

# Fatima Mata National College (Autonomous) Kollam

Scheme & Syllabus of

Post Graduate Degree in Commerce

2019 Admission Onwards

# **Regulations for MCom under Semester system**

# 1. Scope

These regulations are proposed to come into effect from 2019 admissions onwards

# 2. Eligibility for admission

Eligibility for admission and reservation of seats for various Post Graduate Programmes in Commerce shall be according to the rules framed by the Parent University from time to time

### 3. Duration

The normal duration of a P.G Degree Programme shall be four semesters.

The duration of each semester shall be five months inclusive of examinations. There shall be at least 90 instructional days in a semester and a minimum of 450 hours of instructions in a semester.

### 4. Evaluation

Evaluation of each paper shall be done in two parts (1) Continuous Assessment (CA) and (2) End Semester Assessment (ESA)

The distribution of marks shall be 25% for CA and 75% for ESA

### 5. Continuous assessment

The allocation of marks for each component under continuous assessment shall be in the following proportions.

# Theory paper

a.	Attendance	5	
b.	Assignment	5	
c.	Tests	10	
d.	Seminar	5	
Total			

There shall be no continuous assessment for dissertation /project work.

The allotment of marks for attendance shall be as follows:

Attendance less than 75%	0 mark
75%	1 mark
76 to 80%	2 marks
81 to 86%	3 marks
86 to 90%	4 marks
Attendance more than 90%	5 marks

Those who secure a minimum of 75% attendance in the aggregate for all the papers of a semester taken together alone will be allowed to register for the end semester assessment of the semester.

Condonation of attendance to a maximum of 10 days in a semester subject to a maximum of two times during the whole period of the PG Programme may be granted by the College. Benefit of attendance may be granted to students who attended to University Union activities, meetings of the University bodies and for participation in extracurricular activities by treating them as present for the days of the their absence for the above purpose on production of participation/attendance certificate in such activities, subject to a maximum of 10 days in a semester.

Each student shall be required to do not more than 2 assignments for each paper. Valued assignments must be returned to the students.

For each paper there shall be at least two class tests during a semester. The probable dates of tests shall be announced at the beginning of each semester. Marks for tests shall be awarded on the basis of the average marks secured for the two tests. Valued answer scripts must be made available to the students for persual within 10 days from the date of test.

Students shall be required to present a seminar on a selected topic in each paper. A maximum of 5 marks shall be awarded for the seminar. The evaluation of the seminar will be done by the concerned teacher/(s) handling the paper based on the presentation, quality of seminar paper and participation in discussion.

All the records of the continuous assessment must be kept in the Department and must be made available for verification by the CE of the college, if necessary.

In every semester, one hour per week shall be allotted for project work/library.

# 6. Summer Internship

Summer internship shall be done at the end of the second semester subject to the following modified guidelines for summer internship as per U. O No. Ac.AIV/1/M.Com Summer Internship /2015 dated 06.05.2016.

- 1. There shall be summer internship by way of an organizational study (OS) for two weeks to facilitate the students to get familiarized with procedures and practice adopted in functional areas such as production/ operations, Marketing, Human Resource, Management Information system, Research and Development and Finance by reputed firms approved by the Teaching Department at the end of the M Com second semester programme.
- 2. Organizational Study (OS) for two weeks shall be arranged immediately after the ESA of second semester, but prior to the commencement of third semester classes.
- 3. Organizational Study (OS) shall be monitored by the supervising teachers concerned insisting the submission of Work Diary in the format prescribed by the College.
- 4. Each student shall have to submit a written account of experiences gained during the Organizational Study (OS). However, the summer internship carries Zero credit.
- 5. The students shall be permitted to appear for the end semester examination only after furnishing a certificate by the Head of the Department to the effect that the written account of experiences gained during Organizational Study (OS) was submitted on time.

# 7. Project evaluation

Dissertation/Project to be submitted at the end of the last semester will be valued by a Board of 2 examiners appointed by the College. The maximum marks shall be 100 of which 75 marks is for Project Report and 25 marks is for Project Viva. The project viva shall be conducted along with the comprehensive Viva Voce.

# 8. End Semester Assessment

End semester assessment of all the semesters shall be conducted by the CE of the College under double valuation system.

The results of the CA shall be displayed within 5 working days from the last day of a semester. The complaints regarding award of marks of various components of CA, if any, have to be submitted to the department within 3 working days from the display of CA marks. These complaints shall be examined by the Departmental Committee to arrive at a decision regarding the awarding of marks. The decision shall be communicated to the student.

The marks awarded for various components of the CA shall not be rounded off, if it has a decimal part. The total marks of CA shall be rounded of to the nearest

whole number. The statement of marks of the CA of all the students in a semester shall be approved by the departmental Committee, countersigned by the Principal and forwarded to the Controller of Examinations within 15 working days from the last day of the semester.

# 9. Pass requirement

Those who secure not less than 40% marks for ESA for each paper and an aggregate minimum of 50% marks including CA for all the papers of a semester shall be declared to have successfully completed the semester. The marks for project and viva will be carried over. Those who have successfully completed all the semesters of a Programme shall be declared to have successfully completed the PG Programme.

# 10. Classification of results

The classification of the results of the programme shall be done at the end of the fourth semester based on the total marks secured for all semesters and shall be as follows:

Candidate securing not less than 50% but below 60%- second class

Candidate securing 60% and above- First class

Candidates who pass all the semester examinations in the first appearance within the minimum period prescribed for each semester shall be ranked on the basis of aggregate marks secured for all the semesters.

# MCom Programme Structure & Syllabus (Proposed from 2019 Admission onwards)

SEMESTER I			Marks		
Code	Paper	Subject	CA	ESA	Total
19PCO11	Paper 1	Business Ethics and Corporate Governance	25	75	100
19PCO12	Paper 2	Legal Framework for Business	25	75	100
19PCO13	Paper 3	Research Methodology	25	75	100
19PCO14	Paper 4	Planning and Development Administration	25	75	100
19PCO15	Paper 5	Advanced Corporate Accounting and Reporting	25	75	100
		Total	125	375	500
		SEMESTER II		Marks	
Code	Paper	Subject	CA	ESA	Total
19PCO21	Paper 1	E -Business and Cyber Laws	25	75	100
19PCO22	Paper 2	Strategic Management	25	75	100
19PCO23	Paper 3	Quantitative Techniques and Financial Econometrics	25	75	100
19PCO24	Paper 4	International Business	25	75	100
19PCO25	Paper 5	Investment Management	25	75	100
		125	375	500	
Summer In	ternship				
		<b>Elective - FINANCE</b>			
	Marks				
Code	Paper	Subject	CA	ESA	Total
19PCO31	Paper 1	Income tax Planning and Management	25	75	100
19PCO32	Paper 2	Security Analysis and Portfolio Management	25	75	100
19PCO33	Paper 3	International Financial Management	25	75	100
19PCO34	Paper 4	Strategic Cost and Management Accounting	25	75	100
		Total	100	300	400
		SEMESTER IV		Marks	
Code	Paper	Subject	CA	ESA	Total
19PCO41	Paper 1	Goods and Service tax & Customs Duty -Law and Practice	25	75	100
19PCO42	Paper 2	Risk Management and Derivatives	25	75	100
19PCO43	Paper 3	Accounting Standards	25	75	100
19PCO44	Paper 4	Management Optimization Techniques	25	75	100
		Total	100	300	400
19PCO45		Project Report			100
19PCO46		Comprehensive Viva			100
		Grand Total			2000



# SEMESTER I

### 19PCO11: BUSINESS ETHICS AND CORPORATE GOVERNANCE

# **Objectives:**

- 1. To convey basic understandings on the theories of Business Ethics
- 2. To provide a understanding on Corporate Governance practices and the provisions of the Companies Act relating to corporate governance

### **Course Outcome**

Have deep understanding on ethical issues and practices in business and develop knowledge and skills in corporate governance.

**Module 1: Business Ethics and Ethical Practices:** Ethics – Sources- Importance - factors influencing Business Ethics – Benchmarks on code of Ethics – Ethics Committees – Training Programmes – Ethical Decision Making – Ethics in Finance - Marketing and HR (15 Hrs)

**Module 2: Organization Culture**: Features – Building and Maintaining Organization Culture – Organizational Socialization – Managing cultural Diversity – Work Ethics – Work Culture – Quality of Work Life – Work Life Balance – areas Improving Work Life Balance – Strategies of Work Life Balance (20 Hrs)

**Module 3: Corporate Governance:** Importance – Objectives – Basic Ingredients of Corporate Governance – Principles - Theories – Phases of development of Corporate Governance in Global and Indian Perspectives – Code of Corporate Governance – Committees on Corporate Governance (Global and Indian) (15 Hrs)

Module 4: Corporate Social Responsibility: CSR under Companies Act 2013 – Scope – Relevance – Importance – Areas of CSR – Arguments for and against CSR – Ackerman's model of CSR – SEBI – Clause 49 of listing agreement – Evaluation of Corporate Governance of a Company – Methods – Shareholder Value – EOCE, PAT, EPS, TSR, MVA, EVA and HVA - Corporate Philanthropy – Corporate Citizenship – Social Audit (25 Hrs)

Module 5: Corporate Image and Excellence: Corporate image – building corporate image – Importance – Corporate Excellence – importance – Measures to achieve corporate excellence – New initiatives on corporate excellence - Role of Chairman – Qualifications – Power – Duties and Responsibilities – Board Committees – New Directions (15 Hrs)

### **References:**

- 1. Laura P Hartman, Perspectives in Business Ethics, Mc Graw Hill International
- 2. George A Steiner and John F Steiner, Business, Government and Society, Mc Graw Hill International
- 3. SK Chakraborthy, Ethics in Management Vedantic Perspectives, Oxford University Press
- 4. Subhash Sharma, Management in New Age: Western Windows Eastern Doors, New Age International Publishing, New Delhi
- 5. Prof (Col.) PS Bajaj, Dr.Raj Agarwal Business Ethics an Indian Perspectives, Biztantra 2006.

### 19PCO12: LEGAL FRAMEWORK FOR BUSINESS

# **Objectives:**

- 1. To enable student acquire updated knowledge and develop understanding of the regulatory framework for business
- 2. To make students aware of opportunities available in various legal compliances so as to enable them employable.
- 3. To expose students in emerging trends in good governance practices including governance.

### **Course Outcome**

The participant is abled to be equipped with knowledge in Business and Industrial laws particularly in corporate law applicable in both domestic and international business deals.

**Module 1: Advanced Company Law:** The Companies Act 2013: Formation and related procedures of various types of companies Procedure for inter-corporate loans, investments- guarantee and security – Registration

modification and satisfaction of charge Declaration and payment of dividend Maintenance of Books of Accounts - statutory financial audit, cost audit and secretarial audit – Board meetings and procedures -

(15 Hrs)

**Module 2: Other Corporate Laws:** Limited Liability Partnership Act, 2008: Concept, formation, membership, functioning and Dissolution - Conversion of LLPs into Private Limited Companies and vice versa. The insolvency and bankruptcy code, 2016 - Insolvency Professionals - Liquidation Process – Insolvency and Bankruptcy Board of India. (15 Hrs)

**Module 3: Economic Laws**: **a.** FDI Policy – Foreign Direct Investment in India and abroad – External Commercial Borrowing (ECB) Formalities – Establishment of Branch Office of a foreign entity in India. **b.** Foreign Trade Policy – Opportunities of commerce/finance professional in foreign trade – Procedure of import and export – Export promotion schemes and initiatives. **c.** Competition Commission of India – Compliance of competition law. (20 Hrs)

**Module 4 : Industrial and Labour laws:** Overview of Industrial Policy of Govt of India and Govt of Kerala – Regulatory Mechanism under IDRA – MSME Development Act – Advantages of MSMEs and their role and significance in economic development – Central and State Schemes for MSME Promotion – Udyog Aadhar.

(20 Hrs)

Module 5: Foreign Exchange Management Act - Features and Application- Opportunities for Indian Business -Challenges- Foreign Contribution (Regulation) Act 2010 (20 Hrs)

# References

- 1. Kapoor. N.D, Business law, Sulthan Chand and Sons
- 2. Chandha P.R, Business lawgajgotia, New Delhi
- 3. Garg K.C, V.K Surendran, Mahesh Sharma and Chawla R.C, *Busiess regulatory frame work*, Kalyani Publishers, New Delhi
- 4. Tulsian P.C, Business Laws, Tata Macgraw-Hill publishing Co.Ltd, New Delhi
- 5. B S Moshal, *Modern Business law*, Ane books, New Delhi Awathar Singh, *Company Law*, Eastern Law Books
- 6. Corporate Laws Taxmann
- 7. Lectures on Company Law K.S.Anantharaman
- 8. A Textbook of Company Law PPS Gogna
- 9. Limited Liability Partnerships Hitenter Mehta
- 10. Beginner's Guide to Capital Market SEBI's Investor Awareness Website www.investor.sebi.gov.in
- 11. Guide to Insolvency and Bankruptcy Code 2006 Taxmann
- 12. The Indian Partnership Act Pollock and Mulla
- 13. Economic, Labour and Industrial Laws Sultan Chand and Sons
- 14. FEMA and FDI Ready Reckoner V.S.Datey
- 15. Export and Import Documentation and Procedures J.Senthil Velmurugan and S.Mahalakshmi
- 16. Competition Law in India Abir Roy
- 17. Law of Consumer Protection Dr.V.K.Agarwal
- 18. Anti-Money Laundering and Know Your Customer Indian Institute of Banking and Finance (IIBF)
- 19. Intellectual Property Laws P.Narayanan
- 20. Micro, Small and Medium Enterprises in India IIBF
- 21. Labour and Industrial Laws P.K.Padhi
- 22. Labour Laws Taxmann
- 23. Compliances under Labour Laws H.L.Kumar
- 24. Text Book on Arbitration and Conciliation with Alternate Dispute Resolution Saharay Madhusudan
- 25. Law of Corporate Governance: Principles and Perspective K.R.Sampath
- 26. Listing Agreement by SEBI
- 27. Journals Chartered Secretary, Management Accountant, The Chartered Accountant, FIEO News and Vyavasayakeralam
- 28. Websites <u>www.india.gov.in</u>, <u>www.mca.gov.in</u>, <u>www.commerce.gov.in</u>, <u>www.dgft.gov.in</u>, <u>www.cci.gov.in</u>, udyogaadhaar.gov.in, www.egroops.kerala.gov.in and www.cca.gov.in,

### 19PCO13: RESEARCH METHODOLOGY

# **Objectives:**

- 1. To provide an insight into the fundamentals of social science research.
- 2. To understand the need, significance and relevance of research and research design.
- 3. To acquire practical knowledge and required skills in carrying out research.

### **Course Outcome**

The student will be equipped with basic concepts of research methodology so the he is capable of developing effective methods of conducting social science research.

**Module 1: Fundamentals of Research:** Research-meaning-nature-significance- objectives-utilities-Principles of scientific research-Scientific Methods-Induction, Deduction-Qualities of a good researcher-Research Ethics. Research Methods-Types of Research-Fundamental, Applied, Policy, Exploratory, Descriptive, Predictive, Analytical, Historical; Methods of Investigation-Library, Case study, survey, Field study, Experimental, Evaluation, Action, Diagnostic, Ex-post Facto Research; Quantitative and Qualitative research. (15 Hrs)

**Module 2: Research Process:** Research problem Identification-Identifying research gap- setting of objectives and hypotheses-identifying the variables-dependent, independent and intervening variables-Research design-steps in developing a research design-research design for descriptive, analytical, empirical and experimental research-qualities of a good research design.

