

The Diploma in Investigative & Forensic Accounting (DIFA)

Examination Syllabus (Applicable From January 2014 Exam)

The **Diploma in Investigative & Forensic Accounting (DIFA)** program is designed to provide intermediate or equivalent, with the skills, knowledge, insights and professional characteristics necessary to successfully respond effectively to:-

- (1) the challenges of investigating fraud, other aspects of white-collar crime, and other financial disputes, and (2)
- (2) the provision of reports, advice and evidence to clients, lawyers and courts for the resolution of situations relating to possible or pending civil or criminal legal proceedings.

The demands for and of **Forensic Accountants (FAs)** have been growing as the field expands and as business and related schemes become more complex. To meet the challenges involved, **The Institute of Forensic Accountants of Pakistan (IFAP) DIFA Program**. Consisting of 2 Levels and 10 papers/courses, the Diploma will be delivered over a period of slightly more than one year.

Minimum Admission Requirements

Applicants admitted into **the Diploma in Investigative & Forensic Accounting (DIFA)** Program have must have intermediate or equivalent qualification.

DIFA Level I	
PFA 01	Principles of Financial Accounting
ECA 02	Essentials of Cost Accounting
IFA 03	Introduction to Forensic Accounting
QME 04	Quantitative Methods & Basic Economics
TCL 05	Taxation & Company Laws
DIFA Level II	
IPT 06	Investigation Process & Techniques
CTF 07	Concepts & Techniques of Fraud Examination
BCB 08	Business Communication & Behavioral Studies
FAA 09	Forensic Auditing & Assurance
ITA 10	Information Technology

Detailed Syllabus/Course Outlines:

DIFA Syllabus Level I

Paper 1 Principles of Financial Accounting (Marks: 100)

The objective of this course is to enable candidates to understand fundamentals of accounting theory; apply theory to basic financial accounting and prepare accounting statements of sole proprietorships and partnerships. To develop knowledge and understanding of financial statements and the techniques used to prepare financial statements including necessary underlying records.

1. a) Introduction to business and accounting theory

- i. Definition and scope of business;
- ii. Economic setup of business;
- iii. Organization structures;
 - Sole proprietorship;
 - Partnership (its merits and demerits);
 - Limited Companies (their advantages and disadvantages);
- iv. Types of finances including
 - Long term finance;
 - Short term finance;
- iv. Types of finances including
 - Long term finance;
 - Short term finance;

b) Accounting theory

i. Fundamental accounting concepts including:

- Accrual basis
- Consistency
- True and fair view
- Materiality
- Prudence
- Completeness
- Going Concern
- Substance over form

ii. Financial statements;

- Components
- Responsibility
- Presentation
- Users of financial statements;

iii. Asset valuation alternatives;

- Historical cost;
- Fair value;
- Net realizable value;
- Replacement cost;

DIFA Syllabus

2. Financial accounting practices

a) Accounting Records

- i. Petty cash book and imprest system;
- ii. Cash books (including transactions with banks and their documentation);
- iii. Sales journal and the sales ledger;
- iv. Purchase journal and the purchase ledger;
- v. General journal;
- vi. General ledger
- vii. Computerized Accounting

b) Introduction to Double Entry

- i. Double entry System, Accounting Equation and Rules of Debit & Credit
- ii. Concept of capital and revenue expenditure;
- iii. Concept of liability and income
- iv. Effect of profit or loss on capital;
- v. Balancing of accounts;
- vi. Trial balance;

c) Adjustments before Final Accounts

- i. Methods and recording of depreciation on Fixed Assets;
- ii. Provisions for bad debts/ write off;
- iii. Provisions for discounts on debtors;
- iv. Prepayments and accruals;
- v. Inventory adjustments
- vi. Bank reconciliation and related adjustments;
- vii. Control accounts reconciliation and adjustments
- viii. Errors in trial balance
- ix. Suspense accounts
- x. Other adjustments;

d) The Final Accounts of Sole Traders & Partnership

- i. Statement of financial position
- ii. Statement of comprehensive income
- iii. Cash flows statements

3. Receipt and payment accounts and accounts from incomplete records

- a) Receipt and payment accounts;
- b) Income and expenditure accounts;
- c) Preparation of accounts from incomplete records.

4. Other specialized areas

- a) Accounting for inventories (IAS-2)
- b) i Cost formulas (LIFO/ FIFO/ weighted average cost);
- c) ii Cost of inventories (cost of purchase, cost of conversions, other costs);
- d) iii Measurement of inventories (lower of cost or Net realizable value);
- e) iv Presentation of inventories in financial statements.

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- a) *Accounting for property, plant and equipment (IAS-16)*
- b) *Initial measurement of property, plant & equipment (components of cost, exchange of assets);*
- c) *Subsequent costs;*
- d) *Depreciation ÷ Unit of measure, depreciable amount, depreciation period and depreciation method*
- e) *De-recognition*

- f) *Branch accounts (excluding foreign branches);*

- g) *Treatment of the following in partnership accounts:*

- h) *Admission;*

- i) *Retirement / death of partner (excluding life insurance policies, annuities etc);*

- j) *Goodwill.*

Recommended Books

1. *Accounting The Basis of Business Decisions* by Meigs William Haka Bettner.
2. *Modern Accountancy (Volume 1)* by Mukherjee & Hanif.
3. *Business Accounting* by Frank wood and Alan Sangster.
4. *Gripping IFRS Vol I.*
5. *Framework for the preparation and presentation of financial statements and International Accounting Standards(1, 2 and 16) issued by IASB, IFRS Bound Volume 1.*

DIFA Syllabus Level 1

Paper 2 Essentials of Cost Accounting (Marks: 100)

Objectives

The course is designed to equip candidates with fundamentals of accounting for material, labor and manufacturing expenses; an understanding of the importance of the role of cost accounting in planning and controlling the wide range of organizational and manufacturing cost. The students are expected to acquaint themselves with a comprehensive knowledge of established practices of cost accumulation methods and learn the application of this knowledge to basic planning, control and decision making. The course also covers job order, process costing and standard costing systems.

1. Cost Concepts, Uses and Classification

- a. The nature and scope of Cost Accounting; Sources of Cost data
- b. Definition of and distinction between financial accounting, cost accounting and management accounting
- c. The concept of Cost for different types of entities
- d. Cost classification

2. Elements of Cost Accounting

a. Material

- i. Material purchasing, receiving and issuing procedures and its documentation
- ii. Inventory recording system (Perpetual and Periodic)
- iii. Basis of valuation & Cost formulas
- iv. Stock taking, Reconciliation of Bin Card and Stock Card, and adjustments for inventory differences
- v. Valuation of inventory at lower of Cost and NRV
- vi. Economic Order Quantity and Inventory Levels
- vii. Segregation of material for selective control (ABC Plan)

b. Labor

- i. System and documentation
- ii. Basis for Labor Cost Control
- iii. Labor turnover, Productivity and Efficiency measurement
- iv. Accounting entries for payroll and statutory deductions
- v. Wage incentive plans (piece work plan, bonus and group bonus plans)

c. Overheads

- i. Manufacturing expenses & actual and applied
- ii. Over or under applied overhead
- iii. Concept of production & Service Departments
- iv. Basis of apportionment and allocation of service department overheads to production department

2. Costing Systems

- a. *Fundamentals of Cost Accounting Information System*
- b. *Manufacturing Cost Accounting Cycle*
- c. *Chart of accounts*
- d. *Factory Ledger and accounting entries*
- e. *Reconciliation of Cost and Financial accounts*
- f. *Job order Costing*
- g. *Process costing*
- h. *Treatment of Joint Products and By-Products*

3. Cost Behavior

- a. *Analysis of fixed, variable and semi variable expenses*
- b. *Direct cost and Indirect cost*
- c. *Cost estimation using high-low points method and linear regression analysis*
- d. *Marginal costing and Absorption costing*
- e. *Product cost and Period cost*
- f. *Breakeven analysis and charts*

4. Planning and Control

- a. *Principles of Budgeting*
- b. *Cash Budgets*
- c. *Revenue Budgets*
- d. *Flexible Budgets*
- e. *Projected Income statement and Balance Sheet*
- f. *Standard Costing concepts*

5. Decision Making

- a. *Opportunity Cost*
- b. *Relevant Cost*
- c. *Make or buy decisions*
- d. *Pricing for special orders*
- e. *Further processing decisions*
- f. *Utilization of spare capacity*
- g. *Decision with limiting factors (excluding linear programming)*

Recommended Books

1. *Cost Accounting, Planning and Control* by Matz and Uzry.
2. *Management and Cost Accounting* by Colin Drury.
3. *Cost accounting* by T. Lucey.

