARDS

Objective:-To provide overview of selected IFRS **Course Contents:-**Unit – I An overview of IFR Standards: Meaning and scope of standards, Compliance with standards, IAS Framework, Objectives, Procedure for issuing standards, effective dates etc. Presentation of financial statements (IAS-I) Inventories (IAS-2) Statement of cash flow (IAS-7) Accounting policies, Changes in accounting estimates and errors (IAS-8) Events after the reporting period (IAS-10) Construction contracts (IAS-11) Accounting for taxes on income (IAS-12) Segment Reporting (IAS-14) Accounting for property, Plant band Equipments (IAS-16) Unit – II Accounting for leases (IAS-17) **Revenue Recognition (IAS-18)** Accounting for employee benefits (IAS-19) Accounting for government grants and disclosure of government assistance(IAS-20) The effects of changes in foreign exchange rates (IAS-21) Capitalisation of borrowing costs (IAS-23) Related party disclosures (IAS-24) Accounting and reporting by retirement benefit plans (IAS-26) Consolidated and separate financial statement (IAS-27) Investments in associates (IAS-28) Unit – III Financial Reporting in Hyper inflationary Economics (IAS-29) Interest in Joint Venture (IAS-31) Earnings per share (IAS-33) Interim financial reporting (IAS-34) Impairment of Assets (IAS-36) Provisions, Contingent liabilities and Contingent Assets (IAS-37) Intangible Assets (IAS-38) Financial Instruments Recognition and Measurement (IAS-39) Investment property (IAS-40) Agriculture (IAS-41) Unit – IV IFRS-1 First time adoption of IFR standards. IFRS-2 Share based payment. **IFRS-3** Business Combinations. IFRS-4 Insurance Contracts. IFRS-5 Non-current assets held for sale and discontinued operations. Unit – V IFRS-6 Exploration for and Evaluation of Mineral Assets. IFRS-7 Financial Instruments Disclosure. **IFRS-8** Operating Segments. IFRS-9 Financial Instruments.

Contemporary Developments. (if any)

Recommended Books:

1. Ghosh, T.P. – Accounting standards and Corporate Accounting Practices: Taxman Publications, New Delhi.

2. Kulkarni, Shirish – International financial reporting standards, Sonali Publications, New Delhi.

3. Sodani, K.C. and Soral, G. (Ed.) – Global Convergence and Commerce Education: Apex Publishing House, Udaipur.

4. Rawat, D.S. – Accounting Standards, Taxman Publication, New Delhi.

5. Jawahar Lal – Accounting Theory and Practice, Himalaya Publishing House, Delhi.

6. Sharma, D.G. and Anand G. Srinivasan: Illustrated Guide to Accounting Standards, Taxmann, New Delhi.

7. The Chartered Accountant, Journal of ICAI, New Delhi.

405. DISSERTATION

A Short Research shall be conducted by the student under supervision of a Faculty member assigned by the department. The candidate shall be required to submit two copies of the dissertation before commencement of fourth semester examination.

Evaluations shall be made by an external examiner (appointed by the university). Maximum marks for evaluation will be 50 and remaining 50 marks will be for viva - voce. A committee will be constituted to conduct the viva – voce examination. The members of the committee will be senior most professor, HOD, Supervisor and External examiners (appointed by the university).