(15 Hrs)

**Module 3: Sampling Techniques and Data Collection Methods:** Probability and non- probability sampling techniques-sample size-sampling errors-sources of collection of data-Techniques and tools for data collection-Pre-testing and Pilot study (Review only). (5 Hrs)

Module 4: Statistical Estimation and Hypothesis Testing: Estimation-Qualities of a good estimation, Criteria for selecting estimation, Methods of estimation, point and interval estimation, confidence interval, determination of sample size in estimation. Testing of Hypothesis-Need and Significance of hypotheses-Formulation, Types of hypotheses-errors in testing hypotheses-type-I and Type-II errors-one tailed and Two tailed tests-level of significance-Parametric tests-large sample and small sample tests-Z test, t-test, F-test-application of parametric tests. Non-parametric tests-Chi-square test, Sign test, Fisher-Irwin test, rank sum test, Run test, Mann-Whitney U test, Kruskal Wallis H test, Wilcoxon test, Mc Nemer test. Analysis of Variance-Meaning-Assumptions of ANOVA, Techniques of ANOVA-One way classification-Two-way classification-Setting up ANOVA table, Conditions for application and uses of ANOVA-Interpretation of analysed data.

(40 Hrs)

**Module 5 : Report writing and presentation:** Research report- Types of reports- Content of report-Style of reporting-Steps in drafting reports-Qualities of a good report- Documentation-Citation-Footnotes-References-Bibliography-APA and MLA Format in writing references and Bibliography. (15 Hrs)

### **References:**

- 1. Krishnaswamy O.R, Research Methodology in Social Sciences
- 2. Kothari C.R,Research Methodology: Methods and Techniques
- 3. harma R,N & Sharma R.K ,Research Methods in Social Science
- 4. John W.Best and James V. Khan, Research in Education
- 5. Singh A.K., Tests, Measurements and Research Methods in Behavioural Sciences.

# 19PCO14: PLANNING AND DEVELOPMENT ADMINISTRATION

# **Objectives:**

- 1. To generate an overall insight on planning process in Indian Economy
- 2. To make the students aware about new planning initiatives in India

# **Course Outcome**

The student will get a clear understanding on Indian economy and planned growth and development in India.

- **Module 1 Structure of Indian Economy-** Relevance of sectors in Indian Economy; Primary, Secondary and Tertiary Sectors-National Income-Methods of Computation- Inflation effects on Indian Economy- India's current National Income in comparison with leading economies of the world- Challenges. (15 Hrs)
- Module 2: Planning mechanism in India—Economic planning-features, types-Phases of Economic Planning-Growth and Planning Models-(Briefly mention) -State Planning Board-District Planning Board (20 Hrs)
- **Module 3: Fiscal Policy**-Centre-State financial relationship-Resource Allocation- Finance Commission-Development and Non Development expenditure-Preparation of budgets: Centre, State and Local Self Government-Deficit financing-Plan and Non-Plan Expenditure (Case Study: Evaluation of current Budget)

  (20 Hrs)

**Module 4**: **Policy Initiatives in the Planning Process** —Niti Aayog —Structure—Objectives —Functions-Guiding Principles -Vision Statement-Recent Policy initiatives: Make in India, Jan Dhan Yojana, Startup India, Swatch Bharath Abhiyan, Mudra Bank, Digital India — Future development initiatives (20Hrs)

Module 5: Role of State and Local Self Government-Planning initiatives in Kerala-Kerala Perspective Plan

–Mission-Vision-Scope-Local Self Government –Role, Functions and Programmes (15Hrs)

### **References:**

- 1. Agarwal A.N. and Kundanlal (1999), Economics of Development and Planning, Vikas Publishing House, New Delhi
- 2. Seth.M.L. and S.P. Singh (1998), Economic Planning: Theory and Practice, S.Chand and Company Ltd., Ram Nagar, New Delhi
- 3. Dhingra.I.C. and V.K.Garg (2000), Economic Development and Planning in India, Sulthan Chand Publications, New Delhi
- 4. Mishra S.K. and Puri V.K (2008), 26th Edition, Indian Economy, Himalaya Publishing House Pvt. Ltd., Mumbai-
- 5. Desai and Bhale Rao (1986), Economic Planning and Policy, Himalaya Publishing House, Mumbai
- 6. Madan Mohan Batra (1987), Planning in India: development perspective towards the 21st century, V.K. Publishing House, Mysore
- 7. Misra and Puri (1999), Development and Planning Theory and Practice, Himalaya Publishing House, Mumbai
- 8. Gerald. M. Meier, and Robert E. Baldwin,(1957) (Reprint in 1975), Economic Development-Theory, History, Policy, Asia Publishing House, Mumbai
- 9. Gerald. M. Meier, James E. Rauch, (2005), Leading Issues in Economic Development, (8th Edition) Oxford University Press, Oxford,
- 10. Meier .G.M. (1995), Leading Issues in Economic Development (6th edition) Oxford University Press, New Delhi.
- 11. Higgins Benjamin (1963), Economic Development, Principals, Problems and Policies, Central Book Depot, Allahabad
- 12. Kindleberger C.P. (1977), Economic Development (III edition) McGraw Hill New York.
- 13. Adelman. I (1961), Theories of Economic Growth and Development, Stanford Universities Press, Standford.
- 14. Bose. A, (1975), Marxian and Post Marxian Political Economy, Penuin London
- 15. Chakrvarthy S (1982), Alternative Approaches to the Theory of Economic Growth, Oxford University Press, New Delhi.
- 16. Growth. S, (1986), An Introduction to Development Economics, Allen and Unwin
- 17. Little IMD (1982), Economic Development : Theory Policy and International Relations, Basic Books, New York
- 18. Schumpeter J.A., (1949), The Theory of Economic Development, Harvard University Press, Cambridige.
- 19. Bhagavathi J and Desai, (1970), India: Planning for Industrialization, Oxford University Press, Oxford
- 20. Jolly. R., (1973), Third World Employment, Penguin, Oxford
- 21. Sen.A.K. (1962), Choice of Techniques, Basil Backwall, Oxford

### 19PCO15: ADVANCED CORPORATE ACCOUNTING AND REPORTING

# **Objectives:**

- 1. To acquaint the students about important accounting standards
- 2. To gain ability to prepare financial statements including consolidated financial statements of group companies and financial reports of various types of entities by applying relevant accounting standards.
- 3. To expose the students to advanced accounting issues and practices such as insurance claims, investment accounting and liquidation of companies.

# **Course Outcome**

The students will be well conversant in corporate accounting practices, related accounting standards and reporting and acquire skills in accounting practices of investment companies, insurance companies and liquidation accounting practices.

**Module 1:** International Financial Reporting Standards (IFRS)-Introduction –Scope- An Overview of IFRS – Applicability of Accounting Standards in the preparation and presentation of Final accounts (15 Hrs)

Module 2: Insurance Claims and Investment Accounts--Loss of stock,-- Consequential Loss—Average Clause- Investment Accounts— Cum interest—Ex- interest—Ex dividend and cum dividend—Columnar investment accounts. (20 Hrs)

**Module 3: Consolidated Financial Statement** (AS 21) – Holding Companies – Definition – Preparation of Consolidated Balance Sheet – Minority Interest – Pre- acquisition or Capital Profits – Cost of Control or Goodwill – Inter- company Balance – Unrealised Inter-company profits – Revaluation of assets and liabilities – Bonus Shares – Treatment of Dividend- Cross Holding. (20 Hrs)

**Module 4: Amalgamation** - Types of Amalgamation - Calculation of Purchase- consideration- Methods of accounting for amalgamation- Inter-company investments (20Hrs)

Module 5: Accounting for Liquidation of Companies – Preparation of Statement of Affairs – Deficiency/ Surplus Account - Liquidator's Final Statement of Account – Receiver's Statement of Accounts. (15 Hrs)

Theory and practical problems shall be in the ratio of 30: 70. Practical problems shall be included for application of accounting standards also.

### **References:**

- 1. Accounting Standards—Prof. IsrarShaikh and Rajesh Makkar, Lexis Nexis.
- 2. Accounting Standards—M.P. Vijayakumar, Snow White, Chennai.
- 3. Indian Accounting Standards—Rajkumar S Adukia, LexiNexis.
- 4. Indian Accounting Standards—Asish K Bhattacharjee, Tata McGraw Hill.
- 5. Advanced Corporate Accounting—PC Thulsian
- 6. Advanced Corporate Accounting—MC Shukla, T.S. Grewal and SC Gupta
- 7. Advanced Financial Accounting—Dr. B.D. Agarwal
- 8. Advanced Accountancy—RL Gupta and Radhaswami

# **SEMESTER II**

### 19PCO21: E-BUSINESS & CYBER LAWS

# **Objectives:**

- 1. To equip the students with the emerging trends in business
- 2. To equip the students to introduce and explore the use of information technology in all aspects of business.
- 3. To familiarise with the students cyber world and cyber regulations

### **Course Outcome**

The students are equipped with the ability to utilize various possibilities in business based on ICT and to have updated knowledge in the cyber laws.

**Module - 1:** E-business- Concepts – Definition – e-business vs. e-commerce - Technology – Sustainable and disruptive, - E-Business Models – Revenue model, Architectural model and Market opportunity models - E-business Design: steps, Knowledge building, capacity evaluation. (10 Hrs)

**Module-2 : E-Marketing** – Traditional Marketing – Web presence Goals – Browsing Behaviour – online Marketing – E-advertising – Internet Marketing Trends – E branding– E- marketing strategies .- modes of e-marketing - Concept and Definition of E-Retailing: Different Models of E Retailing; Model for Web based Information System in E- retailing; -EPOS System. Functions of an EPOS System, e-payment mechanism.

(20 Hrs

**Module - 3 : E- Business Technologies-**Customer relationship management (CRM) - Organizing around the customer - CRM design and infrastructure - CRM Trends; Selling- chain management - Need for selling-chain management - Order acquisition process - Enterprise resource planning (ERP) - Forces influencing ERP - Implementation strategies - ERP trends; Supply chain Management - Supply-chain planning and execution - SCM issues and trends; E-procurement - Knowledge repository- Data mining - Social media platform.

(30 Hrs)

**Module – 4: Cyber Law-** Introduction – Need – Evolution of Cyber Laws - Scope– Jurisdiction in cyber space – jurisdiction with respect to E-Commerce and E-governance–Indian law relating to IPR (Copy right, Trademark, Patents etc.) (15 Hrs)

**Module – 5: Cyber Regulations-** -Cybercrime investigation and surveillance – internet surveillance and privacy - issues relating to investigation, cyber forensic, relevant provisions under IT Act 2000, IPC and Evidence Act etc. Adjudication under the IT Act Cyber Appellate Tribunal – punishments for various cybercrimes (an overview) (15 Hrs)

### **References:**

- 1. E-business, Dr. Ravi Kalakota, Pearson Education Asia
- 2. E-Business (R)evolution, Daniel Amor, Pearson Education Asia
- 3. E-Business-2, Dr. Ravi Kalakota & Macia Robinson, Pearson Education Asia
- 4. E-Business and Commerce, Brahm Canzer, Dreamtech press, New Delhi
- 5. The E-Business book, Dayle M Smith, Viva books, Newdelhi
- 6. E-Business essentials, Rajat Chatterjee, Global India Publication, Newdelhi
- 7. E-Business essentials, Matt Haig, Kojan Page India Ltd
- 8. IT Act 2000, IT Amendment Bill 2006, IT Amendment Bill 2008

# 19PCO22: STRATEGIC MANAGEMENT

# **Objectives:**

- 1. To create a conceptual awareness on various strategies.
- 2. To familiarise students with the formulation, implementation and evaluation of strategies

# **Course Outcome**

Develops skills in strategic functions and practices of management.

- Module 1: Concept of strategy- Meaning- Definition—Features of strategic management- process of strategic management- Levels of strategy—Corporate and SBU- Strategic decision making- Approaches to and process of strategic decision making- Mintzberb's modes of strategic decision making, Strategic Intent-Developing vision and mission- setting of objectives and goals Strategic management in international context- strategies of multinational companies with respect to case studies. (20 Hrs)
- **Module 2: Environment analysis** components of environment -environmental scanning- PESTEL analysis- Environmental Threat and Opportunity Profile (ETOP)- organisational appraisal-SWOT analysis- Industry and Competitive Analysis- competitive intelligence Michael Porters' industry analysis-competitive analysis- Strategic Advantage Profile--Comparative advantage and Core competence- TOWS matrix. **(20 Hrs)**
- **Module 3: Strategic Alternatives-** Criteria and process, Corporate level strategies-Grand strategies-Generic Strategies- integration, intensive, Stability, Defensive, and Expansion- Diversification Retrenchment strategies: sub-classification of strategies. (15 Hrs)
- **Module 4: Formulation of strategies**—Approaches to strategy formulation-GAP analysis- BCG matrix-Synergy-Functional strategies- Production, Marketing, Finance and HR Strategies, Strategic choice- process and policies. (15 Hrs)
- **Module 5: Implementation, Evaluation and Control-** Implementation process and issues –Structural, functional and behavioural Aspects of implementation- Mc Kinsey Seven S Model concept of blue ocean strategy,- Evaluation and control of strategies- Techniques. Strategic audit. (20 Hrs)

# **References:**

- 1. Arthur A Thompson and AJ Stickland III, Strategic Management, New Delhi Tata McGraw Hill
- 2. Sharma R.A, Strategic Management in Indian Companies, Deep and Deep Publications, New Delhi.
- 3. Thomas L Wheelen and J. David Hunger, Concepts in Strategic Management and Business Policy, New Delhi, Pearson.
- 4. Subha Rao, Business Policy and Strategic Management, Himalaya Publishing House, Mumbai
- 5. Budhiraja, S.B. and M.B. Athreya: Cases in Strategic Management, Tata McGraw Hill, New Delhi.
- 6. Michal, E Porter: The Competitive Advantage of Nations, Macmillan, New Delhi.
- 7. David Fred R, Strategic Management, Prentice Hall, New Jersey

# 19PCO23: QUANTITATIVE TECHNIQUES AND FINANCIAL ECONOMETRICS

# **Objectives:**

- 1. To impart expert knowledge in the application of Quantitative Techniques and Business Econometrics in research.
- 2. To impart knowledge in the use of SPSS in processing and analysis of data.

# **Course Outcome**

To be capable of conceptually sound in application of quantitative techniques in business research including univariate and multivariate data analysis and model building. Students will also be capable of tools in SPSS.