DIFA Syllabus Level 1

Paper 3 Introduction to Forensic Accounting (Marks: 100)

COURSE DESCRIPTION

Principles of Forensic Accounting provide a solid foundation for building skills in forensic accounting techniques, including gathering, interpreting, and documenting evidence. In this course we examine the investigative techniques used by accountants to conduct forensic examinations as well as the common schemes and techniques used to commit fraud. The skills acquired will enable you to assist businesses in detecting, investigating, documenting, and preventing fraud. The course also introduces you to the many professional opportunities available to **Forensic Accountants (FAs)**.

Advisory

Students considering enrolling in this graduate course should have a thorough understanding of the business transaction cycle and, at a minimum, a background in both financial accounting and auditing, obtained through either prior coursework or professional experience.

COURSE OBJECTIVES

After successfully completing this course, you should be able to:-

- CO1** Implement the best practices used by **Forensic Accountants (FAs)**, including investigative techniques, standards of proof, and report format used to support their conclusions
- CO2** Describe the types of research and the wide array of investigations that **Forensic Accountants (FAs)** are customarily engaged to conduct
- CO3** Discuss the various roles undertaken by **Forensic Accountants (FAs)**, as well as their requirements and certifications
- CO4** Differentiate roles and responsibilities of the financial statement auditor and the forensic investigator
- CO5** Summarize the "red flags" used by **Forensic Accountants (FAs)** to detect fraud.
- CO6** Assess the objectives of the forensic accountant called in as part of the fraud investigation team
- CO7** Describe and practice "professional skepticism"
- CO8** Evaluate the fraudulent schemes commonly encountered by the **Forensic Accountant (FA)**.
- CO9** Plan a forensic investigation by gathering and documenting evidence, including cases where there is known or suspected fraud.
- CO10** Discuss the professional ethical responsibilities of the Forensic Accountant (FA) and develop appropriate recommendations or strategies for resolving potential ethical dilemmas.
- CO11** Identify internal controls or other methods that can be used to help prevent fraud.

COURSE STRUCTURE/OUTLINES

Principles of Forensic Accounting consist of seven modules. Each module includes an overview, a list of topics, learning objectives, a study assignment, graded assessments (i.e., a combination of one or more discussion forums, review questions, integrative assignments, case assignments, and research assignments), and additional resources to supplement your assigned study materials. The module structure is as follows:-

Module 1—Accounting and Legal Fundamentals for Forensic Accounting

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- Course objectives covered in this module include: CO1, 2, 3, 4, 5, 6, 7, 8, 9, 10
- Topics addressed include: role of the **Forensic Accountant (FA)**; differences between forensic accounting and auditing; legal fundamentals (including financial crimes and criminal and civil processes); transaction cycles and internal controls

Module 2—The Auditing Environment and the Sarbanes-Oxley Act of 2002

- Course objectives covered in this module include: CO1, 2, 3, 4, 5, 7, 9, 10, 11
- Topics addressed include: the audit process (including methods and techniques used and types of audit reports issued); the auditor's responsibility to detect fraud; Sarbanes-Oxley Act (including overall objectives, major provisions, compliance with the act, and evaluation of effectiveness)

Module 3—Forensic Accounting Tools and Techniques

- Course objectives covered in this module include: CO1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11
- Topics addressed include: key concepts of forensic science applicable to accounting; key concepts of information security management systems; the effect of suspected fraud on the audit of financial statements or a forensic investigation; common indicators of fraud; common analytical procedures; sources of forensic evidence; investigative techniques used by forensic accountants; interview and interrogation techniques

Module 4—Financial Statement Fraud

- Course objectives covered in this module include: CO1, 2, 4, 5, 6, 7, 8, 9, 10
- Topics addressed include: financial statement fraud schemes (including improper revenue recognition, overstatement of assets, understatement of expenses and liabilities, misappropriation of assets, inappropriate disclosure, and other miscellaneous techniques); characteristics of financial statement fraud; motives of management to commit financial statement fraud; financial statement fraud, the stock market, and insider trading; prevention of financial statement fraud; red flags of financial statement fraud

Module 5—Employee and Vendor Fraud

- Course objectives covered in this module include: CO1, 2, 5, 6, 7, 8, 9, 11
- Topics addressed include: circumstances that lead to employee fraud, types of employee and vendor fraud (including transaction cycle fraud and electronic information fraud); internal control weakness and fraud

Module 6—Tax, Bankruptcy, and Divorce Fraud; Identity Theft; and Money Laundering

- Course objectives covered in this module include: CO1, 2, 5, 6, 7, 8, 9, 10
- Topics addressed include: overview of tax fraud; the tax practitioner and the IRS; principal tax evasion crimes; civil tax fraud; statute of limitations; methods of proof; tax protesters; bankruptcy fraud; divorce fraud; identity theft; organized crime; terrorism; money laundering

Module 7—Professional Services: Business Valuation, Dispute Resolution, and Litigation

- Course objectives covered in this module include: CO1, 2, 3, 5, 7, 8, 9, 10
- Topics addressed include: overview of business valuation; basic valuation theory; the process of valuing a business; valuation methods; forms of alternative dispute resolution; creating an alternative dispute resolution department; expert consulting and testimony

DIFA Syllabus

Detailed Syllabus/Course outlines

INTRODUCTION TO FORENSIC ACCOUNTING

Definition and Development of Forensic Accounting

- *Defining Forensic Accounting*
- *Historical Roots of Accounting*
- *History of Financial Reports and Legal Challenges*
- *Threads of Forensic Accounting*
- *Accounting Literature Parallels Accounting Practice*
- *The Phrase "Forensic Accounting" Is Born*

Forensic Accounting and Investigative Accounting Come of Age

- *The Forensic Accountant Becomes an Investigator*
- *FBI and Forensics*
- *First Forensic Accounting Books in United States*
- *AICPA Practice Aid*
- *American Management Association Course*
- *The Panel on Audit Effectiveness*
- *AICPA Fraud Task Force Report*
- *Controversy Surrounding the Accountant's Role in Fraud Detection*
- *Conclusion*

FORENSIC ACCOUNTING EDUCATION, INSTITUTIONS, AND SPECIALTIES

Preparing to Become a Forensic Accountant (FA)

- *College and University Programs*
- *Keystones of Forensic Accounting Curricula*
- *KSAs and Education of the Forensic Accountant*

Career Tracks in Forensic Accounting

- *Income Expectations for Forensic Accountants*
- *Specialties within Forensic and Investigative Accounting*

Professional Groups and Credentials

- *The Institute of Forensic Accountants of Pakistan (IFAP)*
- *The Institute of Certified Forensic Accountants (ICFA USA/Canada)*
- *Caribbean Institute of Forensic Accountants (CIFA West Indies)*
- *The Institute of Forensic Accountants (IFA Nigeria)*
- *The Institute of Forensic Accounting and Investigative Audit (IFAIA India)*
- *American College of Forensic Examiners*
- *Association of Certified Fraud Examiners*
- *Association of Certified Fraud Specialists*
- *Forensic Accounting Society of North America*
- *National Association of Certified Valuation Analysts*
- *National Litigation Support Services Association*
- *Network of Independent Forensic Accountants*
- *Institute of Business Appraisers*
- *Other Organizations Serving Forensic Practitioners*
- *Conclusion*

FRAUDULENT FINANCIAL REPORTING

Importance of Transparent Financial Information

- *Statement of Financial Accounting Concepts*

Means and Schemes of Financial Reporting Fraud

- *Three M's of Financial Reporting Fraud*
- *Ten Fraud Schemes Bases on SEC Releases*
- *Shenanigans to Boost Earnings*

Sources of Fraudulent Financial Reporting

- *Internal Versus External Fraud*

Motivation and Contributing Factors

- *Contributing Factor Model*
- *Risk Factor Analysis*
- *Internal Controls*

Incidence of Crime and Characteristics of Perpetrators

- *Studies of the Prevalence of Fraud in Business*
- *Characteristics of the White-Collar Criminal*

Earnings Management and GAAP versus IFRS

- *Flexibility of GAAP and IFRS*
- *Restatements of Earnings*
- *Conclusion*

DETECTING FRAUD IN FINANCIAL REPORTING

Responsibilities and Roles in Financial Reporting

- *Independent Audit Procedures and the Auditor's Role*
- *Internal Auditor's Procedures and Role*
- *Audit Committee's Role*
- *Management Role*
- *Forensic Accountant's Role*