- **Module 1 : Probability Theories:** Introduction to probability-Certain and Impossible events-sample space-The complement of an event-Mutually exclusive events-Addition and Multiplication Rules for Probability-Independent and dependent events- Combinatorial probability-Conditional probability-Bayes Theorem/Law of total probability-Central Limit Theorem (15 Hrs)
- **Module 2: Probability Distribution:** Binomial distribution-Bernoulli process, properties of binomial distribution, mean and standard deviation of binomial distribution-utility of binomial distribution-fitting of binomial distribution. Poisson distribution-meaning and properties of Poisson distribution, utility of Poisson distribution, fitting of Poisson distribution. Normal distribution-normal curve-properties of normal distribution, utility of normal distribution, normal approximation to binomial distribution-normal approximation to Poisson distribution. Other probability distribution- beta distribution- exponential distribution. (15 Hrs)
- **Module 3: Introduction to Financial Econometrics:** Econometrics-Meaning, Methodology, Types; Econometric Models Steps in modeling -Specification Estimation and Validation Types of Economic Data –

Time Series, Cross Sectional and Panel - Model Specification test – Ramsey Reset Test – Basic Understanding of Breakpoint- Least Square Estimates – Assumptions – Best Linear Unbiased Estimate (BLUE) – Spherical Errors – White Noise (15 Hrs)

Module 4: Univariate and Multivariate Analysis(Basic concepts and simple problems only) Ordinary Least Squares (OLS) – Simple and Multiple Regression – Predictors and Predict and Normality of Distributions – Normality Test using descriptive statistics – Jarque- Bera statistic Stationary series- Level- First and second order differencing – Unit Root test – Augmented Dickey Fuller test -Linear Relationship of Variables – Correlation- Regression Results analysis – Individual Coefficient tests – t statistics and p values, Joint test – fit of goodness of model tests- R-squared, Adjusted R-squared, F statistics and p value, Serial correlation-Durbin Watson statistics-Basic difference between Multi-variate and Multiple regression. Multi collinearity - Coefficient Diagnostics – Variance Inflation Factor- Residual diagnostics – Correlogram Q Statistics, Correlogram of square Residuals, Histogram Normality, Heteroskedasticity. (25 Hrs)

Module 5: Processing and Analysis of Data using SPSS: Introduction to SPSS- Features, Creating files and data entry, Preparation of frequency tables and graphs. Steps in data processing-checking, editing, coding, classification. Analysis of data-statistical tools, univariate, bivariate and multivariate-Measures of central tendency, dispersion, correlation, regression, t-test, Chi-square test, factor analysis and ANOVA. (20 Hrs)

### References:

- 1. Fundamentals nof Statistics for Business and Economics-V.K.Kapoor, Sultan Chand and Sons, New Delhi.
- 2. Statistics for Management-Levine, Pearson Education Asia.
- 3. Basic Econometrics (5<sup>th</sup> Ed), Damodar N Gujarati, Dawn C Porter and Sangeetha Gunasekhar, Nc Graw Hill Education (India) Edition 2012, ISBN: 978-0-07-133345-0 (13 digits) or 0-07-133345-2 (10 digits)
- 4. Analysis of Financial Time series (3<sup>rd</sup> Ed), Ruey S. Tsay, Wiley India Pvt Ltd, 4435-36/7, Ansari Road, Dharyagani, New Delhi 110002, ISBN: 978-81-265-4893-4
- 5. Using Econometrics (6<sup>th</sup> Ed), A. H. Studenmund, Pearson, Education Limited, Indian edition published by Dorling Kindersley India Pvt Ltd, copyright © 2014 ISBN: 978-93-325-3648-7 First Impression 2015
- 6. Applied Econometrics (3<sup>rd</sup> Ed), Dimitrios Asteriou and Stephen G. Hall, Palgrave 2016, ISBN: 978-1-137-41546-2
- 7. Mutivariate Data Analysis (7<sup>th</sup> Ed), Joseph F. Hair (jr), William C. Black, Barry J. Babin and Rolph E. Anderson, Pearson, Education Limited, Indian edition published by Dorling Kindersley India Pvt Ltd, copyright © 2015 ISBN: 978-93-325-3650-0 Fourth Impression 2016.
- 8. SPSS in simple steps-Kiran Pandya Smruti Bulsari Sanjay Sinha Dream tech Press.
- 9. A Handbook of Statistical Analyses Using SPSS-Sabine Landau, Brain. S. Everitt- Chapman and Hall/CRC.

# 19PCO24: INTERNATIONAL BUSINESS

# **Objective:**

1. To introduce the concept of international business and to create awareness on the changes in the international business arena

### **Course Outcome**

Have awareness on business in a globalised environment including structure and operational arena of international business, related laws and the functioning of multi-national companies.

Module 1: International Business - Meaning, Nature, scope and importance- Stages of internationalization of business-Methods of entry into foreign markets: Licensing- Franchising- Joint Ventures-Strategic Alliances-Subsidiaries and Acquisitions (Discuss case studies relating to subsidiaries and acquisitions)-Framework for analyzing international business environment- Domestic -Foreign and Global Environment-Recent Developments in International Business. (20Hrs)

Module 2: Theoretical Foundations of IB: Theory of Mercantilism- Theory of Absolute and Comparative Cost Advantage-Haberler's Theory of Opportunity Cost- Heckscher- Ohlin Theory- Market Imperfections

Approach-Product Life Cycle Approach(Discuss case studies)- Transaction Cost approach-Dunning's Eclectic Theory of International Production (20 Hrs)

Module 3: Legal framework of International Business: Nature and complexities: Code and common laws and their implications to business-International Business contract- legal provisions, Payment terms.

(10Hrs)

**Module 4: Multi-Lateral Agreements & Institutions:** Economic Integration – Forms: Free Trade Area, Customs Union, Common Market and Economic Union-Regional Blocks: Developed and Developing Countries- NAFTA- EU-SAARC, ASEAN-BRICS- OPEC-Promotional role played by IMF-World Bank & its affiliates- IFC, MIGA and ICSID-ADB-Regulatory role played by WTO & UNCTAD. (25Hrs)

Module 5: Multinational Companies (MNCs) and Host Countries: MNCs – Nature and characteristics-Decision Making-Intra Firm Trade and Transfer Pricing – Technology Transfer- Employment and labour relations- Management Practices- Host Country Government Policies-International Business and Developing countries: Motives of MNC operations in Developing Countries (Discuss case studies)-Challenges posed by MNCs

(15 Hrs)

# **References:**

- 1. Charles W.L. Hill, Global Business Today- University of Washington.
- 2. Charles W.L. Hill, International Business: Competing in the Global Market Place- Mc Graw Hill, New York.
- 3. Charles W. L. Hill, Chow How Wee & Krishna Udayasankar, International Business: An Asian Perspective-Mc Graw Hill, New York.
- 4. Donald Ball, Michael Geringer, Michael Minor & Jeanne McNett, International Business: The Challenge of Global Competition- Mc Graw Hill, New York.
- 5. Alan M Rugman & Simon Collinson, International Business: Pearson Education, Singapore .
- 6. Paul R. Krugman & Maurice International Economics: Theory and Policy Obstfeld Pearson Education Singapore
- 7. John Daniels, Lee Radebaugh, Daniel Sullivan, International Business: Environments & Operations-Prentice Hall, New Delhi.
- 8. SumatiVarma, International Business. Ane Books Pvt Ltd, New Delhi, 2011.
- 9. P. Subba Rao, International Business: Text and Cases-Himalaya Publishing House Pvt. Ltd. Mumbai.
- 10. Francis Cherunilam, International Business: Text and Cases- PHI Learning Pvt. Ltd. New Delhi.
- 11. V.K. Bhalla, S. Chand & Company Pvt. Ltd. New Delhi.International Business
- 12. K. Aswathappa, International Business Tata McGraw Hill Publishing Company Limited. New Delhi.

# 19PCO25: INVESTMENT MANAGEMENT

### **Objectives:**

- 1. To provide a general understanding about investment avenues and personal finance.
- 2. To give a broader understanding about behavioural finance and how it equip to decide personal investment.

# **Course Outcome**

Become conversant in different investment avenues, personal finance, behavioral finance and analytical techniques for financial analysis and charting.

# **Module 1: Investment**

- a. Conceptual Background To Investment: Meaning & Definition Of Investment Dimensions Of Investment
   Economic, Physical & Financial Investment Corporate Vs Personal Investment Investment Objectives
   Process Of Investment Factors Affecting Investment Investment, Speculation & Gambling.
- b. Investment Avenues: Security & Non-Security Form Fixed Income Investment Variable Income Investment Direct & Indirect Investment Mortgage Reverse Mortgage Securitisation Of Assets/Debts Real Estate Investment REI Valuation Real Estate Investment Regulatory Authorities SEBI Guidelines on REIT Money Market Instruments(Repos & Tbs) Capital Market Instruments (Equity, Debts & Hybrid) Investment In Banks, Insurance Companies, Post Offices, Etc Investment in Gold: Physical gold Gold ETFs Sovereign Gold Bond Relative advantages and limitations. (20 Hrs)

- Module 2: Principles of Financial Markets and Interest Rates: Principles of Financial Market Online Trading Depository System Interest Rates Nominal and Real Rates Base Rate –LIBOR/LIBID etc Term Structure Theories Interdependence of Markets and Interest Rates. (16 Hrs)
- Module 3: Personal Finance: Meaning Components of Personal Finance Levels of Personal Finance (Basic, Advanced, & Application) Financial Literacy Personal Finance Principles Personal Finance Planning Essentials of Asset Planning Insurance Planning Investment Planning Retirement Planning Estate Planning Tax Planning. (20 Hrs)
- Module 4: Behavioural Finance: Investment Deciding Cycle Judgment Under Uncertainty Utility Preference Expected Utility Theory Information Screening Biases Information Processing –Baysian Decision Making Heuristic And Cognitive Biases Forecasting Biases Group Behaviour Conformism Hedging Cornering Investment Styles And Behavioural Pricing Insider Trading Circular Trading Price Rigging. (18 Hrs)

**Module 5: Financial Modeling Using Spreadsheet:** Introduction To Modeling – Introduction To Spread Sheet – Database Framing – Creating Charts -Understanding Finance Function In Spread Sheet – Creating Model – Valuation – DCF Techniques.(Practicals) (16 Hrs)

### **References:**

- 1. Bhalla VK, Investment Management, S Chand & Co.
- 2. Bodie, Kane, Marcus, and Mohanty, Investment, TMH
- 3. Prasanna Chandra, Investment Analysis and Portfolio Management, TMH
- 4. Punithavathy Pandian, Security Analysis and Portfolio Management, Vikas Publications
- 5. Reghunathan, Investment Analysis and Portfolio Management, Pearson Education
- 6. Dhanesh Kumar Khatri, Security Analysis and Portfolio Management, Trinity Press
- 7. Sidney Cottle, Roger F Murray & Frank E Block, Security Analysis, TMH
- 8. Stephen H Penman, Financial Statement Analysis and Security Valuation, TMH
- 9. Preeti Singh, Investment Management: Security Analysis & Portfolio Management, HPH

# **Elective: FINANCE**

# **SEMESTER III**

# 19PCO31: INCOME TAX PLANNING AND MANAGEMENT

# **Objectives:**

- 1. To impart deep knowledge about the latest provisions of Income Tax Act
- 2. To develop application and analytical skill of the provisions of Income Tax Law for Income Tax planning and Management.

### **Course Outcome**

Students will get expert knowledge regarding the legitimate way of Tax Planning and Management under different Financial and managerial decisions after considering the impact of Direct Tax Laws.

# **Expected input**

Basic knowledge and understanding about the fundamental concepts and computation of tax and Assessment procedure from B.Com.

# **Expected outcome**

Students will get expert knowledge regarding the legitimate way of Tax Planning and Management under different Financial and managerial decisions after considering the impact of Direct Tax Laws.

Teaching Hours:108 No. of Modules: 6

Module 1: Overview of Income Tax law-Computation of Tax an Overview -Individual, Company ,Firm – Accounting Standards relating to Tax-Tax Information (10 Hrs)

**Module 2: Tax planning and Management:**- Meaning - Tax planning, Tax Evasion, Tax avoidance, Tax management - Differences- Nature and Scope of Tax Planning- Precautions in Tax Planning- Need for Tax Planning-Limitations- Tax Audit- Tax Planning in relation to Heads of Income -Concept of TDS/TCS -Advance payment- Computation- -Rebate 87A,88 - Relief u/s 89, 90,91.Black Money Act 2005- Introduction-Features-Highlights-Importance. (15 Hrs)

Module 3: Tax Planning And Management For Individuals:- Tax Incidence on Individuals- Significance-Taxable Income- hints for Tax Planning and Management- Impact of Tax on Financial Decisions-Alternative Minimum Tax (AMT)- Tax Planning For Employer and Employee-Documentation and Filing of Return-E-Filing- Tax Credit- TRACES- Refund-Appeal-Tax Return Preparators(TRP)- Procedures and rules-Settlement commission-Advance Ruling (16 Hrs)

**Module 4:Tax Planning For Firm, Association of Person and Body of Individuals:**- Tax incidence on Firm/AOP/BOI- Impact of Tax liability on Firm –Significance of Tax Planning- LLP-Sec: 184 & 185- Intertransaction between partners and Firm – impact of Tax on Change in Constitution of Firm- Conversion Of Firm in to Company – Conditions Of 40(b) – Carry forward and Set off in case of Change in Constitution of Firm – Filing of Return-Appeal- Refund- Hints for Tax planning for Firm, AOP and BOI. (22 Hrs)

**Module 5: Tax Planning and Management for Company:**Types of Companies- Domestic and Foreign-Tax incidence on Companies- Impact of Income Tax on Corporate Decisions – Tax Planning and Management in Corporate Decisions – MAT Provisions- Computation-Application of IT in Tax Planning –Tax Planning For New Business- Tax Planning on Venture capital Companies – Tax Planning on Financial and Investment decisions – Capital structure-Dividend and Deemed Dividend- Dividend Distribution Tax-Bonus Shares-Make or buy – own or Lease – Repair or Replace- Employee Remuneration – Setting up of new business – Location Aspects – Amalgamation or Demerger – Filing of Return – E-Filing- Refund- Appeal- Methods and procedures – Annual Return for TDS and TCS – Hints for Tax Planning and Management. (25 Hrs)

**Module 6: International Taxation-** Basic Concepts – Double Taxation Relief – Computation – DTAA – GAAR – Advance Ruling- Transfer pricing – transfer Pricing Law in India- Concepts of Arms length price – advance Pricing Agreement- Taxation of E-Commerce Transaction – Filing of Return- International Settlement Commission – Methods and Procedures. (20Hrs)

**NB**: i) Some case studies involving the learning

ii) Necessary inputs from B.Com Programme

### **References:**

### **Books**

- 1. Singhania. V.K: Direct Tax planning and Management, Taxman, N.Delhi.
- 2. Singhania.V.K: Direct Taxes Laws and Practices, Taxman, N.Delhi
- 3. E.A.Srinivas: Corporate Tax Planning; Tata Mc-GrawHill
- 4. Mehrithra HC: Direct Tax Planning
- 5. Kushal Kumar Agrawal: Direct Tax Planning and Management; Atlantic Publishers
- 6. Bhagavath Prasad: Direct Tax Law and Practice
- 7. LakhotiaR.N: Corporate Tax Planning
- 8. CA G.Sekar: professional guide to Tax Audit

# **Journals and Circulars**

- 1. Chartered Accountant Today- Tax man for Current Reading
- 2. Circulars issued by CBDT
- 3. Journal Chartered Accountant
- 4. Black Money Act 2005 (Bare Act-main provisions)

# 19PCO32: SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT

# **Objectives:**

- 1. To provide a comprehensive understanding on the principles of security analysis and develop the skill in portfolio management.
- 2. Equip the students to value the real worth of securities.

# Course outcome

Create awareness on approaches towards security analysis and develop skills in the application of various tools and models in portfolio analysis, construction, revision and performance evaluation.

# Module 1: Fundamental Analysis: Sources of Investment Information - Intrinsic Value

Dimensions of Fundamental Analysis – Analysis of Economy-wide Factors (Study of Economic Aggregates, Classification of Factors into indicators, Forecasting about the Economy & Conclusion of Economic Analysis) – Analysis of Industry-wide Factors (Study of Industry Life Cycle, Study of Qualitative & Quantitative Factors & Conclusion) – Analysis of Company-wide Factors (Financial Performance Analysis, Analysis of Qualitative Parameters, & Conclusion) – Estimation of Intrinsic Value – End Result of Fundamental Analysis.

(10 Hrs)

Module 2: Technical Analysis: Premises of Technical Analysis – Type of Charts – Tools of Technical Analysis – Prediction of Overall Market Trends (Dow Jones Theory, Elliot Wave Theory, Advance Decline Index, & Client Account Position) – Prediction of Individual Share Trends (Moving Average Analysis, Oscillators-MACD,ROC & RSI-Chart Patterns) – Confirmation through Traded Volume – Efficient Market – Efficiency of Indian Stock Market – Efficient Market Hypothesis Basics of EMH – Forms of Market Efficiency (Weak Form, Semi-Strong Form, & Strong Form) – Test of Market Efficiency – RUN Test. (20 Hrs)

Module 3: Valuation of Securities: Concept and Factors Affecting Valuation - Yield- Holding Period Return (HPR) – Yield Till Maturity (YTM) - Return & Risk – Risk-free Return & Risk Premium – Valuation of Fixed Income Securities – Valuation of Debenture/Bond – Valuation Mechanism (Valuation of Redeemable Debenture, Valuation of Deep Discount Debenture/Bond, Valuation of Non-redeemable Debenture, & Valuation of Convertible Debenture) – Valuation of Preference Shares – Valuation of Equity Shares (Dividend Capitalisation/Constant Growth Model, Multi-Stage Growth/Super Normal Growth in Dividend, & Price-Earnings Ratio Model) – (Illustrations)

**Module 4: Portfolio Management**: Meaning of Portfolio – Notions/Principles (Notion of Diversification & Notion of Negative Correlation) – Measurement of Return of Individual Securities & Portfolio (Historical Return/Ex-Post Returns and Expected Return/Ex-Ante Returns) – Measurement of Risk (Systematic & Non-

Systematic) of Individual Securities & Portfolio-Concept of Beta-Portfolio Theories/Approaches (Traditional Portfolio Theory & Modern Portfolio Theory) – Portfolio Construction under Traditional Approach – Features of Traditional Approach & Portfolio Management Process.(Illustrations) (18 Hrs)

Module 5: Modern Portfolio Theory: Principles of MPT – Concept of Efficient Portfolio, Efficient Frontier, Market Portfolio, & Managed Portfolio – Characteristics Line – Markowitz Portfolio Theory/Mean – Variance Criterion of Markowitz – Assumptions – Markowitz Portfolio Construction Process – Markowitz Portfolio Selection using Utility Curve – Sharpe's Single Index Model – Construction of Efficient Portfolio – Capital Assets Pricing Model (CAPM) – Concept of Risk-free Assets and Risky Assets – Assumptions of CAPM – Concepts of Lending & Borrowing in Construction of Portfolio – Application of CAPM (CML & SML) – Factor Model – Fama French Three Factor Model - Arbitrage Pricing Theory (APT) – (Illustrations)

(20 Hrs)

Module 6: Portfolio Revision and Evaluation: Portfolio Revision – Need – Factors Affecting Portfolio Revision – Revision Strategy (Active Revision Strategy & Passive Revision Strategy) – Index Portfolio – Tracking – Formula Plans – Constant Rupee Value Plan – Constant Ratio Plan – Variable Ratio Plan – Rupee Cost Averaging – Merits & Demerits of Portfolio Revision – Portfolio Performance Evaluation – Need – Benchmarks, Sharpe Reward to Variability Ratio – Treynor Reward to Volatility Ratio – Jensen's Performance Index – Fama's Decomposition Model. (Illustrations) (20 Hrs)

### **References:**

- 1. Bhalla V K, Fundamentals of Investment Management, S Chand & Co.
- 2. Donald E Fisher and Ronald E Jordan, Security Analysis and Portfolio Management, Pearson Edn.
- 3. Kevin S, Security Analysis and Portfolio Management, PHI
- 4. Prasanna Chandra, Investment Analysis and Portfolio Management, TMH
- 5. Punithavathy Pandian, Security Analysis and Portfolio Management, Vikas Publications
- 6. Reghunathan, Investment Analysis and Portfolio Management, Pearson Education
- 7. Dhanesh Kumar Khatri, Security Analysis and Portfolio Management, Trinity Press
- 8. Sidney Cottle, Roger F Murray & Frank E Block, Security Analysis, TMH
- 9. Stephen H Penman, Financial Statement Analysis and Security Valuation, TMH
- 10. Preeti Singh, Investment Management: Security Analysis & Portfolio Management, HPH

# 19PCO33: INTERNATIONAL FINANCIAL MANAGEMENT

# **Objectives:**

- 1. To familiarise the students with the international financial markets and instruments.
- 2. To convey an understanding about foreign exchange risk management
- 3. To have awareness on FDI, FII and international investment decision making.

### **Course outcome**

The students are expected to generate a deep understanding on financial markets and instruments along with FDI, FII and international investment decision making.

Module 1: International Financial Management- Meaning and Scope of international financial management- Financial Management of MNCs-Components of global financial markets -Recent trends in global financial markets. (13Hrs)

**Module 2 : Foreign Exchange Market**- Exchange Rate Mechanism-Exchange Rate theories -Gold Standard-Bretton Woods System -Fixed Parity System-Floating Rate System- Independent Float and Managed Float-Currency Pegging: Pegging to single Currency -Pegging to basket of Currencies - Pegging to SDRs (Special Drawing Rights) convertibility of Indian rupee-Balance of Payment and Exchange rate. **(25 Hrs)** 

**Module 3: Foreign Exchange Risk Management-**Markets for Foreign Exchange and Derivatives, Market for Currency Futures, Currency Options and SWAPS –Risk management computation -- Challenges

(15 Hrs)

**Module 4: International Financial Instruments**- Equity instruments -ADR-GDR-IDR- Debt instruments -Foreign Bonds, Euro Bonds, Global Bonds, Convertible Bonds- Floating Rate Notes - Quasi instruments – Euro Notes- - Financial Swaps-Parallel loans and Back to back loans (20 Hrs)

**Module 5: Foreign Direct Investment**-Meaning-Types-Theories of Foreign Direct Investment--Current issues in Foreign Direct Investment –FDI in India- Opening up of various sectors-Foreign Institutional Investors(FIIs) -Role of FIIs (20 Hrs)

**Module 6: International Investment Decisions** -- Appraisal of Foreign and Domestic Projects -Risks involved in International Investment Decisions-currency risk-political risk-inflation risk-country risk

(15 Hrs)

### **References:**

- 1. Ian H. Giddy, 'Global Financial Markets' AITBS
- 2. Kirt C. Butler, 'Multinational Finance' Thomson south western
- 3. Thummuluri Siddaiah, 'International Financial Management', Pearson Education, New Delhi, 2010
- 4. S.Kevin, Fundamentals of International Financial Management, Prentice Hall of India, New Delhi., 2016
- 5. Gurusamy S, 'Global Financial Institutions', Vijay Nicole and Tata McGraw Hill
- 6. Reid W. Click and Coval, 'International Financial Management' Prentice Hall India
- 7. Rite M Rodriguez, "International Financial Management", E Eugene Carter Prentice Hall, New Delhi
- 8. Alan C Shapiro, "Multinational Financial Management", Allyn and PaconIoc, Boston
- 9. Adrin. Buckley, "Multinational Finance", Hcrit, New Delhi
- 10. Madura, Jeff, "International Financial Management, West Publishing Company.
- 11. Apte P.G. International Financial Management, Tata McGraw Hill, New Delhi
- 12. Machiraju H R, International Financial Markets in India, New age international Publishers, New Delhi

# 19PCO34: STRATEGIC COST AND MANAGEMENT ACCOUNTING

# **Objectives:**

- 1. To comprehend and familiarize the established techniques, methods and practices in Strategic Cost and Management Accounting to the students.
- 2. To introduce the evolving Strategic approaches and techniques in Cost and Management field and to developed industrial behaviour among the students in the emerging business areas.
- 3. To create abilities in the practice of strategic cost and management accounting practices.

# **Course Outcome**

The students will be able to develop advanced skills and understanding in strategic cost and management accounting methods, techniques and practices.

Module 1: Marginal Costing Techniques for Decision Making – Meaning of marginal cost and marginal costing. Role of Marginal costing in decision making-fixation of selling price, Accepting additional orders, Quotations, Make or buy decisions, Key Factor Analysis, Own or Lease, Sell or further process, Closing down or suspending activities. (15Hrs)

**Module 2 : Process Costing Application -** Features of Process Costing and its applications in different situations- Inter process profits, Work-in-Progress, Accounting for Equivalent Production and its procedure under different cases namely- (a)When there is only closing work-in-progress with no process losses. (b)When there is only closing work-in-progress with process losses (c) When there is opening as well as closing Work in Progress with no process loss. (20Hrs)

Module 3: Standard Costing and Variance Analysis- (a)Material Variance, Material cost variance, Material price variance, Material usage variance, Material Mix Variance, Material Yield Variance, (b) Labour Variance-Labour cost variance, Labour Efficiency variance, Labour Idle time variance, Labour Mix Variance, Labour Yield Variance, (c) Overhead Variance-Fixed overhead variance, Variable overhead variance, Volume Variance, Expenditure variance, Capacity variance, Calendar Variance, Efficiency Variance (d)Sales Value Variance-Total Sales Variance, Sales price variance, Sales Volume Variance, Sales Mix Variance, Sales

Quantity Variance. Sales-Margin variance. (e) Reconciliation of Budgeted Cost and Revenue with the help of Variances. (25Hrs)

**Module 4 : Transfer Pricing Applications-** Concept, Measurement of Divisional performance, Alternative Transfer pricing methods-Market based Transfer pricing, Marginal cost Transfer pricing, Full cost Transfer pricing, Cost plus mark up Transfer pricing, Negotiable Transfer Pricing, Marginal cost and Opportunity cost Transfer pricing, International Transfer pricing. (10Hrs)

Module 5: Strategic cost & Management Accounting- Cost Accounting Standards, Importance of Cost Accounting Standards, Revenue Management Concept- (Importance to Production Channel and Customer Profitability Analysis). Enterprise Performance Management (EPM) - Concept, meaning and importance, Application of EPM in Cost and Management Accounting. Strategic Concepts and Applications in Cost and Management Accounting (a) Concept of Better Decision, (b) Business Intelligence, Strategic map, (d) Driver Caused Budgeting.: Customer Relationship Management (CRM) - Concept, Meaning Importance. CRM Practices in Cost and Management Accounting (a) Predictive Accounting (Importance to Decision Making), (b) Trend Analysis, (c) Decision Support System, (d) Cost Planning, (e) Economic Analysis (Concepts, Tools and Applications), (f) Sunk Cost, (g) Life cycle Cost, (Theory only)

Module 6: Business Analysis Embedded in Enterprise Performance Management- (a) Optimisation Techniques, (b) Predictive Methods, (c) Statistical and Operational Analysis. (Basic Practical Problems only). Behavioral Cost management- (a) Skill Development, (b) Tech-production, (c) Bench marking, (d) Enterprise resource Planning (ERP), (Advanced Concepts Only). (10Hrs)

# References:

- 1. Advanced Cost and Management Accounting SP Jain, KL Narang, Simmi Agrawal, Kalyani Publishers, New Delhi.
- 2. Prasad.N.K. Advanced Cost Accounting, Book syndicate Pvt. Ltd, Kolkata
- 3. Khan.M.Y. and Jain P.K. Advanced Cost Accounting, Tata McGraw Hill Publishing Co.Ltd.New Delhi.
- 4. Arora M.N. Principles and Practices of Cost Accounting-Vikas Publishing House New Delhi
- 5. Maheswari SN. Cost and Management Accounting, Sultan Chand and Sons, NewDelhi.
- 6. Thulsian.PC. Practical Costing, Vikas Publishing House New Delhi
- 7. Colin Drury, Management and Cost Accounting, Cengage Learning India Pvt .Ltd, New Delhi.
- 8. Horngren, Foster and Datar, Cost Accounting A Managerial Emphasis, Prentice Hall of India Pvt.Ltd, New Delhi

# **SEMESTER IV**

### 19PCO41: GOODS AND SERVICE TAX & CUSTOMS DUTY- LAW AND PRACTICE

# **Objectives:**

- 1. To gain expert knowledge of the principles and law relating to Goods and Service Tax and Customs Act.
- 2. To impart skill in applying and analysing the provisions of Goods and Service Tax Act and Customs Act.
- 3. To develop abilities in handling practical situations connected with GST and customs duty.

# **Course Outcome**

Create conceptual and application skills in the practice of GST and customs duty.

**Module 1: Introduction:** Meaning and Definition of Indirect Taxes-Nature-Scope- Constitutional provisions-Advantages-Disadvantages-Difference between Direct and Indirect Taxes- Types-Milestones in the history of Indirect Taxation in India. (10 Hrs)

**Module 2: Basic Provisions of GST:** Introduction-Meaning-Features-Historical backdrop of Goods and Service Tax-Major Indirect Taxes merged in to Goods and Service Tax-Benefits of GST-Economy, Industry and trade, tax payers-Types of GST- CGST-IGST-SGST- UTGST Schedules-Rate of GST- Kerala GST Provisions. (20 Hrs)

Module 3: Main Provisions of GST - Main Provisions: Provisions r- Compensation(GST)Law-Definitions of important terms-Levy of Tax-Collection-elating to Place, Time and Value of Supply-Different meaning of supply- Composite Supply- Mixed supply- Scope of Supply- Taxable Supply- E-Commerce-Supply Chain –GST Exemption limit- Tax Invoice-Credit and Debit Notes-Valuation Rules-Computation Tax- Input tax Credit(ITC)-Registration-procedures-Deemed Registration-Cancellation of Registration- Accounts and Records- Period of Retention of Records- Presumption as to Documents-Returns- Annual-Final-Payment of Tax-Information Technology in GST- Audit- Special Audit-Assessment-Refund-Consumer welfare Fund-GST Practioners- TDS/TCS. (23 Hrs)

**Module 4: Administration of GST:**-GST- Council-Authorities-Inspection-search seizure-Arrest-Demand-Recovery—Liability to pay tax in certain cases- -Advance Ruling- Authority and Appellate Authority-GSTN-Information infrastructure for GST. (15 Hrs)

**Module 5**: **Appeals And Revisions under GST.:** Appeals-Appeal to High Court-Appeal to Supreme Court-Revisions-Offences- Compounding of Offences-Penalty- Transitional provisions-IGST Provisions- Inter-state Supply- Intra-state supply- Zero rated Supply- Imported Supply- Transfer of ITC-Compensation Rules- Base year Revenue-Projected Revenue-Miscellaneous provisions-Interest-Job Work Procedure- Deemed Export.

(20 Hrs)

**Module 6: Customs Duty:** Definition of Customs Duty- Objectives Role of customs duty in International trade--Importance-Demerits-Important definitions-Basis of determining customs Duty- Types of Duties-Antidumping Duties-Import and Export manifest—Specified Goods- Stores-Warehouses-Export Policy-Customs Duty Authorities and Powers Assessment Procedures--Penalties and Prosecutions-Appeals and Revisions-Tax liability and Valuation of Goods-Baggage Rules-Import Procedure and Documents-Export Procedure and Documents. (20 Hrs)

Input—Basic Awareness from B.Com and First Semester M.Com

# **References:**

- 1. Hand Book of GST in India Concepts and Procedures (2017Edition) -Rakesh Garg &Sandeep Garg Bloomsbury India Publications
- 2. GST in India-Rakesh Garg & Sandeep Garg, Bloomsbury India Publications
- 3. All About GST-V.S Datey-Taxman Publications.
- 4. GST Law, Concept & Impact Analysis-Dr. Sanjiv Agarwal
- 5. GST Law & Analysis with Conceptual Procedure-Bimal Jain & Isha Bensal- Young Global
- 6. An Insight of GST in India-ICWAI, Vol: 1&2
- 7. Indirect Taxes-Dr.H.C Mehrotra & Prof. Agarwal, Sahitya Bhavan Publishers, Agra.
- 8. Indirect Taxes-V.S Datey, Taxman Publications New Delhi.

- 9. Indirect Taxes –Dr.V.Balachandran, Sultan Chand and Sons, NewDelhi.
- 10. GST Bare Acts, Rules, Notifications & Circulars

# 19PCO42: RISK MANAGEMENT AND DERIVATIVES

# **Objectives:**

- 1. To understand the risk management process and its application
- 2. To give a broader awareness on derivatives and its applications
- 3. To impart knowledge in risk management through derivative practices and accounting for derivatives.

### **Course Outcome**

Create basic understanding in the concept of risk management and the role of derivatives in managing risk. Also develop practical skills in derivative applications.

Module 1: Basic Concepts in Risk: Meaning of Risk And Uncertainty – Chance of Loss And Loss Forecasting - Pure And Speculative Risk – Objective And Subjective Risk – Fundamental And Particular Risk – Enterprise Risk (Pure, Speculative, Strategic, Operational, & Financial Risks) – Financial Risk (Price, Credit, Interest Rate, Foreign Exchange & Value of Money) – Difficulties in Categorization of Risk – Method of Handling Risk – Financial Analysis In Risk Management Decision - Link Between Cause, Event And Effects – Burden of Risk on Society. (12 Hrs)

Module 2: Introduction to Risk Management: Meaning And Definition of Risk Management – Objectives of Risk Management –Steps in Risk Management Process (Identify And Analyse Loss Exposures, Select The Appropriate Techniques, Implement And Monitor RM Programme) – Benefits of Risk Management – Personal Risk Management – The Changing Scope of Risk Management – Enterprise Risk Management(ERM) – Risk Management Tools And Techniques – Relation Between Risk Management, Compliance, and Audit – Governance, Risk And Compliance (GRC)-Insurance As a Risk Transfer Mechanism – Insurance Market Dynamics. (20 Hrs)

Module 3: Introduction to Derivatives: Concept, History, And Economic Benefits of Derivatives – Underlying Asset, Margin Requirements, Settlement of Transactions, Lot Size – Classification of Derivatives (Exchange Traded Vs. OTC Derivatives Market, Commodity And Financial) –Derivatives Market In India – Traders In Derivative Markets – Derivatives Trading At NSE – Currency Derivatives Market – Commodity Derivatives Trading In India – Commodity Exchanges – Forward Contracts (Features, Payoff From Forward Contracts, Forward Price) – Future Contracts (Features, Difference Between Forward And Futures) – Option Contracts (Features, Payoff From Option Contract, Factors Affecting Price of Option Contract, Call Vs. Put Options, American Vs. European Options) – Index Futures – Swaps (Features & Types).