Financial Statement Fraud Categories and Red Flags

- *Overstated Revenues*
- *Management Estimates*
- *Pro Forma Can Mislead*
- *Earnings Problems: Masking Reduced Cash Flow*
- *Earnings before Interest, Taxes, Depreciation, and Amortization (EBITDA)*
- *Excessive Debt*
- *Inventory Problems*
- *Sales and Expenses Problems*
- *Big Bath*
- *Balance Sheet Account Problems*
- *Pension Plan Problems*

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- Reserve Estimates
- Personal Piggy Bank
- Barter Deals

Financial Fraud Detection Tools

- Interviewing the Executives
- Analytics
- Percentage Analysis
- Using Checklists to Help Detect Fraud
- Conclusion

EMPLOYEE FRAUD THE MISAPPROPRIATION OF ASSETS

Fraud Schemes and Their Schemers

- Company Susceptibility to Fraud
- Employee Fraudsters

Types of Misappropriations

- Embezzlement
- Cash and Check Schemes
- Accounts Receivable Fraud
- Inventory Fraud
- Fictitious Disbursements
- Walking the Walk of Fraud Detection Programs

Company Fraud Prevention, Detection, and Mitigation Measures

- Companies on the Front Lines in Preventing Employee Fraud

Non profit Entities as Special Fraud Targets

- Reasons for Fraud in Not-for-Profits
- Prevention Programs for Not-for-Profits
- Fraud in Federal, State, and Local Governments

When It's Time to Call in Professionals

- Forensic Accountant's Techniques
- Conclusion

INDIRECT METHODS OF RECONSTRUCTING INCOME

Forensic Audit Approaches Used by the IRS

- Minimum Income Probes
- Lifestyle Probes
- IRS's Financial Status Audits

Indirect Methods

- Market Segment Specialization Program

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- Cash T
- Source and Application of Funds Method (Expenditure Approach)
- Net Worth Method
- Bank Deposit Method
- Conclusion

MONEY LAUNDERING AND TRANSNATIONAL FINANCIAL FLOWS

Money Laundering: An Introduction

- Legal and Illegal Laundering
- Cyber cash Creates New Laundering Opportunities
- Who Uses Money Laundering Practices?

Financial Institutions' Role in Money Laundering

- Correspondent Banking
- Tools Banks Use to Identify Money Launderers
- Due Diligence Laws for Banks
- Shell Banks

Other Businesses' Role in Money Laundering

- Cash-Oriented Businesses
- Audit Trail for Business Money Laundering Schemes

Finding Money Laundering Schemes

- Likely Sources

Guarding Against Money Laundering

- Individual due Diligence Using Identity Checks
- Company Due Diligence in Verification Procedures
- Trust Due Diligence Using Trust Deeds
- Organization-wide Suspicious Activities
- The Accountant's Role as Gateway Keeper
- New Initiatives: USA Patriot Act of 2001
- Conclusion

LITIGATION SERVICES PROVIDED BY ACCOUNTANTS

Types of Litigation Services Provided by Accountants

- Consultant
- Expert Witness
- Masters and Special Masters

Standards of Conduct for Performing Litigation Services

- Knowledge, Skills, Experience, Training, and Education
- Professional Codes of Conduct
- Conflicts of Interest
- Written Agreement to Perform Litigation Services

Becoming an Expert Witness

- Expert Witnesses Distinguished from Lay Witnesses
- What Lawyers Look for in an Expert Witness
- Qualifying as an Expert Witness
- Court-Appointed Expert Witnesses

Preparing to Testify as an Expert Witness

- Maintaining Independence from the Client
- Evidence upon Which Experts May Rely
- Use of Confidential Client Information
- Expert Reports
- Working Papers
- Evaluation of Other Experts
- Exhibits and Other Demonstrative Evidence

Testifying as an Expert Witness

- Testifying at a Deposition
- Preparing to Testify at Trial
- Testifying at Trial

Liability of Expert Witnesses

- Witness Immunity
- Bases for Liability
- Conclusion

PROPER EVIDENCE MANAGEMENT

Basic Rules of Evidence

- What Are the Rules of Evidence?
- What Is Evidence?
- Process for Determining the Admissibility of Evidence
- Relevance Requirement
- Privileged Communications
- Hearsay Rule
- Authentication Requirement
- Best Evidence Rule
- Demonstrative Evidence
- Special Rules for Criminal Cases
- Special Rules in Administrative Proceedings

Management of Evidence

- *Maximizing Client Confidentiality*
- *Using Technology to Gather Evidence*
- *Computer Evidence*
- *Ensuring the Admissibility of Evidence in Court*
- *Security for Evidence and Working Papers*
- *Evidence Database*
- *Evaluating the Quality and Persuasiveness of Evidence*
- *Record Retention*
- *Conclusion*

COMMERCIAL DAMAGES

The Expert

- *Expert Witnesses' Qualifications*
- *Expert Witnesses' Testimony Requirements*

Basics of Damages Litigation

- *The Legal Framework of Damages*
- *Two Types of Harm: Tort and Breach of Contract*
- *Two Types of Damages: Restitution and Reliance*

Approaches to Loss Estimation

- *Damages Calculation Approaches*
- *The Lost Profits Methods*
- *Study of Losses Process*
- *Economic Framework for the Lost Profits Estimation Process*

Measuring the Loss

- *Length of the Loss Period*
- *Components of Damages*
- *The Defendant's Damages Estimate*
- *The Plaintiff's Damages Estimate*
- *Lost Sales and Profits*
- *Production or Other Cost Increases*
- *Customer Ill Will and Future Lost Profits*
- *Other Adverse Effects*

The Expert's Journey through the Legal System

- *Testimony Early in Case*
- *Defending the Expert Report*

Cost Behavior and Damages Calculations

- *Cost Behavior Defined*
- *Common Types of Cost Behavior*
- *Cost Behavior Assumptions*
- *Damages Period and Discount Rate*
- *Conclusion*

LITIGATION SUPPORT IN SPECIAL SITUATIONS

Antitrust Litigation

- Overview of Antitrust Laws
- Role of Accountants in Antitrust Litigation
- Actions That Constitute Predatory Pricing
- Determining a Company's Average Variable Costs
- Estimating Cost Behavior Patterns
- Case Study: Coho Grocery

Federal False Claims Act Litigation

- Overview of the Federal False Claims Act
- The Accountant's Role in False Claim Act Litigation
- Conclusion

INTERNET FORENSICS ANALYSIS: PROFILING THE CYBERCRIMINAL

Sifting for Clues to Cybercrimes

- Collecting Evidence
- Clues versus Evidence

Technical Searches

- Internet Protocols: Technical Searches Begin Here
- Decoding Packet Information
- Decoding Simple Mail Transfer Protocol (SMTP)
- Decoded IP Addresses: Tracing Tools
- Decoded IP Addresses: Narrowing the Search

Informational Searches

- Internet Databases: Informational Searches Begin Here
- Web Page Searches
- Government Data Searches
- Miscellaneous Searches
- Conclusion

CYBERCRIME MANAGEMENT: LEGAL ISSUES

Cybercrimes: An Introduction

- Net Frauds
- Unauthorized Access to Network Assets
- Types of Unauthorized Access

Criminality of Cybercrimes

- When Is a Cybercrime Really a Cybercrime?
- Legislation as Lagging Technology

Cybercrime Statutes

- International Law
- Federal Legislation
- State Legislation

Guidelines for Cybercrime Management

- KSAs for Fighting Cybercrime
- Filing Reports of Cybercrimes
- Conclusion

CYBERCRIME LOSS VALUATIONS

Attacks on Tangibles and Intangibles

- Extent of the Problem
- Statutory Loss Valuations

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- *High-Tech "Tangible" Losses Attributed to Cyber Attacks*
- *High-Tech Intangible Losses*

Loss Valuations and Insurance Claims

- *Insurers*
- *Costs and Types of Coverage*
- *Qualifying for Coverage*
- *Conclusion*
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BUSINESS VALUATIONS

Fundamentals

- *Valuation and Appraiser Accreditations*
- *Engagement Agreements That Create Successful Client Relationships*
- *Purposes for Obtaining Business Valuations*
- *Standards of Value*
- *Purpose of the Valuation Affects the Valuation Methods Used*

The Three Valuation Approaches

- *Income Approach*
- *Market Approach*
- *Cost Approach*

Gathering Initial Information

- *Initial Information Request*
- *Discerning What Data Is Required*

Financial Analysis

- *How Much History Is Enough?*
- *Spreading Financial Statements*
- *Analyzing Financial Statements for Trends and Risks*
- *Revenues*
- *Gross Profits*
- *Operating Expenses*
- *Operating Profits*
- *Other Income and Expense*
- *Pretax Profitability*