Module 4: Hedging/Risk Management through Derivatives: Meaning – Types – Short Hedge Through Option, Futures, & Index Futures – Long Hedge Through Option, Futures, Index Futures – Credit Derivatives (Credit Default Swap & Total Return Swap) - Special Issues In Derivates (Synthetics, Multi-Period Option, & Compound Option) – Combination And Spread – Exotic Options (Asian Option, Barrier Option & As You Like It) – Hedging Strategies With Index Futures, Options, & Swap – Speculative Trading Strategies – Arbitrage Strategies With Options. (20 Hrs)

Module 5: Pricing/Valuation of Derivatives: Option Pricing – Binomial Model (One- Step Binomial Process & Two-Step Binomial Method) – Continuous Time Model – Volatility – Estimated And Implied Options And Dividend Paying Assets Warrants And Convertibles - Black & Scholes Model – Options Delta, Gamma, Vega, Theta, Rho – Future Pricing – Spot And Forward Contract - The Cost of Carry Model - Reverse Cost of Carry – Pricing By Arbitrage Process. (18 Hrs)

**Module 6: Accounting for Derivatives:** Accounting treatment in case of Cash Settled Equity Index/Stock Option – Accounting treatment in respect of equity stock option in case of delivery settled options – Accounting for Open Option at the end of an accounting period – Accounting for Equity Stock Options – Accounting for daily receipt/payment of margin - Disclosure to be made in Financial Statement – Guideline of ICAI

(18 Hrs)

### References:

- 1. Kumar S S S, Financial Derivatives, PHI
- 2. Michel Crouhy, Dan Galai and Robert Mark, The Essential of Risk Management, The McGraw Hill Companies
- 3. John C Hull, Risk Management in Financial Institutions, John Wiley and Sons Inc
- 4. Rangarajan K Sundaram, & Sanjiv R Das, Derivatives: Principles and Practice, McGraw Hill Edu (India) Pvt. Ltd.
- 5. Bharati V. Pathak, The Indian Financial System Markets, Institutions, & Services, Pearson
- 6. Dhanesh Kumar khatri, Security Analysis and Portfolio Management, Trinity Press
- 7. George E. Rejda, Principles of Risk Management and Insurance, Pearson
- 8. Ravi. M Kishore, Advanced Accounting with Accounting Standards, Taxmann.
- 9. Ravi. M Kishore, Strategic Financial management, Taxman

# 19PCO43: ACCOUNTING STANDARDS

# **Objective**

- 1. To acquaint the students to understand the structure, process and organizational set up involved in evolving accounting standards in India.
- 2. To enable the students to apply some key standards while preparing and presenting the financial statements.
- 3. To familiarize the students in uniform and universal practices in accounting.

### **Course Outcome**

Students will be made well versed with accounting standards to commensurate with international accounting practices.

Module 1: Accounting Bodies—International Accounting Standards Board— Institute of Chartered Accountants of India—Accounting Standards Boards—Procedure adopted by ASB in formulating Accounting Standards—Companies Act 2013and Accounting Standards—Need for accounting standards—International Accounting Standards and IFRS—Convergence with IFRS. (15 Hrs)

Module 2: Disclosure of Accounting Policies (AS 1)—Accounting Policies Valuation of Inventories (AS 2)—Measurement-- Cost of purchase—Cost of conversion—Joint costs—Treatment of borrowing cost—Cost formulae—Specific identification method—FIFO, Weighted Average Cost—Standard Cost—Retail Inventory Method—NRV—Valuation of inventory below cost. Revenue Recognition (AS 9)—Sale of goods—Rendering of service—Completed service contracts—Proportional completion method. (20 Hrs)

Module 3: Accounting for fixed assets (AS 10) — Gross and Net Book Value — Composition of Cost—Self Constructed Assets—Exchanged Assets—Improvement and repairs to fixed asset—Retirement and Disposal—Revaluation of Fixed Assets Depreciation Accounting (AS 6)—Historical Cost—Estimated Residual Value — Depreciation Policy—Change in method of depreciation—Change in measures of depreciation amount (Estimated life, Estimated resale value and historical cost)—Additions and Extensions—Assets involving liabilities in foreign currency. Intangible Assets (AS 26)—Monetary Assets—Non-Monetary Assets—Acquired intangible assets—Exchange for another assets—IA arising from amalgamation—IA out of Govt. grants—Internally generated goodwill—Amortisation of IA. Service contracts—Proportional completion method.

Module 4: Accounting for Leases (AS 19)—Finance Lease—Operating Lease—Minimum Lease Payments—Gross investment in leases—Interest rate implicit in leases—Accounting treatment in the books of lessee and lessor—Sub leases by lessee Segment Reporting (AS 17)—Business Segment—Geographical Segments—Reportable Segments—Identification Tests—Primary and Secondary Segments. (20 Hrs)

**Module 5: Earning Per Share- AS 20-** Financial Instruments- Financial Liability- Potential Equity Shares- Dilutive Non- Dilutive Potential Equity Share- Profit Available to Equity Shares- Weighted Average Number of Equity shares. Basic EPS- Restatement of EPS- Diluted EPS (15 Hrs)

Module 6: Impairment of Assets (AS 28)—Net Selling Price—Value-in-Use— Recoverable Amount—Carrying Amount—Impairment Loss—Cash Generating Units—Goodwill—Top Down and Bottom up

tests—Corporate Assets—Reversal of Impairment Loss Accounting for Taxes on Income (AS 22)—Deferred Tax—Current Tax—Impact of Timing Difference—Measurement of Tax Expenses—Reasonable certainty and Virtual certainty—Criteria of setting off.

(18 Hrs)

### References

- 1. Asish K Bhattacharjee, Tata Mc Graw Hill, . Indian Accounting Standards
- 2. Israr Shaikh and Rajesh Makkar, Lexis Nexis. Accounting Standards
- 3. Rajkumar S Adukia, Lexi Nexis, Indian Accounting Standards
- 4. Rawat D S—Taxman Accounting Standards
- 5. Vijayakumar M.P, Snow White, Chennai Accounting Standards

# 19PCO44: MANAGEMENT OPTIMIZATION TECHNIQUES

# **Objectives:**

- 1. To convey basic principles and application of optimization tools of resource utilization.
- 2. To provide an insight into optimal project implementation Techniques under deterministic and probabilistic conditions.
- 3. To have awareness in the application of multi-disciplinary tools in decision making in pervasive functional areas of management.

# **Course Outcome**

Equip the students with the application skills in optimization tools for managerial decision making, implementation and control.

Module1: Optimization Techniques: Introduction-Definition-Nature and Importance- Steps in Intelligent decision making-Modelling Techniques (8 Hrs)

**Module 2: Linear Programming:** Introduction-Formulation of LPP-Maximize, Minimize, objective function-Constraints and non-negativity conditions-Graphical solution-Optimal solution-Infeasible and unbounded solutions-degeneracy-Simplex method-slack, surplus and artificial variables-Duality-Primal and dual problems (22 Hrs)

Module 3: Transportation and Assignment Problems: Transportation Problems- Initial basic feasible solution using North West Corner Rule, Lowest Cost Entry Method and Vogel Approximation Method-Optimal solution-MODI method- Degeneracy, Unbalanced and Maximization in Transportation Problems. Assignment Problems- Hungarian Method-Maximization, Unbalanced and Restricted Assignment Problems- Travelling Salesman Problems. (23 Hrs)

**Module 4: Game Theory:** Game Theory- Pay off matrix- Maxim in and Minimax – Saddle point-Solution of pure and Mixed strategy games- Graphic Method-Principle of dominance-Arithmetic Method. (15 Hrs)

**Module 5: Optimization Techniques:** Replacement Theory- Replacement of Capital Items and items that fail completely- Individual and Group replacement policy. Queuing Theory-Models (simple problems); Inventory models-computation; Simulation-MONTE CARLO Method and Random Numbers. (15Hrs)

**Module 6: Project Scheduling and Monitoring:** Network Analysis-Critical Path Method-Scheduling and Control of Projects-Free, Independent and Total Float(slack)- PERT-time estimates and Probability of completion-cost/time trade off analysis-Crashing of projects and resource considerations (25 Hrs)

### **References:**

- 1. J K Sharma operation Research Theory and Practice Mac Millian.
- 2. John M. Nicholas, Project Management for business and Technology Problems and practice.
- 3. Harvey M Wagner "Principle of Operation Research, PH Learning Pvt. Ltd.
- 4. Management operations Research Satya Narayanan, Lalitha Raman.
- 5. Operations Research Hamdy A Taha
- 6. Operation Research V.K. Kapoor.
- 7. Operation Research S.D. Sharma.

# **Industrial Visit cum Study Tour**

Study tour to be mandatory for the M.Com Programme. It should cover an organization where functional applications of concepts/ theories covered in the Programme are being practised. The visit should be pre- planned with an objective to learn identified applications. The learning could be in

- Accounting processes (Computerized, Digitalize operations)
- Capital Market Operations
- Auditing Practices
- Integrated Financial Services
- Payroll Management
- Production/ Marketing/ Distribution/ Logistic Management

The total time to be devoted in the organization is one day out of three days set aside for the tour.

The outcome of the visit to be documented in a report with the following format

# **Student Tour Dairy**

	Student Tour Dan'y
1.	Name of the College
2.	Name of the Student
3.	M.Com Programme Semester
4.	Name of the Oragnisation
5.	Date of Visit
6.	Learning Objectives
	<ul> <li>To Observe applications of</li> </ul>
	<ul> <li>To Understand processes</li> </ul>
_	
7.	Interactions held
8.	Outcome in the form of learnings
9.	Observations (along with pictures, citations, illustrations)

Counter Signed by HoD

# MODEL QUESTION PAPERS

# MODEL QUESTION PAPER 19PC011: BUSINESS ETHICS AND CORPORATE GOVERNANCE

Time 3 Hours Maximum Marks 75

### **Section A**

# (Answer all questions. Each carries 2 Marks)

- 1. What is Business ethics?
- 2. What is Whistle blowing?
- 3. What is code of corporate governance?
- 4. Define corporate governance.
- 5. What do you mean by work ethics?
- 6. What is CSR?
- 7. What is EPS?
- 8. What do you mean by social audit?
- 9. What do you mean by Values?
- 10. What is ethical dilemma?

(10x2=20)

### **Section B**

# (Answer any five of the following. Each carries 5 marks)

- 11. What are the arguments for the social responsibility?
- 12. Briefly explain the responsibilities of a chairman in corporate governance
- 13. Discuss the role and usefulness of moral theories in ethical practice.
- 14. What are the causes of unethical behaviour?
- 15. Discuss the future trend of CSR in India.
- 16. Explain the four pillars of corporate governance.
- 17. Explain the importance of CSR.
- 18. Explain the role of remuneration committee in corporate governance

(5x5=25)

### Section C

# (Answer any two of the following. Each carries 15 marks)

- 19. Explain the models of corporate governance.
- 20. Explain the recommendation of Narayan muruthy committee.
- 21. Explain the strategies of work life balance.
- 22. Explain the CSR under the companies Act.

(2x15=30)

# MODEL QUESTION PAPER 19PC012: LEGAL FRAMEWORK FOR BUSINESS

Time 3 Hours Maximum Marks 75

### Section A

# (Answer all questions. Each carries 2 Marks)

- 1. What is DIN?
- 2. What are the advantages of a LLP?
- 3. What are the modes available for issue of further shares?
- 4. What is foreign direct investment?
- 5. Explain the extent of liability of LLP?
- 6. What are the objectives of MSMED Act?
- 7. What are the types of Foreign Direct Investment?
- 8. What are the main objectives of FEMA Act?
- 9. What is meant by Udyog Aadhar?
- 10. Discuss about the responsibilities of competition Commission of India?

(10x2=20)

### Section B

# (Answer any five of the following. Each carries 5 marks)

- 11. What are the features of LLP?
- 12. What are the benefits available to enterprises registered under MSMED Act?
- 13. Explain the conversion of LLPs into private Ltd Company and Vice versa
- 14. What are the powers of a company Secretary?
- 15. Describe the Content of Annual Return of a Company?
- 16. What are the procedures to be followed in import and export?
- 17. Discuss about the Central and State Schemes for MSME Promotion
- 18. What are the features of Foreign Contribution (Regulations) Act 2010?

(5x5=25)

### **Section C**

# (Answer any two of the following. Each carries 15 marks)

- 19. What are the advantages and disadvantages of Foreign Direct Investment?
- 20. Explain the reasons for voluntary winding up. Distinguish between voluntary winding up and Compulsory winding up.
- 21. Explain the meetings of a company
- 22. what are the procedures to be followed for the incorporation of a LLP

(2x15=30)

# MODEL QUESTION PAPER 19PCO13: RESEARCH METHODOLOGY

Time 3 Hours Maximum Marks 75

### **Section A**

# (Answer all questions. Each carries 2 Marks)

- 1. What is Ex-post Facto Research?
- 2. What do you mean by snow ball sampling?
- 3. What is hypothesis?
- 4. What is case study?
- 5. What is Type I error?
- 6. What do you mean by descriptive research?
- 7. What is sampling?
- 8. What is literature review?
- 9. What do you meant by pilot study?
- 10. What is research problem?

(10x2=20)

### Section B

# (Answer any five of the following. Each carries 5 marks)

- 11. Define Research. Explain the need and importance of research in social science.
- 12. What is research design? Explain the essential features of good research design.
- 13. Explain the process of designing questionnaire?
- 14. What are the characteristics of a hypothesis?
- 15. Explain the disadvantages of secondary data collection.
- 16. What are the types of project reports?
- 17. Explain the types of hypothesis.
- 18. Explain the qualities of good research.

(5x5=25)

# **Section C**

# (Answer any two of the following. Each carries 15 marks)

- 19. What is research report? Explain the contents of research report.
- 20. Explain the basic measurement scales.

- 21. Explain the methods of sampling.
- 22. Explain the methods of data collection.

(2x15=30)

# MODEL QUESTION PAPER 19PCO14: PLANNING AND DEVELOPMENT ADMINISTRATION

Time: 3 Hours Max. Marks: 75

# **SECTION A**

# Answer all questions. Each question carries 2 marks.

- 1. What is double counting?
- 2. What is PPP?
- 3. What is disposable income?
- 4. What are grants-in-aid?
- 5. What is fiscal policy?
- 6. What is a subsidy?
- 7. What is hard infrastructure?
- 8. What is social audit?
- 9. Write any two features of LSG.
- 10. What is corporation tax?

(10 X 2 = 20 Marks)

# **SECTION B**

# Answer any five questions. Each question carries 5 marks.

- 11. Explain the role of agriculture in the economic development of India.
- 12. Write a note on Mudra Bank.
- 13. Explain the provisions of 73<sup>rd</sup> Constitutional Amendment Act of LSG.
- 14. Distinguish centralized planning from decentralized planning.
- 15. Write a note on NITI Aayog.
- 16. Explain the importance of infrastructural development.
- 17. What is non-development expenditure? Explain the various non-developmental expenditure of the central government.
- 18. Explain the objectives of fiscal policy.

(5 X 5 = 25 Marks)

### **SECTION C**

# Answer any two questions. Each question carries 15 marks.

- 19. Explain the reasons for the slow growth of national income in India.
- 20. Briefly explain the instruments of fiscal policy.
- 21. Explain the recommendations of the current central finance commission.
- 22. Briefly explain the various poverty alleviation programme of central government.

(2 X 15 = 30 Marks)

# MODEL QUESTION PAPER 19PC015: ADVANCED CORPORATE ACCOUNTING

Time:3Hours Max.Marks: 75

### SECTION—A

# Answer all questions. Each question carries two marks.

- 1. What do you mean by under insurance?
- 2. What is an average clause in the insurance claim?
- 3. What is short sales?
- 4. How do you treat the bonus issue out of post acquisition profit?
- 5. Write short note on IFRS?
- 6. What do you mean by Amalgamation?

- 7. Mention the methods of winding up of companies?
- 8. What is capital profit?
- 9. Who is a liquidator?
- 10. What is a subsidiary company?

(2x10=20)

### **SECTION-B**

# Answer any 5 questions. Each carries 5 marks.

- 11. From the following balances, calculate goodwill or cost of control.
  - 1. Amount paid for 60% shares in subsidiary company

Rs.1,62,400

- 2. Reserves appearing on the liability side of the balance sheet of subsidiary company on the date of acquisition Rs.50,000
- 3. Preliminary expenses of subsidiary company on the date of acquisition

Rs. 6,000

4. Share capital of subsidiary company(fully paid up)

- Rs. 2,00,000
- 12. Define holding company? Explain with suitable examples the treatment of the following items in consolidated balance sheet.
  - a. Inter company owings
  - b. Unrealized profit
  - c. Revaluation of assets
  - d. Minority interest
- 13. What is a consequential loss policy?
- 14. Explain IFRS 9
- 15. Explain the advantages Holding companies?
- 16. Explain the accounting treatment of amalgamation?
- 17. The following are the liabilities and assets of Anritha Ltd.

Liabilities		Assets			
Share capital	60,000	Goodwill	28,000		
Debentures	10,000	Land and Building	16,000		
Sundry creditors	6,000	Plant and machinery	28,000		
General Reserve	4,000	Stock	16,000		
Profit and loss a/c	20,000	Debtors	8,000		
		Cash	2,000		
		Preliminary Expenses	2,000		
Total	1,00,000		1,00,000		

Bangalore Ltd. Takes over the business of Anritha Ltd., the value agreed for various assets are: Goodwill 22,000,Land and Buildings 25,000, Plant and Machinery 24,000, stock 13,000, and Debtors 8,000. Bangalore Ltd. Does not take over cash but agrees to assume the liabilities of sundry creditors at 5,000. Calculate purchase consideration.

(5x5=25)

# **SECTION—C**

# Answer any two questions. Each carries 15 marks.

- 18. Explain IFRS in detail?
- 19. The following are the balance sheet of H.Ltd and its subsidiary S.Ltd as on 31st March 2011.

Liabilities	HLtd S	S.Ltd Assets	H.Ltd S	.Ltd
Equity capital shares of	6,00,000	, ,	3,90,000	1,35,000
Rs.10 fully paid		machinery		
General Reserve	3,40,000	80,000 furniture	80,000	40,000
	1,00,000	60,00080% shares in	3,40,000	
Profit and loss account		S.Ltd (at cost)		
Creditors	70,000	35,000Stock	1,80,000	1,20,000
		Debtors	50,000	30,000
		Cash at bank	70,000	50,000
	11,10,000	3,75,000	11,10,000	3,75,000

# Additional information:

- 1. Profit and loss account stood at Rs. 30,000 on 1<sup>st</sup> April 2010 where as general reserve stood at Rs. 80,000 even on this date.
- 2. H.Ltd acquired 80% shares in S.Ltd on 1st October 2010.
- 3. S.Ltd's plant and machinery which stood at Rs.1,50,000 on 1<sup>st</sup> April 2010 was considered worth Rs. 1,80,000 as on 1<sup>st</sup> October 2010, this figure is to be considered while consolidating the balance sheets. You are required to prepare consolidated balance sheet as at 31<sup>st</sup> March 2011.

20. The following is the summerised statement of liabilities and assets of Moon Lts. As on 31st March 2015.

Share capital		Fixed Assets			
40,000 equity shares of Rs.10 each	4,00,000	Land and buildings	2,00,000		
Reserves and Surplus		Plant and Machinery	1,00,000		
Capital Reserve	1.80,000	Furniture	80,000		
Profit and loss account	60,000	Investments			
Secured Loan		Current Assets			
10% Debentures	2,00,000	Stock	40,000		
Current Liabilities and Provision		Sundry Debtors	60,000		
Sundry creditors	20,000	Bank	3,00,000		
		Cash	80,000		
Total	8,60,000		8,60,000		

On 1st April 2015 Sun Ltd. Took over the business of Moon Ltd as per the following terms.

- A. Debentures are to be discharged at a premium of 5% in Sun Ltd.
- B. Creditors are to be paid off by Sun Ltd.
- C. Sun Ltd. Will issue 5 equity shares of Rs. 10 each at a market value of Rs. 11 for every shares of Moon Ltd.
- D. Cost of liquidation Rs. 10,000 is to be paid by Sun Ltd.
- 21. The Balance sheet of Narayan Ltd. As on 31-3-2014 was as follows:

Liabilities		Assets	
Paid up capital		Land and Buildings	4,00,000
2000,6% preference shares of 100 each	2,00,000	Plant and Machinery	4,40,000
4,000 equity shares of 100 each, 50 paid	3,00,000	Stock	2,00,000
6% debentures			
(floating charge on all assets)	2,00,000	Sundry debtors	2,00,000
Mortgage loan on land and buildings	2,00,000	Cash	60,000
Sundry creditors	1,80,000	Profit and Loss a/c	2,00,000
Income tax provision	20,000		
Total	15,00,000		15,00,000

The company went into liquidation on 1-4-2014. The preference dividend were in arrears for 3 years. The arrears are payable on liquidation. The assets were realized as follows:

Land and Buildings4,80,000Plant and Machinery3,60,000Stock1,40,000Debtors1,20,000Expenses of liquidation16,000

The liquidator is entitled to a commission of 2% on all assets realized and 3% on the amount distributed to unsecured creditors (including preferential creditors). All the payments made on 30<sup>th</sup> September 2014. Prepare liquidator's final statement of account.

(2x15=30)

# MODEL QUESTION PAPER 19PCO21: E-BUSINESS AND CYBER LAWS

Time: 3 Hours Max. Marks: 75

# **SECTION A**

# Answer any 10 questions. Each question carries 2 marks.

- 1. What is EPOS?
- 2. What is cyber defamation?
- 3. What are the objectives of IT Act, 2000?
- 4. What is e-branding?
- 5. What is IPR?
- 6. What is digital signature?
- 7. What is cross-media marketing?
- 8. Write any two differences between traditional marketing and e-marketing.
- 9. What is file-swapping?
- 10. What is cyber space?

(10 X 2 = 20 Marks)

# **SECTION B**

# Answer any five questions. Each question carries 5 marks.

- 11. What is copyright? Explain different copyright issues?
- 12. Briefly explain different cyber laws?
- 13. Explain the browsing behavior model.
- 14. Briefly explain different revenue models of e-business.
- 15. Explain different models of e-retailing.
- 16. What are the advantages of e-advertising?
- 17. Explain different types of cyber-crimes.
- 18. Explain the merits of e CRM.

(5 X 5 = 25 Marks)

### SECTION C

# Answer any two questions which carries 15 marks.

- 19. What is e-marketing strategy? Briefly explain various e-marketing strategies.
- 20. Briefly explain different e-business trends?
- 21. Briefly explain the positive aspects and negative areas in IT Act, 2000.
- 22. Explain different steps in e-business design.

(2 X 15 = 30 Marks)

# MODEL QUESTION PAPER 19PCO22: STRATEGIC MANAGEMENT

Time 3 Hours Maximum Marks 75

### Section A

# (Answer all questions. Each carries 2 Marks)

- 1. What is strategic intent?
- 2. What is strategic alliance?
- 3. What is benchmarking?
- 4. What is strategic plan?
- 5. What do you mean by value chain?
- 6. Define Strategy.
- 7. What is strategic audit?
- 8. What is Core competence?
- 9. What is blue ocean strategy?
- 10. What is environmental scanning?

(10x2=20)

### Section B

# (Answer any five of the following. Each carries 5 marks)

- 11. Discuss the strategic management process.
- 12. Explain the different levels of strategy formulation.
- 13. Explain BCG matrix of resource allocation.
- 14. Explain SWOT analysis.
- 15. Explain Michael Porters' industry analysis.
- 16. Explain the Mc Kinsey Seven S Model
- 17. Explain the behavioural aspects of strategic implementation
- 18. Explain TOWS matrix.

(5x5=25)

# **Section C**

# (Answer any two of the following. Each carries 15 marks)

- 19. Explain the approaches and process of strategic decision making.
- 20. Explain the strategic management in the international context.
- 21. Explain the strategic implementation process and issues.
- 22. Explain the different strategic alternatives.

(2x15=30)

# MODEL QUESTION PAPER

# 19PCO23: QUANTITATIVE TECHNIQUES AND FINANCIAL ECONOMETRICS

# Time 3 Hours Maximum Marks 75

# **Section A**

# (Answer all questions. Each carries 2 Marks)

- 1. Show the significance of Durbin Watson statistics
- 2. Determine the sample space in tossing two dice together
- 3. What do you mean by P Value?
- 4. Briefly explain the concept of Chi-Square test and its uses.
- 5. What do you mean by interval scale?
- 6. Define a Poisson Distribution.
- 7. If n = 10, p = 0.1, find P(x=2) by both Binomial and Poisson distributions.
- 8. Explain the term Standard error and degree of freedom in the context of testing of hypothesis.
- 9. What do you mean by Mutually exclusive event?
- 10. What do you mean by Multicolleanarity?

(10x2=20)

### **Section B**

# (Answer any five of the following. Each carries 5 marks)

- 11. A college PG class consist of 20 males and 30 females. Among the males, 12 are in the first year and among the females 10 are in the first year. A student is chosen randomly and is found to be in the second year. What is the probability that the chosen student is a female?
- 12. Explain econometric modeling? What are the steps involved in it?
- 13. Having derived a model for the exchange rate st as a function of the interest rate differential rt and performed the following regression. st= a + b rt + et. Where et is an error term. How would you check for the presence of serial correlation in the error term and how would you deal with it.
- 14. Explain cross tab analysis using a suitable example and show the interpretation of the result of chi square test in SPSS.
- 15. Explain the key differences between univariate and multivariate data analysis.
- 16. The councilor of a city ward claims that not less than 50 per cent of the residents in his ward favour all the policy changes made by the city corporation. A random sample of 150 residents showed the 90 of them were against the policy changes. Test the claim of the councilor at 0.05 level of significance.
- 17. Define Normal Distribution. Explain the properties of a normal distribution.

- 18. A Secretary make two errors per page on an average. What is the probability that on the next pages she makes:
  - i. 4 or more errors
  - ii. No Errors.

(5x5=25)

### **Section C**

# (Answer any two of the following. Each carries 15 marks)

- 19. Explain ANOVA and MANOVA in the context of SPSS.
- 20. Below are given the yields per acre of wheat for six plots entering a crop competition, three of the plots being sown with wheat of variety A and the three with B.

Variety	1	2	<b>3</b> 22	
$\mathbf{A}$	30	32		
В	20	18	16	

Set up a table of ANOVA and calculate F. State whether the difference between yield of the two varieties is significant taking 7.71 as the table value of F at 5% level for  $v_1 = 1$  and  $v_2 = 4$ .

- 21. Explain the pre requisite tests for multivariate regression analysis.
- 22. Eight coins were tossed 256 times. The result obtained are given below. Test whether the coins are unbiased using Chi-Square test.

No. of heads	:0	1	2	3	4	5	6	7	8	
Frequency	<b>:</b> 2	10	25	50	75	58	21	9	6	

(2x15=30)

# MODEL QUESTION PAPER 19PCO24: INTERNATIONAL BUSINESS

Time 3 Hours Maximum Marks 75

### **Section A**

# (Answer all questions. Each carries 2 Marks)

- 1. Define International business
- 2. What is SDR?
- 3. What is customs union?
- 4. What is transfer pricing?
- 5. What is joint venture?
- 6. What do you mean by Intra firm trade?
- 7. What is Free trade area?
- 8. What is comparative cost advantage theory?
- 9. What is FDI?
- 10. Why GATT is replaced by WTO?

 $(10 \times 2 = 20)$ 

# **Section B**

# (Answer any five of the following. Each carries 5 marks)

- 11. Discuss the rationale behind regional economic co-operation
- 12. There is a huge scope of International business in today's scenario. Elucidate.
- 13. Define Technology transfer. what are the different types of Technology transfer?
- 14. Write a note on UNCTAD
- 15. Critically analyse the contribution of world Bank for developing economies
- 16. What are the determinants of foreign exchange rate?
- 17. Discuss the policies of success of European Union
- 18. Explain the impact of WTO on business

 $(5 \times 5 = 25)$ 

### Section C

# (Answer any two of the following. Each carries 15 marks)

- 19. Explain the methods of entry into Foreign exchange market
- 20. Explain various challenges to International business. What are the advantages and disadvantages of regional trade blocks
- 21. Discuss various challenges faced by MNC's in developing economies
- 22. Write a note on regulatory role of WTO and UNCTAD

 $(2 \times 15 = 30)$ 

# MODEL QUESTION PAPER 19PCO25: INVESTMENT MANAGEMENT

Time 3 Hours Maximum Marks 75

# **Section A**

# (Answer all questions. Each carries 2 Marks)

- 1. What is Reverse Mortgage?
- 2. What do you mean by Securitization of Assets?
- 3. What do you mean by behaviourial finance?
- 4. What is Price Rigging.?
- 5. What do you mean by Heuristic?
- 6. What do you mean by Cornering?
- 7. What is Database Framing?
- 8. What is LIBOR?
- 9. What is insider trading?
- 10. What is financial literacy?

(10x2=20)

# **Section B**

# (Answer any five of the following. Each carries 5 marks)

- 11. What are the factors affecting investment?
- 12. Differentiate speculation and gambling
- 13. Explain the principles of financial market.
- 14. Explain the Baysian Decision Making.
- 15. Explain the principles of Asset planning.
- 16. Explain the Cognitive biases of investors decision making.
- 17. Briefly explain the investment styles and behaviourial pricing.
- 18. Explain the dimensions of investment.

(5x5=25)

# **Section C**

# (Answer any two of the following. Each carries 15 marks)

- 19. Explain the components of personal finance.
- 20. Explain the theories of behaviourial finance.
- 21. Explain the different investment avenues.
- 22. Explain the financial modelling using spread sheet.

(2x15=30)

# MODEL QUESTION PAPER 19PCO31: INCOME TAX PLANNING AND MANAGEMENT

Time 3 Hours Maximum Marks 75

#### **Section A**

## (Answer all questions. Each carries 2 Marks)

- 1. Who is Assessing Officer?
- 2. What do you mean by domestic company/
- 3. What is tax evasion?
- 4. What is Tax Audit?
- 5. What do you mean by Alternative Minimum Tax?
- 6. Distinguish between AOP and BOI.
- 7. What do you mean by Advance Ruling?
- 8. What is GAAR?
- 9. What do you mean by Double Taxation Relief?
- 10. What is CII?