Practical Illustrations

- *Earnings History*
- *Income Statement Methods of Determining a Business Valuation*
- *Cash Flow Methods of Determining the Business Valuation*
- *Rules of Thumb—Valuation on the Cheap*

Business Valuation Standards

- *Uniform Standards of Professional Appraisal Practice (USPAP)*
- *American Institute of Certified Public Accountants (AICPA)*
- *Common Requirements of Business Valuation Standards of Valuation Societies*
- *Features of the Standards*

Business Valuation Reports

- *Organization of the Report*

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- *Attention to Mechanics*
- *Main Sections of the Valuation Report*
- *Conclusion*

Recommended Books

1. Hopwood, W. S., Leiner, J. J., & Young, G. R. (2008). *Forensic accounting*. Boston: McGraw-Hill Irwin. ISBN 978-0-07-352685-0.
2. Knapp, M. C. (2010). *Forensic accounting—ACC 501. Two case studies*. Custom publication. Mason, OH: Cengage Learning. ISBN-10: 1-111-29530-1.
3. *Forensic and Investigative Accounting* by D. Larry Crumbley, Lester E Heitger & G. Stevenson Smith, published by CCH Incorporated WoltersKluwer Company.
4. *Introduction to Forensic Accounting* by Robert K. Minniti, CPA, CFE, Cr.FA, CFF, MBA President, Minniti CPA, LLC
5. *Fraud Auditing and Forensic Accounting* by Tommie W. Singleton
6. *Forensic Accounting in Matrimonial Divorce* by James A. DiGabriele
7. *Forensic Accounting* by John Taylor ISBN10: 0273722964 ISBN13: 9780273722960 Publisher: Pearson Education Limited Financial Times Prentice Hall Publication date: 11 Nov 2010

DIFA Syllabus Level 1

Paper 4 Quantitative Methods & Basic Economics (Marks: 100)

Part 1 Quantitative Methods (Marks: 50)

Objective

The objective of the course is to train the students in the use of Quantitative Techniques in business and finance. The students are required to gain thorough theoretical knowledge of the subject and understanding of the application of such knowledge.

1. Basic Mathematics

Rates, ratios, percentages; discounts, markup, markdown; indices, exponential and logarithmic functions. Use of brackets, simplification rules, co-ordinate system, concept of equation, gradient, equation of straight line, application of straight line in business and economics; simultaneous equations; quadratic equations; factorization of equations including factorization by completion of squares, arithmetic progression and geometric progression.

2. Financial Mathematics

Simple interest, present and future values; discounting notes; bank discount; compound interest and annuities; sinking funds, present value; perpetuities; effective rate of interest.

3. Calculus

Techniques of differentiation; sum, difference, product and quotient rules of differentiation. Marginal function, calculation of revenue, cost & profit of marginal unit. Use of second order derivatives; maxima, minima and point of inflexion.

4. Matrix and Determinants

Addition, subtraction, multiplication, inverse of matrices. Solution of equations using matrix; inequalities, graphical presentation of inequalities; graphical method for linear programming; problems in graphical solutions such as no feasible solution, alternative optimum solution, unbounded solutions and redundant constraints.

5. Statistical Methods

Collection, presentation, tabulation, graphical presentation through graphs, charts and diagrams, stem and leaf display, box and whisker plot. Measures of central tendencies. Measures of dispersions. Index numbers, weighted index numbers, concept of purchasing power and deflation of income.

6. Methods of Least Square and Regression

Scatter diagram, linear relationship, simple linear regression lines by method of least square. Simple linear correlation, Coefficient of correlation, determination and interpretation. Rank correlation.

7. Probability and Probability Distribution

Counting techniques, probability, addition law for mutually exclusive and not mutually exclusive events. Multiplicative laws for dependent and independent events. Binomial, Poisson, hypergeometric and normal distribution.

8. Sampling and Decision Making

Simple random sampling, sampling distribution of mean, standard error of mean. Sampling with and without replacement. Testing of hypothesis for population mean, difference between population means, population proportion, difference between two population proportions, single population variance and test of association through z, t and Chi-square. Confidence interval for estimating population mean. Population and variance. Difference between means, proportion and difference between proportion and population variance. Problems of determination of sample size for the study of population mean and proportion.

Recommended Books

1. *Mathematics for Business and Finance* by Hamid A Hakeem
2. *Business Mathematics* by M. M. Hasan and M. A. Mirza
3. *Mathematics for Business and Economics* by Robert H. Nicholson.

Part 2 Basic Economics (Marks: 50)

The object of the course is to enable candidates to equip themselves with the main economic concepts and their use, relevance in economic analysis and as an introduction to the economic environment of trade, industry and banking as well as to methods of analysis relevant to the study of financial decisions.

1. Economic Concepts

- a. Basic concepts;
- b. Natural resources, labor, capital and enterprise;
- c. Allocation of scarce resources to production, distribution and consumption;
- d. Production possibility frontier and the opportunity cost;
- e. Key characteristics of market economy, planned economy and mix economy;
- f. Microeconomics and Macroeconomics.

2. Microeconomics

a. Concept of Market

- i. Market forces of demand and supply;
- ii. Demand and supply;
- iii. Equilibrium of demand and supply;
- iv. Elasticity of demand and supply;
- v. Utility analysis and indifference curve;
- vi. Consumer, producers and efficiency of market.

b. Theory of the Firm

- i. Production function and isoquants;

- ii. Cost, revenue and profits;
- iii. Maximization of profits;
- iv. Cost and revenue curves;
- v. Distinction between long run and short run assumptions;
- vi. Equilibrium of firm under perfect competition, monopoly, oligopoly and monopolistic conditions.

c. Factors of Production

- i. Laws of returns;
- ii. Pricing of factors of production
- iii. Marginal productivity theory.

3. Macroeconomics

a. National Income

- i. Circular flow of income;
- ii. Measurement of national income including knowledge of basic concepts like GDP, GNP, NNP;
- iii. Marginal propensity to consume and save;
- iv. Consumption, saving and investment functions;
- v. Multiplier and accelerator;
- vi. Equilibrium of national income;

b. Government and the Economy

- i. Fiscal Budget
- ii. Unemployment;
- iii. Inflation;
- iv. Growth, price stability and employment;
- v. Recession

c. Fiscal Policy

- i. Direct and indirect taxation;
- ii. Principles, methods and forms of taxation.

d. Money & Monetary Policy

- i. Types of money;
- ii. Value of money;
- iii. Nature and functions of money;
- iv. Definitions of banking, banking system and its institutions;
- v. Financial intermediaries;
- vi. Role of State Bank;
- vii. The supply of money and interest rate policy.

e. Capital

- i. Role of the money and capital markets.

f. International Trade

- i. Trade and balance of payments;
- ii. Foreign exchange rates (floating and fixed exchange rates) their nature, function and determination;
- iii. Trade and its determinants;

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- iv. *Markets and demand for imports and exports;*
- v. *Open Economy (Basic concept)*
- vi. *Introduction to World Trade Organization*

Recommended books

1. *Modern Economic Theory* by K. K. Dewett.
2. *Introduction to economics and finance* by Abdul Haleem Khawaja
3. *Economics* by samuelson and nordhaus
4. *Macro Economics* by Paul Crompton, Michael Swann, Sandra Hopkins, William A. McEachen.
5. *The Monetary and Financial System* by David Goacher.

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DIFA Syllabus Level 1

Paper 5 Taxation & Company Laws (Marks: 100)

Part 1 Taxation Laws (Marks: 50)

Objective

The aim of this paper is to develop basic knowledge and understanding in the core areas of Income Tax and its chargeability as envisaged in the Income Tax Ordinance 2001 and the Income Tax Rules 2002/2008 (relevant to the syllabus), Sales Tax Act 1990 and the Sales Tax Rules (relevant to the syllabus)

Indicative Grid

Syllabus Content Area	Weight-age
Income Tax	
Basic concepts of taxation	15
Heads of Income, Computation of Income, Determination of tax liability	40
Types of persons and their taxation	10
Procedures and Administration	
Income Tax Rules 2002	10
Sales Tax	
Prescribed chapters of Sales Tax Act and Rules	25
Total	100

The weight-ages given above are for guidance purposes only and some of deviations in setting of papers could be expected.

Note

Finance Act/Ordinance, Notifications and circulars issued within a period of less than 4 months from the date of examination shall not be tested. Chapters, Parts and Divisions not mentioned here specifically are excluded from the syllabus. However, it is clarified to eliminate any ambiguity that if only a chapter is mentioned it includes all parts and if only a part is mentioned it includes all divisions. The weight-age given above are for guidance purposes only and some deviations in setting of papers could be expected. Students are not expected to remember the tax rates. Some if applicable shall be given in the question paper.

Syllabus Contents

Income Tax Ordinance, 2001

Basic concepts of taxation

Chapter I	Preliminary (concepts of terms defined)
Chapter II	Charges of tax (excluding section 7)
Chapter IV	Common rules (Part I & II)

Heads of income, Computation of income, Determination of tax liability

Chapter III	Tax on taxable income (excluding Section 29A, 30 & 31)
Chapter IX	Minimum Tax
Chapter X Part V	Advance tax and deduction of tax at source

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Chapter XII Transitional Advance Tax Provisions

Types of persons and their taxation

Chapter V Part Central concepts
Chapter V Part II – Division I Individuals
Chapter V Part III Association of persons
Chapter VII Part II Taxation of foreign – source of residents

Procedures and Administration

Chapter X Part I Returns
Chapter X Part II Assessments
Chapter X Part III Appeals including Alternative Dispute Resolution
Chapter X Part IV Collection and recovery of tax ((Sections 137 to 140)
Chapter X Part VIII Audit (Section 177)
Chapter XI Part I Administration – General (excluding section 224 to 227)

Income Tax Rules 2002/2008

The rules related to the above chapters of the Income Tax Ordinance, 2001 shall also be examined.

Sales Tax Act 1990

Chapter I Preliminary (concepts of terms defined)
Chapter II Scope and payment of tax
Chapter III Registration
Chapter IV Book keeping and invoicing requirements
Chapter V Returns

The following rules (excluding annexure and forms) of the Sales Tax Rules – 2006 related to the relevant chapters of the Sales Tax Act may be examined. Rules other than the following shall not be examined at this stage:-

Chapter I Registration, Voluntary registration and De – Registration
Chapter II Filing of returns
Chapter III Credit and Debit Note and Destruction of Goods
Chapter IV Apportionment of Input Tax

Recommended Reading

1. Complete Income Tax Law by S A Salam
2. Law & Practice of Income Tax by Dr. Ikram-ul-Haq
3. Bare Act, Rules, Notifications; Circulars etc. on syllabus topics are included in these books with brief explanations
4. Sales Tax Ready Reference by S A Salam
5. Bare Act, Rules, Notifications; Circulars etc. on syllabus topics are included in these books with brief explanations.
6. Synopsis of taxation by Mirza Munawar Hussain
7. Pakistan Income Tax Law Principles and Practice by Mian Safiullah and Kashif Aziz Jahangir
8. Khalid Petiwala's Notes on Income Tax and Sales Tax

DIFA Syllabus

Part 2 Company Laws (Marks: 50)

This course aims to provide candidates with knowledge of the Companies Ordinance, 1984 and to develop amongst them an understanding of their application to corporate and other business environment, excluding advanced topics as provisions relating to arbitration, arrangements and reconstruction, prevention of oppression and mismanagement, winding up etc. that are covered at the Final Examination Stage.

Indicative Grid

Syllabus Content Area	Weight-age
The Companies Ordinance, 1984 – Sections 1 to 51	20
The Securities and Exchange Commission of Pakistan Act, 1997	
The Companies Ordinance, 1984 – Sections 52 to 136	25
The Companies Ordinance, 1984 – Sections 142 to 262	55
Total	100

Note: The weight-ages given above are for guidance purposes only and some deviations in setting of papers could be expected.

Syllabus Contents

The companies Ordinance, 1984- section 1 to 51

Part I	Preliminary (concepts of terms defined)
Part II	Jurisdiction of courts
Part III	Section 12 and Section 13
Part IV	Incorporation of companies and matters incidental thereto
Part V	First schedule to the Companies Ordinance, 1984

The Securities and Exchange Commission of Pakistan Act, 1997

The Companies Ordinance, 1984-Sections 52 to136

Part V	Prospectus, allotment, issue and transfer of shares and debentures, deposits, etc.
Part VI	Share capital and debentures.
Part VII	Registration of mortgages, charges etc.

The Companies Ordinance, 1984-Sections 142-262

Part VIII	Management and Administration (excluding investigation & related matters)
	Third Schedule to the Companies Ordinance, 1984

Recommended Books

1. Complete Company Law by S A Salam (Relevant topics)
2. Bare law and brief explanation thereon are included in the book
3. Practical Approach to the Companies Ordinance, 1984 by Nazir Ahmed Shaheen (Relevant topics). This book is useful for understanding practical application of law.

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Paper 6 Investigation Process & Techniques (Marks: 100)

This subject adopts an interdisciplinary approach to introduce the investigative processes used by **Forensic Accountants (FAs)** to identify, examine and prevent fraudulent financial activity. Students are provided with the opportunity to learn the specific elements involved in a financial investigation from the moment of predication through to case profiling and the investigation processes, including the process of setting, testing, adjusting and eliminating the case hypothesis. The subject focuses on both qualitative and quantitative investigative procedures including investigative interviewing and data mining techniques. In addition, students are exposed to Forensic Accounting issues beyond financial statement and employee fraud, to also understand and appreciate the roles and responsibilities of a **Forensic Accountant (FA)** when investigating a case and working alongside members of various regulatory bodies, including the legal ability and limitations faced by a **Forensic Accountant (FA)**.

This subject also explores complex qualitative investigation techniques utilized by a **Forensic Accountant (FA)** to further gather evidence in order to adequately and appropriately detect and investigate the existence of financial crime. Students will learn how to apply sophisticated investigation techniques to complex investigations of both domestic and offshore financial crimes. Advanced study of investigative interviewing and human behavior analysis is undertaken to correctly detect deception and understand a subject motives and rationalization for committing financial crime utilizing this knowledge in the overall financial investigation. In consideration of evidence gathering and custodial issues students will be taught how to undertake the use of electronic discovery, a crucial component to any forensic accounting investigation complimented by the **Forensic Accountant's(FA)** responsibility throughout the investigation to issues of privacy and confidentiality.

Syllabus Contents

Part I

Introduction

- Chapter 1 Investigating Forensic Accounting
- Chapter 2 Why the World Needs Forensic Accountants

Part 2

- Chapter 3 Meeting Your Methods of Investigation
- Chapter 4 Walking through the Investigation Process
- Chapter 5 Tracing the Flow of Money
- Chapter 6 Going to the Source: Obtaining Records
- Chapter 7 Tapping into Electronic Evidence
- Chapter 8 Who Wants to Know? Reporting on Your Findings
- Chapter 9 Preparing for Trial: Business Litigation

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Chapter 10 Organizing Evidence and Serving as an Expert Witness.

Chapter 11 Peeking Inside Federal Government Fraud Cases

Part 3

Chapter 12 Preventing Occupational Fraud

Chapter 13 Helping Small Businesses Prevent Fraud

Chapter 14 Assisting Larger Businesses with Fraud Prevention

Chapter 15 Keeping Employees Honest (and Happy)

Chapter 16 Applying Technology to Fraud Prevention

Chapter 17 A Historical Account of the Auditor's Role

Chapter 18 The Roles of the Auditor and the Forensic Accounting Investigator

Chapter 19 Auditor Responsibilities and the Law

Chapter 20 Today's Auditors Are Not Forensic Accounting Investigators

Recommended Reading

1. A Guide to Forensic Accounting Investigation, Thomas W. Golden, Steven L. Skalak, Mona M. Clayton ISBN 9780470599075 Published by John Wiley and Sons Ltd Edition 2nd Revised edition
2. Anatomy of a Fraud Investigation, Stephen Pedneault ISBN10: 0470560479 ISBN13: 9780470560471 Published by John Wiley and Sons Ltd John Wiley & Sons Ltd Publication date: 19 Feb 2010
3. Forensic Accounting, How to Investigate Financial Fraud by William Thornhill ISBN 9781556237331
4. Expert Fraud Investigation by Tracy L Coenen ISBN10 0470387963 ISBN13 9780470387962 published by John Wiley and Sons Ltd John Wiley & Sons Ltd Publication date: 10 Mar 2009

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Paper 7 Concepts & Techniques of Fraud Examination (Marks: 100)

Course Description

Fraud examination will cover the principles and methodology of fraud detection and deterrence. The course includes such topics as skimming, cash larceny, check tampering, cash register disbursement schemes, billing schemes, payroll and expense reimbursement schemes, non-cash misappropriations, corruption, accounting principles and fraud, fraudulent financial statement, and interviewing witnesses.

Course Objective

- To develop an understanding of how and why occupational fraud is committed;
- To recognize how fraudulent conduct may be deterred; and
- To determine how allegations of fraud should be investigated and resolved.