 $(10 \times 2 = 20)$ 

#### **Section B**

## (Answer any five of the following. Each carries 5 marks)

- 11. Discuss the evolution of Income Tax Law in India.
- 12. State the impact of Tax on Change in Constitution of Firm.
- 13. Explain the Tax Planning and Management in Corporate Decisions.
- 14. What are the precautions to be taken in tax planning?
- 15. A firm assessed as such is engaged in the business of plying and hiring of goods carriage. The firm wants to compute its income u/s 44AE. From the following information compute the business income of the firm: The firm has five heavy goods vehicles, out of which two were purchased on hire purchase system on 20.1.2018. it has four goods carriages other than heavy goods vehicles. As per the partnership deed partners A and B are entitled to (i) salary Rs. 15,000 p.m. each, and (ii) interest @ 12 % p.a. on capital of Rs. 3,00,000 each.
- 16. Kwality Electronics Ltd. is a domestic company in which public are substantially interested. The following are the particulars of income in respect of the PY 2018-19:
  - i. Interest on Govt. Securities Rs. 20,000
  - ii. Income from business Rs. 5,00,000
  - iii. Short-term capital gain Rs. 15,000
  - iv. Long term capital gain Rs. 33,000
  - v. Dividend from an Indian Co. (gross) Rs. 10,000
  - vi. Dividend from a foreign Co. Rs. 10,000
  - vii. Book profits u/s 115-JB Rs. 9,00,000

Compute company's total income and its tax liability.

- 17. The business income of a firm before charging the following is Rs. 2,20,000:
  - i. Remuneration to working partners as per deed Rs. 1, 20,000
  - ii. Brought forward business loss Rs. 1,50,000
  - iii. Unabsorbed depreciation Rs. 50,000
  - iv. Unabsorbed capital expenditure on Scientific Research Rs. 30,000

Compute the total income of the firm.

18. X, an individual, purchased shares in Indian Companies as investments on June 10, 2017 for Rs. 1,20,000. On June 1, 2018 he started a business as a dealer in shares and transferred the entire holdings to the business. The market value of the shares as on that date was Rs. 1,60,000. These shares were sold by X for Rs. 2,00,000 on October 20, 2018. Compute gains.

 $(5 \times 5 = 25)$ 

#### **Section C**

## (Answer any two of the following. Each carries 15 marks)

- 19. Raveedranathan has the following salary structure Basic salary Rs. 8,000 p.m. Dearness allowance Rs.1,000 p.m. Entertainment allowance Rs.500 p.m. Children education allowance (for 3 children) Rs.1,000 p.m. Contribution to RPF by his employer Rs.10,000 p.a. Own contribution to RPF Rs. 10,000 p.a. His employer also provides rent-free furnished accommodation at Kolkata for which his employer paid Rs. 12,000 p.m. (Rs.2,000 for furniture and Rs. 10,000 for accommodation). However, he is charged Rs. 1,000 p.m. for accommodation and Rs. 1,000 p.m. for furniture. He also supplied following details for computing total income —a) Fixed Deposit interest Rs. 42,000 b) Rent received Rs. 1,50,000 from a house at Mumbai c)Income from royalty on a book (artistic nature) @ 20% Rs. 3,20,000 d) He contributed Rs. 5,000 to approved scientific research association) He contributed Rs. 10,000 to a political party f) Interest on Government securities Rs. 14,000 g) Investment in PPF Rs. 25,000 h) His date of birth is 7-9-1979. Compute total income.
- 20. Following are the incomes of a domestic company for the year ended 31st March, 2019:
  - i. Business profit Rs. 4,20,000
  - ii. Dividend from an Indian public sector company (gross) Rs. 10,000
  - iii. Dividend from a n Indian company whose 80% income is agricultural income (gross) Rs. 9,000.
  - iv. Income from Mutual Fund (gross) Rs. 5,000
  - v. Royalty received from a foreign concern for providing technical knowledge Rs. 16,000
  - vi. Fee from an Indian company for technical advice Rs. 12,000
  - vii. Dividend from a foreign company Rs. 8,000
  - viii. Company has donated to National Rural Development Fund during the PY Rs. 8,800.

Compute the total income of the company for the AY 2019-20. Find out tax liability if the book profit of the company is Rs. 7,00,000 u/s 115JB.

- 21. Write an elaborate note on Black Money Act, 2005 and also mention its Features and Importance.
- 22. Explain in detail tax planning for individual assesses.

 $(2\times15=30)$ 

# MODEL QUESTION PAPER 19PCO32: Security Analysis and Portfolio Management

Time: 3 hrs. Max.Marks: 75

### Section A

(Answer all questions. Each carries 2 Marks)

- 1. What is an efficient portfolio?
- 2. What is mid cap index?
- 3. What do you understand by bond duration?
- 4. State constant growth model of pricing equity?
- 5. Show the application of yield curve?
- 6. What are Trend reversals?
- 7. What do you mean by tracking error?
- 8. What is Treynor ratio?
- 9. R D Gupta recently purchased a bond with Rs.1000 face value, a 10% coupon and 4 years to maturity. The bond makes annual interest payments, the first to be received one year from today. Mr Gupta paid Rs.1032.40 for the bond. What is the bond's YTM?
- 10. Given, retention ratio(b) = 60%, cost of equity(Ke) = 15% and IRR of the company(r) = 20%. Calculate P/E ratio and show how it is useful in investment decision making.

(10x2=20)

### Section B

(Answer any **five** of the following. Each carries **5** marks)

- 11. Distinguish between CML and SML
- 12. A company has a book value per share of Rs. 137.80. Its return in equity is 15% and it follows a policy of retaining 60% of its earnings. If the opportunity cost of capital is 18%, what would be the price of the share today?

- 13. Explain how the risk of a portfolio is measured?
- 14. What is weak form market efficiency? Explain any two tests of weak form market efficiency.
- 15. Distinguish between efficient frontier in MPT and that in capital market theory.
- 16. Briefly explain the application of RSI and ROC in investment decision making.
- 17. XYZ Co. is considering raising Rs 25 crores through rights offering. Currently it has 1 crore shares in the market with a face value of Rs.10 which are selling for Rs 84 per share. The subscription price of new equity will be Rs. 60 per share. How many shares must be sold to raise the desired funds? How many rights are necessary to purchase one equity share? What is the value of one right?
- 18. You are asked to evaluate the performance of two portfolios having the following characteristics.

Portfolio	Observed return	Beta	Residual variance
A	0.18	2.0	0.03
В	0.12	1.5	.00

The risk free rate is 0.07. The return on the market portfolio is 0.15 and the standard deviation of the market portfolio is 0.06. Compute the Sharpe index for the market portfolio and portfolios A and B.

(5x5=25)

#### Section C

(Answer any **two** of the following. Each carries 15 marks)

19. A financial analyst is analyzing two investment alternatives of A and B. The estimated rates of return and the chance of occurrence for the next year are given below:

	Rates of Return	
Probability of returns	$\mathbf{A}$	В
0.20	22%	5%
0.60	14%	15%
0.20	-4%	25%

- a. Determine each alternatives Expected return and Risk
- b. Is B comparatively riskless
- c. If the analyst wishes to invest half in A and half in B, would it reduce the risk? Why?
- 20. The following information is available:

Expected return of the market = 14%, Standard deviation of market returns = 20%, Risk free return = 6%, Correlation coefficient between stock A and the market = 24%, Correlation coefficient between stock B and the market = 32%.

- a. Calculate the beta for stock A and B
- b. Calculate the required rate of return for each stock
- c. If stock A with a return of Rs.15 is currently selling at Rs.130 and stock B with a return of Rs.18 is currently selling at Rs.116, what will be your investment decision? Why?
- 21. Critically compare fundamental and technical approaches towards security analysis.
- 22. Explain Fama decomposition model of portfolio performance evaluation and critically compare it with other models

(2x15=30)

## MODEL QUESTION PAPER 19PCO33: INTERNATIONAL FINANCIAL MANAGEMENT

Time 3 Hours Maximum Marks 75

#### **Section A**

### (Answer all questions. Each carries 2 Marks)

- 1. What do you mean by international financial management?
- 2. What is SDR?
- 3. What do you mean by SWAP?
- 4. What is Inflation risk?
- 5. What is Balance of payment?
- 6. What is Euro Bond?
- 7. What is American Depository Receipts?

- 8. What is MNC'S?
- 9. What is FDI?
- 10. What is Foreign Institutional Invstment?

 $(10 \times 2 = 20)$ 

#### **Section B**

## (Answer any five of the following. Each carries 5 marks)

- 11. What are the risks involved in international investment?
- 12. What are the differences between Currency option and Currency future?
- 13. What do you mean by pegging to SDR?
- 14. Briefly explain the scope of International financial management
- 15. Discuss the issues in FDI
- 16. Explain the role of FII's in India
- 17. What are the Equity instruments in international business
- 18. Explain the components of global financial market

 $(5 \times 5 = 25)$ 

#### **Section C**

## (Answer any two of the following. Each carries 15 marks)

- 19. Explain the recent trends in global financial market
- 20. Discuss the various theories of Foreign Direct Investment
- 21. Explain in detail various Risk management techniques
- 22. Explain in detail various International financial instruments

 $(2 \times 15 = 30)$ 

# MODEL QUESTION PAPER 19PCO34: STRATEGIC COST AND MANAGEMENT ACCOUNTING

Time: 3 hours Max. Marks: 75

#### **Section A**

Answer all questions. Each question carries two marks

- 1. What do you mean by transfer pricing?
- 2. What is life cycle costing?
- 3. What do you mean by target costing?
- 4. What do you mean by target costing?
- 5. What is relevant costing?
- 6. What is standard costing?
- 7. What do you mean by shut down point?
- 8. What is Absorption costing?
- 9. What do you mean by customer relationship management?
- 10. What do you mean by enterprise performance management?

 $(10 \times 2=20 \text{ marks})$ 

#### **Section B**

Answer any five questions. Each question carries 5 marks.

11. The following are product Nova Shaft's data for next year budget:

Activity	Cost driver	Cost driver volume / year	Cost pool (Rs.)
Purchasing	Purchase orders	1,500	75,000
Setting	Batches produced	2,800	1,12,000
Materials handling	Materials movements	8,000	96,000
Inspection	Batches produced	2,800	70,000
Machining costs	Machine hours	50,000	1,50,000

Purchase orders	25
Output	15,000 units
Production batch size	100 units
Materials movements per batch	6
Machine hours per unit	0.1

- a. Calculate the budgeted overhead costs using Activity Based Costing principle.
- b. Calculate the budgeted overhead costs using absorption costing ( Absorb overheads using Machine hours)
- 12. Ramu is the Managing Partner of a business that has just finished building a Motel. He anticipates that he will rent these rooms for 16,000 room-nights next year. All rooms are similar and will rent for the same price. The following operating costs are expected to be incurred for the next year;

Variable operating costs	Rs.800 per room-night
Fixed costs:	
Salaries and wages	Rs.17,50,000
Maintenance of building	Rs.3,70,000
Other operating and administrative costs	Rs.14,00,000

The capital invested is Rs.60,00,000 and the firm expects 25% return on its investment.

- a. What price should be charged for a room-night?
- b. Market research indicate that if the price of a room-night as determined above is reduced by 10%, the number of rooms rented out will increase by 10%. Should the firm reduce price by 10%.
- 13. "The diverse use of routinely recorded cost data give rise to a fundamental danger information prepared for one purpose can be grossly misleading in another context". Discuss to what extent the above statement is valid and explain your conclusion.
- 14. Ready-Mix Ltd. provides the following information:

Particulars	Budget	Actual
Output (units)	15,000	16,250
Hours	30,000	33,000
Fixed overheads	Rs.45,000	Rs.50,000
No. of working days	25	26

Calculate fixed overhead calendar variance.

15. The details regarding composition and the weekly wage rate of labour force of Saipem International Ltd. engaged on a rig maintenance job scheduled to be completed in 30 weeks are as follows:

	Standard		Actual	
Category of workers	No. of labourers	Weekly wage rate (Rs.)	No. of labourers	Weekly wage rate (Rs.)
Skilled	75	60	70	70
Semi-skilled	45	40	30	50
Unskilled	60	30	80	20

The work is actually completed in 32 weeks. Calculate the various labour cost variances.

16. Jungle Books Ltd. has just been incorporated and planed to produce a product that can be sold for Rs.10 per unit. Preliminary market surveys shows that demand will be around 10,000 units per year.

The company has the choice of buying one of the two machines 'A' would have fixed cost of Rs.30,000 per year and would yield a profit of Rs.30,000 per year on the sale of 10,000 units. Machine 'B' would have fixed cost of Rs.18,000 per year and would yield a profit of Rs.22,000 per year on the sale of 10,000 units. Variable costs behave linearly for both the machines.

Required to calculate:

- a. Break-even sales for each machine.
- b. Sales level where both the machines are equally profitable.
- c. Range of sales where one machine is more profitable than the other.

- 17. Differentiate between marginal costing and absorption costing>
- 18. Distinguish between Job costing and Process costing.

 $(5 \times 5 = 25 \text{ marks})$ 

#### Section C

Answer any two questions. Each carries 15 marks.

19. The product of a manufacturing concern passes through two processes 'A' and 'B' and then to finished stock. It is ascertained that in each process normally 5% of the total weight is lost and 10% is scraped which from process A and B realizes Rs.80 per tonne and Rs.200 per tonne respectively. The following are the figures relating to both the processes:

Particulars	Process A	Process B
Materials in tones	1,000	70
Cost of materials per tonne	Rs.125	Rs.200
Wages	Rs.28,000	Rs.10,000
Manufacturing expenses	Rs.8,000	Rs.5,250
Output in tones	830	780

Management expenses Rs.10,000 and selling expenses @ Rs.5 per unit. Two third of finished stock is sold @ so as to yield a profit of 20% on sales. There was no opening or closing stock of work-in-progress in any process.

Prepare process cost accounts, abnormal loss account, abnormal gain account, finished stock account and profit and loss account.

20. Modern Tiles Limited makes plastic tiles of standard size of 6<sup>11</sup> X 6<sup>11</sup> X 1/8<sup>11</sup>. From the following information, you are required to calculate all Direct Material Cost Variances:

A standard mix of compound required to produce an output of 20,000 square feet of tiles  $1/8^{11}$  thick is as follows:

Direct material	Quantity(Kg)	Price per kg.(Rs.)
$\mathbf{A}$	600	0.90
В	400	0.65
C	500	0.40

During June, 2016, 8 mixes were processed and actual materials consumed were;

Direct material	Quantity(Kg)	Price per kg.(Rs.)
$\mathbf{A}$	5000	0.85
В	2900	0.60
C	4400	0.45

Actual production for July, 2016 was 6,20,000 tiles.

- 21. Differentiate between Process, Contract and Standard costing.
- 22. A practicing Chartered Accountant now spends Rs.0.90 per km on taxi fares for his client's work. He is considering two other alternatives; the purchase of a new small car or an old bigger car.

Items	New small car	Old bigger car
Purchase price (Rs.)	35,000	20,000
Sale price after five years (Rs.)	19,000	12,000
Repairs and servicing per annum (Rs.)	1,000	1,200
Taxes and insurance per annum (Rs.)	1,700	700
Petrol consumption per liter (km)	10	7
Petrol price per liter (Rs.)	3.50	3.50

He estimates that he does 10,000 km per annum. Which of the three alternatives will be cheaper? If his practice expands and he has to do 19,000 km per annum, which is cheaper? Will cost of two cars breakeven and why? Ignore interest and income tax.

 $(2 \times 15 = 30 \text{ marks})$ 

#### MODEL QUESTION PAPER

## 19PCO41: GOODS AND SERVICE TAX & CUSTOMS DUTY- LAW AND PRACTICE

## Time 3 Hours Maximum Marks 75

#### **Section A**

## (Answer all questions. Each carries 2 Marks)

- 1. Distinguish between direct tax and indirect tax.
- 2. What is Goods and Services Tax?
- 3. What is cascading?
- 4. What is IGST?
- 5. Define "Aggregate turnover".
- 6. What is Reverse Charge?
- 7. Define of Customs Duty.
- 8. What do you mean by Specified Goods?
- 9. What do you mean by Import and Export manifest?
- 10. What is Zero Rate Supply?

 $(10 \times 2 = 20)$ 

#### **Section B**

## (Answer any five of the following. Each carries 5 marks)

- 11. Discuss the constitutional provisions relating indirect taxes.
- 12. Write a short note on the Objectives Role of customs duty in International trade.
- 13. What are the cases in which appeals can be filed with High Court?
- 14. Elucidate the Information infrastructure for GST
- 15. How will you treat the Input tax Credit?
- 16. Explain th provisions relating to registration under GST Act.
- 17. What are the Benefits of GST? Explain
- 18. What are the different types of customs duties?