Course Requirements

Class sessions will consist of lectures, case studies, video presentations, and discussions. The sessions will be interactive, with students working through the cases, developing investigative strategies, and seeking to prove how the fraud was committed.

Course Overview

Chapter 1	Introduction
Chapter 2	Skimming
Chapter 3	Cash Larceny
Chapter 4	Billing schemes
Chapter 5	Check Tampering
Chapter 6	Payroll Schemes
Chapter 7	Expense Reimbursement Schemes
Chapter 8	Cash Register Disbursement Schemes
Chapter 9	Non-Cash Assets
Chapter 10	Corruption
Chapter 11	Accounting Principles & Fraud
Chapter 12	Fraudulent Financial Statement Schemes
Chapter 13	Interviewing Witnesses
Chapter 14	Conducting Investigations and Writing Reports
Chapter 15	Occupational Frauds and Abuse: The Big Picture

Course Outlines

Introduction

- Fraud Examination methodology
- predication
- Fraud Theory Approach
- Tools used in Fraud Examinations
- Defining Occupational Fraud and Abuse
- Defining Fraud
- Defining Abuse
- Research in Occupational Fraud and Abuse.

Skimming

DIFA Syllabus

- *Skimming Schemes*
- *Sales Skimming*
- *Receivables Skimming*
- *Proactive Computer Audit Tests Detecting Skimming*
- *Case Studies.*

Cash Larceny

- *Cash Larceny Schemes*
- *Larceny at the Point of Sale*
- *Larceny of Receivables*
- *Cash Larceny from the Deposit*
- *Proactive Computer Audit Tests for Detecting Cash Larceny,*
- *Case Studies.*

Billing Schemes

- *Billing Schemes*
- *Shell Company Schemes*
- *Billing Schemes Involving Non – Accomplice Vendors*
- *Pay – and – Return Schemes*
- *Overbilling with a Non – Accomplice Vendor's Invoices*
- *Personal Purchases with Company Funds*
- *Personal Purchases through False Invoicing*
- *Personal Purchases on Credit Cards or Other Company Accounts*
- *Proactive Computer Audit Tests for Detecting Billing Schemes*
- *Case Studies.*

Check Tampering

- *Check Tempering Schemes*
- *Forged Maker Schemes*
- *Forged Endorsement Schemes*
- *Altered Payee Schemes*
- *Concealed Checks Schemes*
- *Authorized Maker Schemes*
- *Concealing Check Tempering*
- *The Fraudster Reconciling the Bank Statement*
- *Re – Altering Checks*
- *Falsifying the Disbursements Journal*
- *Reissuing Intercepted Checks, Bogus Supporting Documents*
- *Proactive Computer Audit Tests for Detecting Check Tempering Schemes*
- *Case Studies.*

Payroll Schemes

- *Payroll Schemes*
- *Ghost Employees*
- *Falsified Hours and Salary*
- *Commission Schemes*
- *Proactive Computer Audit Tests for Detecting Payroll Frauds/ Schemes*
- *Case Studies.*

Expense Reimbursement Schemes

- *Expense Reimbursement Schemes*
- *Mischaracterized Expense Reimbursements*
- *Overstated Expense Reimbursements*

DIFA Syllabus

- *Fictitious Expense Reimbursement Schemes*
- *Multiple Reimbursement Schemes*
- *Proactive Computer Audit Tests for Detecting Expense Reimbursement Schemes*
- *Case Studies.*

Cash Register Disbursement Schemes

- *Register Disbursement Schemes*
- *False Refunds*
- *False Voids*
- *Concealing Register Disbursements*
- *Small Disbursements*
- *Destroying Records*
- *Preventing and Detecting Register Disbursement Schemes*
- *Proactive Computer Audit Tests for Detecting Register Disbursement Schemes*
- *Case Studies*

Non-Cash Assets

- *Non Cash Misappropriation Schemes*
- *Misuse of Non Cash Assets*
- *Unconcealed Larceny Schemes*
- *Asset Requisitions and Transfers*
- *Purchasing and Receiving Schemes*
- *False Shipments of Inventory and Other Assets*
- *Other Schemes*
- *Concealing Inventory Shrinkage*
- *Altered Inventory Records*
- *Fictitious Sales and Accounts Receivable*
- *Write Off Inventory and Other Assets*
- *Physical Padding*
- *Preventing and Detecting Noncash Thefts That are Concealed by Fraudulent Support*
- *Proactive Computer Audit Tests for Detecting Noncash Misappropriations*
- *Case Studies*

Corruption

- *Corruption Schemes*
- *Bribery*
- *Kickback Schemes*
- *Bid – Rigging Schemes*
- *Something of Value*
- *Illegal Gratuities*
- *Economic Extortion*
- *Conflicts of Interest*
- *Purchasing Schemes*
- *Sales Schemes*
- *Other Conflict of Interest Schemes*
- *Preventing and Detecting Conflicts of Interest*
- *Proactive Computer Audit Tests for Detecting Corruption*
- *Case Studies*

Accounting Principles & Fraud

- *Fraud in Financial Statements*

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- *Who Commits Financial Statement Fraud?*
- *Why Do People Commit Financial Statement Fraud?*
- *How Do People Commit Financial Statement Fraud?*
- *Conceptual Framework for Financial Reporting*
- *Economic Activity*
- *Going Concern*
- *Monetary Unit*
- *Periodicity*
- *Historical Cost*
- *Revenue Recognition*
- *Matching*
- *Full Disclosure*
- *Cost – Benefit*
- *Materiality*
- *Industry Practice*
- *Conservatism*
- *Relevance and Reliability*
- *Comparability and Consistency*
- *Responsibility for Financial Statements*
- *Users of Financial Statements*
- *Types of Financial Statements*
- *The Sarbanes – Oxley Act of 2002*
- *Public Company Accounting Oversight Board (PCAOB)*
- *Certification Obligations for CEOs and CFOs*
- *New Standards for Audit Committee Independence*
- *New Standards for Auditor Independence*
- *Enhanced Financial Disclosure Requirements*
- *Protection for Corporate Whistleblowers under Sarbanes Oxley Act 2002*
- *Enhanced Penalties for White – Collar Crime*
- *Frequency and Cost*
- *Types of Fraudulent Financial Statement Schemes*
- *Case studies*

Fraudulent Financial Statement Schemes

- *Defining Financial Statement Fraud*
- *Costs of Financial Statement Fraud*
- *Fictitious Revenues*
- *Sales with Conditions*
- *Pressures to Boost Revenues*
- *Red Flags Associated with Fictitious Revenues*
- *Timing Differences*
- *Matching Revenues with Expenses*
- *Premature Revenue Recognition*
- *Long Term Contracts*
- *Channel Stuffing*
- *Recording Expenses in the Wrong Period*
- *Red Flags Associated with Timing Differences*
- *Concealed Liabilities and Expenses*
- *Liability/Expense Omissions*
- *Capitalized Expenses*
- *Expensing Capital Expenditures*

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- *Returns and Allowances and Warranties*
- *Red Flags Associated with Concealed Liabilities and Expenses*
- *Improper Disclosures*
- *Liability Omissions*
- *Subsequent Events*
- *Management Fraud*
- *Related – Party Transactions*
- *Accounting Changes*
- *Red Flags Associated with Improper Disclosures*
- *Improper Asset Valuation*
- *Inventory Valuation*
- *Accounts Receivable*
- *Business Combinations*
- *Fixed Assets*
- *Red Flags Associated with Improper Asset Valuation*
- *Detection of Fraudulent Financial Statement Schemes*
- *SAS No.99 – Consideration of Fraud in a Financial Statement Audit*
- *Financial Statement Analysis*
- *Deterrence of Financial Statement Fraud*
- *Reduce Pressures to Commit Financial Statement Fraud*
- *Reduce the Opportunity to Commit Financial Statement Fraud*
- *Reduce Rationalization of Financial Statement Fraud*
- *Case Studies*

Interviewing Witnesses

- *Introductory Questions*
- *Informational Questions*
- *Closing Questions*
- *Assessment questions*
- *Admission – Seeking Questions*
- *Review Questions*
- *Discussion Issues*
- *Case Studies*

Conducting Investigations and Writing Reports

- *When Is an Investigation Necessary?*
- *Planning the Investigation*
- *Selecting the Investigation Team*
- *Developing Evidence*
- *Covert Operations*
- *Surveillance*
- *Using Informants*
- *“Dumpster Diving”*
- *Subpoenas*
- *Search Warrants*
- *Voluntary Consent*
- *Preserving Documentary Evidence*
- *Chronologies*
- *To – Do Lists*