 $(5 \times 5 = 25)$ 

#### Section C

## (Answer any two of the following. Each carries 15 marks)

- 19. Explain the Assessment Procedures relating to customs duty.
- 20. Explain the different authorities in the administration of GST system.
- 21. What do you mean by assessment under GST? Explain the different types of assessment.
- 22. Explain the process of Matching, Reversal and Reclaim of Input Tax Credit under GST, with the relevant rules.

 $(2\times15=30)$ 

# MODEL QUESTION PAPER 19PCO42: RISK MANAGEMENT AND DERIVATIVES

Time: 3 hrs. Max.Marks: 75

#### Section A

(Answer all questions. Each carries 2 Marks)

- 1. What are derivatives?
- 2. What do you mean by VaR?
- 3. What is interest rate risk?
- 4. What is a plain vanilla option?
- 5. Who is an arbitrageur?
- 6. What is meant by marking to market?
- 7. State the accounting treatment for equity stock option.
- 8. What is NSE midcap index?
- 9. What do you understand by EV Rule of risk management?
- 10. What is a naked call?

(10x2=20)

#### Section B

(Answer any five of the following. Each carries 5 marks)

- 11. Discuss the uses of index options for the purpose of hedging.
- 12. "Futures contracts are improvised forward contracts". Do you agree? Explain.
- 13. Consider a gold futures contract for 100 grams. The spot price is Rs. 480 per gm. and its cost is Rs. 3 per gram for six months period and the cost is incurred at the end of the period. If the risk free rate of interest is 12% per annum compounded annually, obtain the futures price.
- 14. Explain the long position risk management in stock; use a suitable example.
- 15. Differentiate between systematic and unsystematic risk. Do you agree that stock index futures controls both these types of risks? Explain.
- 16. What is a straddle? Explain its relevance and application.
- 17. Discuss the risk return characteristics of a strategy of writing covered call options.
- 18. Using binomial option pricing mode obtain the hedge ratio,  $\alpha$ , and the call price from the following data: Share price = Rs. 70, Exercise price = Rs. 75, u = 1.2, d = 1.9, i = 1.2 and N = 3

(5x5=25)

#### Section C

(Answer any **two** of the following. Each carries 15 marks)

- 19. Briefly explain the risk in derivative trading with special relevance to futures and options.
- 20. The following data are given:

Stock price: Rs. 120Exercise price: Rs120Risk-free rate of interest: 5% p.a.

Std. Deviation of continuously

Compounded rate of return : 0.20 Time to maturity :45 Days

Using the above data calculate the call and put option values. Using the above inputs and call and put option values, verify that SD = 0.20. (Hint: Base on Black and Scholes Model).

- 21. Explain how to record derivative transaction in the books of accounts in accordance with the directives of ICAI
- 22. Explain the hedging strategies using swaps in interest rate and foreign exchange risk management. Use appropriate examples.

(2x15=30)

# MODEL QUESTION PAPER 19PCO43: ACCOUNTING STANDARDS

Time: 3 hours Max. Marks: 75

#### **Section A**

Answer all questions. Each question carries two marks

1. X Ltd. had deferred research and development cost of Rs.150 lakhs. Sales expected in the subsequent years are as under:

Year	Sales (Rs. In Lakhs)
1	400
2	300
3	200
4	100

- a. You are required to suggest how should research and development cost is to be charged to Profit and Loss Account?
- b. If at the end of the third year, it is felt that no further benefit will accrue in the forth year, how the unamortized expenditure would be dealt with in the accounts of the company?
- 2. What are specifically excluded from inventories as per AS-2?
- 3. What constitute revenue as per AS-9?
- 4. What are Property, Plant and Equipment as per AS-10?

- 5. What are Business Segment as per AS-17?
- 6. What are the features of a Financial Lease as per AS-19?
- 7. On 01/01/2010, NDA Corp. has 1800 equity shares outstanding. On 31/05/2010, it issued 600 equity shares for cash (without bonus claim). On 01/11/2010, it bought back 300 equity shares. Calculate weighted average number of shares as on 31/12/2010.
- 8. What is Deferred Tax Asset as per AS-22?
- 9. In a production process, normal waste is 5% of input. 5,000 MT of input were put in process, resulting in wastage of 300 MT. Cost per MT of input is Rs.1,000. The entire quantity of waste is on stock at the year end. State with reference to accounting standard, how will you value the inventories in this case?
- 10. M/s XYZ Ltd. has three segments namely X, Y and Z. The total assets of the company are Rs.10.00 crores. Segment X has Rs.2.00 crores, segment Y has Rs.3.00 crores and segment Z has Rs.5.00 crores. Deferred Tax Asset included in the assets of each segment are: X Rs.0.50 crores, Y Rs.0.40 crores and Z Rs.0.30 crores. The accountant contends that all the three segments are reportable segments. Comment.

(10X2=20)

#### **Section B**

Answer any five questions. Each question carries 5 marks.

11. Calculate adjusted earnings per share for the year 2011-2012 from the following:

Net profit during the year 2011-2012

Rs.60 lakhs

Number of equity shares outstanding until 30<sup>th</sup> September 2011 10,00,000 shares of Re.1 each

1 equity share for 5 equity shares outstanding as at 30th

Bonus issue 1st October 2011

September 2011

Consolidation of shares on 1st January 2012

Into shares of Rs.100 each

Split up of shares on 31st March 2012

Into shares of Rs.10 each

- 12. What are timing differences and permanent differences? Also give two examples of each.
- 13. ABC international Ltd. is developing a new production process. During the financial year 31st March 2010 the total expenditure incurred on this process was Rs.100 lakhs. The production process met the criteria for recognition as an intangible asset on 1st December 2009. Expenditure incurred till this date was Rs.44 lakhs. Further expenditure incurred on the process for the financial year ending 31st March 2011 was Rs.160 lakhs. As at 31/03/2011, the recoverable amount of knowhow embodied in the process is estimated to be Rs144 lakhs. This includes estimates of future cash outflows as well as inflows. You are required to work out:
  - a. What is the expenditure to be charged to the profit and loss account for the year ended 31st March 2010? (ignore depreciation for this purpose)
  - b. What is the carrying amount of the intangible asset as at 31st March 2010?
  - c. What is the expenditure to be charged to profit and loss account for the year ended 31st March 2011? (ignore depreciation for this purpose)
  - d. What is the carrying amount of the intangible asset as at 31st March 2011?
- 14. From the following details of an asset:
  - i. Find out impairment loss
  - ii. Treatment of impairment loss
  - iii. Find out current year depreciation
  - iv. Pass journal entries

Cost of asset Rs.60 lakhs, useful life period 10 years, salvage value Rs.4 lakhs, useful life remaining 3 years, upward revaluation done in last year by 50%. Current value in sue is Rs.12 lakhs, current selling price Rs.11 lakhs, current disposal cost Rs.1 lakh.

15. ABC advertisers obtained advertisement rights for one day world cup cricket tournament to be held in May 2012 for Rs.800 lakhs in February 2012. By 31/03/2012, they had paid Rs.500 lakhs to secure these advertisement rights. The balance Rs.300 lakhs was paid in April 2012. By March 2012 they procured advertisement for 75% of the available time for Rs.1000 lakhs. The advertisers paid 60% of the amount by that date. The balance 40% was received in April 2012. Advertisement for the balance 25% time was procured in April 2012 for Rs.200 lakhs. The advertisers paid the full amount while booking the advertisement. 25% of the advertisement time is expected to be available in May 2012 and balance in June 2012. Journalize.

- 16. ABC Ltd. has provided depreciation as per accounting records Rs.4,00,000 and as per tax records Rs.7,00,000. Unamortized preliminary expenses as per tax record is Rs.5,600. There is adequate evidence of future profits sufficiency. How much differed tax asset or liability should be recognized as transition adjustment. Tax rate is 40%.
- 17. NDALtd. acquired a machine for Rs.32,00,000 on 30/11/2006. The machine has 5 years life with Rs.5,00,000 salvage value and was depreciated using strait line method. On 31/03/2009 a test for impairment reveals the following:
  - a. Present value of future cash flow Rs.13,50,000
  - b. Net selling price Rs15,40,000
  - c. Salvage value estimated NIL

Assuming loss for impairment is recognized for the year 31/03/2009

What should be the depreciation expenses for the year ended 31/03/2010?

18. Explain the functioning of ASB.

(5X5=25)

#### Section C

### Answer any two questions. Each carries 15 marks

19. On n1st April 2015, F Ltd. had an inventory of cut-seasoning timber which had cost Rs.12 million 2 years ago. Due to shortage of this quality timber, its value as on 1<sup>st</sup> April 2015 had risen to Rs.20 million. On 1<sup>st</sup> April 2015, F Ltd. entered into an arrangement to sell the timber to Bank of India for Rs.15 million. F Ltd. has an option to buy back the timber at any time within the next three years at a cost of Rs.15 million plus accumulated interest at 2% per annum above the base rate. This will be charged from the date of the original sale. The base rate for the period of the transaction is expected to be 8%. F Ltd bought back the timber on 31<sup>st</sup> March 2018 and sold it the same day for an expected price of Rs.25 million.

Required: assuming the above transaction take place as expected, prepare extracts to reflect the transaction in profit or loss for the years to 31<sup>st</sup> March 2016, 2017 and 2018 and the statement of financial position (ignore cash) at those year ends.

- i. If F Ltd. treated the transaction in their legal form, and
- ii. If the substance of the transactions is recorded.
- 20. From the following information, value the inventories as on 31st March 2018:

Raw material has been purchased at Rs.125 per kg. Prices of raw material are on the decline. The finished goods being manufactured with the raw material is also being sold at below cost. The stock of raw material is of 15,000 kg and the replacement cost of raw material is Rs.100 per kg. Cost of finished goods per kg is as under:

	Rs. Per KG
Material cost	125
Direct labour cost	20
Direct variable production overhead	10

Fixed production overheard for the year for a normal capacity of 1,00,000 kg of production is Rs.10,00,000. As at the year end, there were 2,000 kg of finished goods in stock. Net realizable value of finished goods is Rs.140 per kg.

21. The Chief Accountant of sports Ltd. gives the following data regarding its six segments:

Particulars	M	N	O	P	Q	R	Total
Segment assets	40	80	30	20	20	10	200
Segment result	50	(190)	10	10	(10)	30	(100)
Segment revenue	300	620	80	60	80	60	1200

The chief accountant is of the opinion that segments M and N alone should be reported. Is he justified in his view? Discuss.

22. NDA Corp. has outstanding equity shares of 20,00,000 on 01/01/2010, average fair value per equity share during 2010 was Rs.75, potential equity shares in capital structure of NDA Corp. are as under:

- i. Options 1,00,000 shares with exercise price of Rs.60
- ii. 8% convertible preference shares of Rs.100 each -8,00,000 shares to be converted into 2 equity sheers, attributable corporate dividend tax 10%.
- iii. 12% convertible debentures of Rs.100 each, nominal value of Rs.10 crores convertible into 4 equity shares. Tax rate 30%, net profit attributable to equity share holders Rs.10,00,000

Calculate diluted EPS.

(2X15=30)

## MODEL QUESTION PAPER

19PCO44: Management Optimization Techniques

## Time: 3 Hours Max. Marks: 75

### SECTION - A

## Answer all questions. Each question carries 2 marks.

- 1. What is slack variable?
- 2. What is degeneracy in transportation problem? How is it resolved?
- 3. What is a feasible solution? How does it differ from optimal solution?
- 4. "Assignment problem is a particular case of transportation problem". Do you agree? Explain.
- 5. What do you mean by service discipline? Give an example.
- 6. What is a two person zero sum game?
- 7. Explain the concept of EOQ.
- 8. Distinguish between activity and event in a network.
- 9. What is meant by total float?
- 10. What is a deterministic model? How does it differ from a probabilistic model?

 $(10 \times 2 = 20 \text{ Marks})$ 

### SECTION - B

## Answer any five of the following questions. Each question carries 5 marks.

- 11. A company, for one of the A-Class items, placed 6 orders each of a size of 200 units in a year. Given ordering cost is Rs.600 per order, holding cost 40% and the cost per unit is Rs.40. Find out the loss to the company for not operating scientific inventory policy. Also determine the time between two consecutive orders under scientific inventory policy.
- 12. Solve the following game

13. The dual of an LPP is given by:

Maximise  $Z = 50y_1 + 40y_2$ 

Subject to:  $3y_1 + 2y_2 \le 3$ ,  $2y_1 + 4y_2 \le 5$ ,  $Y_1, y_2 \ge 0$ 

The final simplex table of the solution to the above is given below:

Cj		50	40	0	0	Solution
	ВV	$Y_1$	$Y_2$	$S_1$	$S_2$	
50	Y	1	0	1/2	-1/4	1/4
40	Y <sub>2</sub>	0	1	-1/4	3/8	9/8
Zj		50	40	15	20/8	230/4
Cj - Zj		0	0	-15	-20/8	

- a. Write down the primal of the above
- b. State with reason whether the solution is optimal.
- c. Read the solution to the primal.
- d. State how useful the dual in post optimality analysis.

- 14. Explain the use of network analysis in resource allocation clearly indicating the role of resource levelling and smoothing.
- 15. A departmental store has a single cashier. During rush hours, customers arrive at the rate of 20 per hour. The average number of customers that can be processed by the cashier is 24 per hour. Assume that the conditions for single channel queuing model apply, what is the:
  - a. Probability that the cashier is idle?
  - b. Average number of customers in the system?
  - c. Average time a customer spends in the system?
  - d. Average number of customers in the queue?
- 16. Four salesmen are to be assigned to be assigned to four districts. The estimates of the sales revenue in hundred of rupees are as under.

			Dis	trict	
		A	В	C	D
	I	320	350	400	280
Salesmen	II	400	250	300	220
	III	420	270	340	300
	IV	250	390	410	350

Give the assignment pattern that maximizes sales revenue. Calculate the optimum sales revenue.

- 17. What is a waiting line problem? What are the components in a waiting line system?
- 18. A manager provides you the cost per year of running an item of plant ,whose purchase price was Rs.30000, and resale value as given below:

Year	1	2	3	4	5	6	7	8
Running cost(Rs.)	5000	6000	7000	9000	11500	14000	17000	20000
Resale Price(Rs.)	15000	7500	3750	1850	1000	1000	1000	1000

How often the plant should be replaced?

 $(5\times5=25 \text{ Marks})$ 

#### SECTION - C

## Answer any two of the following questions. Each question carried 15 marks.

- 19. Food A contains 20 units of vitamin X and 40 units of vitamin Y per gram. Food B contains 30 units each of vitamin X and Y. The daily minimum human requirement of vitamin X and Y are 900 and 1200 units respectively. How many grams of each type of food should be consumed so as to minimize the cost if food A costs Rs.60 per gram and food B costs Rs. 80 per gram. **Solve by simplex method.**
- 20. The activities involved in a PERT project are detailed as below

Job	Duration (days)					
i - j	$t_{o}$	$t_{_{\mathrm{m}}}$	$t_{p}$			
1 – 2	3	6	15			
2 - 3	6	12	30			
3 - 5	5	11	17			
7 – 8	4	19	28			
5 – 8	1	4	7			
6 - 7	3	9	27			
4 – 5	3	6	15			
1 - 6	2	5	14			
2 - 4	2	5	8			

- a. Draw a network diagram showing EST and LFT on each node and find the critical path.
- b. What is the probability that the project will be completed before 31 days?
- c. Find the chance that the project duration will be exceeding 40 days?
- d. What will be the effect on the current critical path if the most likely time of activity 3-5 is increased to 14 days instead of the present 11 days?

21. Solve the following transportation problem. At present the company spends Rs.9700 as the total transportation cost. What savings the company can have by adopting the optimum transportation policy.

	P	Q	R	S	Т	Supply
A	5	8	6	6	3	80
В	4	7	7	6	5	50
C	8	4	6	6	4	90
Demand	40	40	50	40	80	

22. What is management science? What are its characteristics? Explain the application of O R in various functional areas of management.

 $(15 \times 2 = 30 \text{ Marks})$