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- *Using Computer Software to Organize Documents and other Data*
- *Sources of Information*
- *In – House Sources*
- *Public Information*
- *Report Writing*
- *Purpose of the Report*
- *Know the Reader*
- *Format*
- *Opinions or Conclusions in Report*
- *Case Studies*

Occupational Frauds and Abuse: The Big Picture

- *Defining Abusive Conduct*
- *Measuring the Level of Occupational Fraud and Abuse*
- *The Human Factor*
- *Understanding Fraud Deterrence*
- *The Impact of Controls*
- *The Perception of Detection*
- *The Corporate Sentencing Guidelines*
- *Definition of Corporate Sentencing*
- *Vicarious or Imputed Liability*
- *Requirements*
- *The Ethical Connection*
- *Concluding Thoughts*
- *Case Studies*

Recommended Reading Material

1. *Fraud Examination (with ACL CD + ROM) by W Steve Albrecht, Conan C. Albrecht, Chad O. Albrecht and Mark Zimbelman (3rd Edition) Published by South Western Cengage Learning.*
2. *Essentials of Corporate Frauds by Tracy L Coenen, published by John Wiley & Sons Inc.*
3. *Corporate Fraud Handbook: Prevention and Detection by Joseph T. Wells*
4. *Fraud & Forgery Laws (Latest Edition) by Emmanuel Zafar, published by Nadeem Law Book House, Lahore*

DIFA Syllabus Level II

Paper 8 Business Communication & Behavioral Studies (Marks: 100)

Objective

The course aims to introduce students to the key concepts of business communication and their application. The course also intends to incorporate an understanding of the concepts of organizational behavior to develop problem solving skills, negotiation skills and leadership qualities in the students.

Indicative Grid

Syllabus Content Area

Weight-age

Principles of Effective Business Communication	25
Communication Methods and Skills	40
Organizational Behavior	30
Total	100

Note: The weight-ages given above are for guidance purposes only and some deviations in setting of paper could be expected.

Syllabus Contents

Principles of Effective Business Communication

Introduction

- Concepts and benefits of effective communication
- Components of communication including effective listening
- Problems of communication

Basic principles of Business Communication

- Seven C's of effective communication

Interpersonal Communication (IPC)

- Universal of IPC
- Axioms of IPC
- Types of IPC

Communication Methods and Skills

Business Messages

- Planning before communication
- Basic organizational plans
- Appearance and design
- Letters to customers
- Circular letters
- Job application and Curricular Via tea (Resume)
- Good news messages & bad news messages
- Persuasive messages
- Business letters, memos, faxes and e-mail

Meetings

- Preparation of Agenda, Notice and Minutes of Meetings

Report and proposal writing

- Short report
- Long report
- Proposals

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Organizational Behavior (OB)

Introduction

- Approaches to Organizational Behavior (OB)
- Definitions and characteristics of Organizational Behavior (OB)
- Challenges faced by the management – Globalization, Information Technology, Diversity and Ethics

Organizational processes

- Organizational structure & design (principles of organization, different ways of structuring organization)
- Organizational Change (nature of change process, resistance of change)
- Organizational culture (concept, dysfunctional aspect of culture)

Individual Behavior

- Perception
- Attitude
- Job satisfaction
- Job stress

Motivation

- Types of Motivation
- Theories of Motivation
- Applications – Job Design
- Goal setting and Management by Objectives (MBO)
- Management by Exception (MBE)

Leadership

- Types of Leadership
- Theories of Leadership
- Applications – Roles, Activities, Skills of Leaders
- Group dynamics and team work (types of groups, group formation, group structure, individual in groups, team work)

Conflict and Negotiation

- Levels of Conflict
- Conflict Resolution
- Negotiation & Stages of negotiation
- Peculiar Negotiation Situation

Recommended Books

1. *The Effective Business Communication* by Herta a Murphy, Herbert Hildebrandt, Jane P. Thomas. The book covers substantial part of the syllabus area of business communication.
2. *Organizational Behavior* by Stephen P. Robbins.
3. *Organizational Behavior* by Fred Luthans. These are very useful books for understanding the theoretical and practical aspects of organizational behavior.

DIFA Syllabus Level II

Paper 9 Forensic Auditing & Assurance (Marks: 100)

Objective

To develop knowledge and understanding of the process of carrying out the assurance engagement and its application in the context of the professional regulatory framework.

MAIN CAPABILITIES

On successful completion of this paper, candidates should be able to:-

- Explain the nature, purpose and scope of assurance engagements including the role of the external audit and its regulatory and ethical framework
- Explain the nature of internal audit and describe its role as part of overall performance management and its relationship with the external audit
- Demonstrate how the auditor obtains an understanding of the entity and its environment, assesses the risk of material misstatement (whether arising from fraud or other irregularities) and plans an audit of financial statements
- Describe and evaluate information systems and internal controls to identify and communicate control risks and their potential consequences, making appropriate recommendations
- Identify and describe the work and evidence required to meet the objectives of audit engagements and the application of the International Standards on Auditing
- Evaluate findings and modify the audit plan as necessary
- Explain how the conclusions from audit work are reflected in different types of audit report explain the elements of each type of report.

RATIONALE

The Forensic Audit and Assurance syllabus is essentially divided into seven areas. The syllabus starts with the nature, purpose and scope of assurance engagements, including the statutory audit, its regulatory environment, and introduces professional ethics relating to audit and assurance. It then leads into internal audit, including the scope of internal audit as well as the differences between internal audit and external audit. The syllabus then covers a range of areas relating to an audit of financial statements. These include planning and risk assessment, evaluating internal controls, audit evidence, and a review of the financial statements. The final section then deals with reporting, including statutory audit reports, management reports, and internal audit reports.

DETAILED SYLLABUS

A. Audit Framework and Regulation

1. The concept of audit and other assurance engagements
2. Statutory audits
3. The regulatory environment and corporate governance
4. Professional ethics and IFAP's Code of Ethics and Conduct

B. Internal audit

1. Internal audit and corporate governance
2. Differences between the external auditor and the internal audit function
3. The scope of the internal audit function

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4. Outsourcing the internal audit function
5. Internal audit assignments

C. Planning and risk assessment

1. Objective and general principles
2. Understanding the entity and its environment
3. Assessing the risks of material misstatement and fraud
4. Analytical procedures
5. Planning an audit
6. Audit documentation
7. The work of others

D. Internal control

1. Internal control systems
2. The use of internal control systems by auditors
3. Transaction cycles
4. Tests of control
5. The evaluation of internal control components
6. Communication on internal control

E. Audit evidence

1. The use of assertions by auditors
2. Audit procedures
3. The audit of specific items
4. Audit sampling and other means of testing
5. Computer-assisted audit techniques
6. Not-for-profit organizations

F. Review

1. Subsequent events
2. Going concern
3. Written representations
4. Audit finalization and the final review

G. Reporting

1. Audit reports
2. Reports to management
3. Internal audit reports

APPROACH TO EXAMINING THE SYLLABUS

The syllabus is assessed by a three-hour paper based examination, consisting of five compulsory questions. The bulk of the questions will be discursive but some questions involving computational elements will be set from time to time. The questions will cover all areas of the syllabus. Question 1 will be a scenario-based question worth 30 marks. Question 2 will be a knowledge-based question worth 10 marks. Questions 3, 4 and 5 will be worth 20 marks each.

Study Guide

A AUDIT FRAMEWORK AND REGULATION

1. The concept of audit and other assurance engagements

- a) Identify and describe the objective and general principles of external audit engagements.
- b) Explain the nature and development of audit and other assurance engagements.

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- c) *Discuss the concepts of accountability, stewardship and agency.*
- d) *Discuss the concepts of materiality, true and fair presentation and reasonable assurance.*
- e) *Explain reporting as a means of communication to different stakeholders.*
- f) *Explain the level of assurance provided by audit and other review assignments.*

2. Statutory audits

- a) *Describe the regulatory environment within which statutory audits take place.*
- b) *Discuss the reasons and mechanisms for the regulation of auditors.*
- c) *Explain the statutory regulations governing the appointment, rights, removal and resignation of auditors.*
- d) *Discuss the types of opinion provided in statutory audits.*
- e) *State the objectives and principle activities of statutory audit and assess its value (e.g. in assisting management to reduce risk and improve performance).*
- f) *Describe the limitations of statutory audits*

3. The regulatory environment and corporate governance

- a) *Explain the development and status of International Standards on Auditing.*
- b) *Explain the relationship between International Standards on Auditing and national standards.*
- c) *Discuss the objective, relevance and importance of corporate governance.*
- d) *Discuss the need for auditors to communicate with those charged with governance.*
- e) *Discuss the provisions of international codes of corporate governance (such as OECD) that are most relevant to auditors.*
- f) *Describe good corporate governance requirements relating to directors' responsibilities (e.g. for risk management and internal control) and the reporting responsibilities of auditors.*
- g) *Analyze the structure and roles of audit committees and discuss their benefits and limitations.*
- h) *Explain the importance of internal control and risk management.*
- i) *Compare the responsibilities of management and auditors for the design and operation of systems and controls.*

4. Professional ethics and IFAP's Code of Ethics and Conduct

- a) *Define and apply the fundamental principles of professional ethics of integrity, objectivity, professional competence and due care, confidentiality and professional behavior.*
- b) *Define and apply the conceptual framework.*
- c) *Discuss the sources of, and enforcement mechanisms associated with, IFAP's Code of Ethics and Conduct.*
- d) *Discuss the preconditions, requirements of professional ethics and other requirements in relation to the acceptance of new audit engagements.*
- e) *Discuss the process by which an auditor obtains an audit engagement.*
- f) *Explain the importance of engagement letters and state their contents.*

B INTERNAL AUDIT

1. Internal audit and corporate governance

- g) *Discuss the factors to be taken into account when assessing the need for internal audit.*

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- h) *Discuss the elements of best practice in the structure and operations of internal audit with reference to appropriate international codes of corporate governance.*

2. Differences between the external auditor and the internal audit function

- a) *Compare and contrast the role of external and internal audit regarding audit planning and the collection of audit evidence.*
- b) *Compare and contrast the types of report provided by internal and external audit.*

3. The scope of the internal audit function

- a) *Discuss the scope of internal audit and the limitations of the internal audit function.*
- b) *Explain the types of audit report provided in internal audit assignments.*
- c) *Discuss the responsibilities of internal and external auditors for the prevention and detection of fraud and error.*

4. Outsourcing the internal audit function

- a) *Explain the advantages and disadvantages of outsourcing internal audit.*

5. Internal audit assignments

- a) *Discuss the nature and purpose of internal audit assignments including value for money, IT, best value and financial.*
- b) *Discuss the nature and purpose of operational internal audit assignments including procurement, marketing, treasury and human resources management.*

C PLANNING AND RISK ASSESSMENT

1. Objective and general principles

- a) *Identify and describe the need to plan and perform audits with an attitude of professional skepticism.*
- b) *Identify and describe engagement risks affecting the audit of an entity.*
- c) *Explain the components of audit risk.*
- d) *Compare and contrast risk based, procedural and other approaches to audit work.*
- e) *Discuss the importance of risk analysis.*
- f) *Describe the use of information technology in risk analysis.*

2. Understanding the entity and its environment

- a) *Explain how auditors obtain an initial understanding of the entity and its environment.*

3. Assessing the risks of material misstatement and fraud

- a) *Define and explain the concepts of materiality and performance materiality.*
- b) *Compute indicative materiality levels from financial information.*
- c) *Discuss the effect of fraud and misstatements on the audit strategy and extent of audit work.*

4. Analytical procedures

- a) *Describe and explain the nature and purpose of analytical procedures in planning.*
- b) *Compute and interpret key ratios used in analytical procedures.*

5. Planning an audit

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- a) Identify and explain the need for planning an audit.
- b) Identify and describe the contents of the overall audit strategy and audit plan.
- c) Explain and describe the relationship between the overall audit strategy and the audit plan.
- d) Develop and document an audit plan.
- e) Explain the difference between interim and final audit.

6. Audit documentation

- a) Explain the need for and the importance of audit documentation.
- b) Describe and prepare working papers and supporting documentation.
- c) Explain the procedures to ensure safe custody and retention of working papers.

7. The work of others

- a) Discuss the extent to which auditors are able to rely on the work of experts.
- b) Discuss the extent to which external auditors are able to rely on the work of internal audit.
- c) Discuss the audit considerations relating to entities using service organizations.
- d) Discuss why auditors rely on the work of others.
- e) Explain the extent to which reference to the work of others can be made in audit reports.

D INTERNAL CONTROL

The following transaction cycles and account balances are relevant to this capability:-

- Revenue,
- Purchases,
- Inventory,
- Revenue and capital expenditure,
- Payroll,
- Bank and cash.

1. Internal control systems

- a) Explain why an auditor needs to obtain an understanding of internal control activities relevant to the audit.
- b) Describe and explain the key components of an internal control system.
- c) Identify and describe the important elements of internal control including the control environment and management control activities.
- d) Discuss the difference between tests of control and substantive procedures.

2. The use of internal control systems by auditors

- a) Explain the importance of internal control to auditors.
- b) Explain how auditors identify weaknesses in internal control systems and how those weaknesses limit the extent of auditors' reliance on those systems.

3. Transaction cycles

- a) Explain, analyze and provide examples of internal control procedures and control activities.
- b) Provide examples of computer system controls.

4. Tests of control

- a) Explain and tabulate tests of control suitable for inclusion in audit working papers.
- b) List examples of application controls and general IT controls.

5. The evaluation of internal control components

- a) Analyze the limitations of internal control components in the context of fraud and error.
- b) Explain the need to modify the audit strategy and audit plan following the results of tests of control.
- c) Identify and explain management's risk assessment process with reference to internal control components.

6. Communication on internal control

- a) Discuss and provide examples of how the reporting of internal control deficiencies and recommendations to overcome those deficiencies are provided to management.

E AUDIT EVIDENCE

1. The use of assertions by auditors

- a) Explain the assertions contained in the financial statements.
- b) Explain the principles and objectives of transaction testing, account balance testing and disclosure testing.
- c) Explain the use of assertions in obtaining audit evidence.

2. Audit procedures

- a) Discuss the sources and relative merits of the different types of evidence available.
- b) Discuss and provide examples of how analytical procedures are used as substantive procedures.
- c) Discuss the problems associated with the audit and review of accounting estimates.
- d) Describe why smaller entities may have different control environments and describe the types of evidence likely to be available in smaller entities.
- e) Discuss the quality of evidence obtained.

3. The audit of specific items

For each of the account balances stated in this sub capability:-

Explain the purpose of substantive procedures in relation to financial statement assertions,

Explain the substantive procedures used in auditing each balance, and

Tabulate those substantive procedures in a work program.

Receivables:-

Direct confirmation of accounts receivable

- ii) Other evidence in relation to receivables and prepayments, and
- iii) The related income statement entries.

b) Inventory:-

i) Inventory counting procedures in relation to year-end and continuous inventory systems

ii) Cut-off

iii) Auditor's attendance at inventory counting

iv) Direct confirmation of inventory held by third parties,

v) Other evidence in relation to inventory.

c) Payables and accruals:-

i) Supplier statement reconciliations and direct confirmation of accounts payable,

ii) Obtain evidence in relation to payables and accruals, and

iii) The related income statement entries.

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d) Bank and cash:-

- i) Bank confirmation reports used in obtaining evidence in relation to bank and cash
- ii) Other evidence in relation to bank and cash, and
- iii) The related income statement entries.

e) Tangible non-current assets and long-term liabilities:-

- i) Evidence in relation to non-current assets and
- ii) Non-current liabilities and
- iii) The related income statement entries.

4. Audit sampling and other means of testing

- a) Define audit sampling and explain the need for sampling.
- b) Identify and discuss the differences between statistical and non-statistical sampling.
- c) Discuss and provide relevant examples of, the application of the basic principles of statistical sampling and other selective testing procedures.
- d) Discuss the results of statistical sampling, including consideration of whether additional testing is required.

5. Computer-assisted audit techniques

- a) Explain the use of computer-assisted audit techniques in the context of an audit.
- b) Discuss and provide relevant examples of the use of test data and audit software for the transaction cycles and balances mentioned in sub-capability 3.
- c) Discuss the use of computers in relation to the administration of the audit.

6. Not-for-profit organizations

- a) Apply audit techniques to small not-for-profit organizations.
- b) Explain how the audit of small not-for-profit organizations differs from the audit of for-profit organizations.

F REVIEW

1. Subsequent events

- a) Explain the purpose of a subsequent events review.
- b) Discuss the procedures to be undertaken in performing a subsequent events review.

2. Going concern

- a) Define and discuss the significance of the concept of going concern.
- b) Explain the importance of and the need for going concern reviews.
- c) Explain the respective responsibilities of auditors and management regarding going concern.
- d) Discuss the procedures to be applied in performing going concern reviews.
- e) Discuss the disclosure requirements in relation to going concern issues.
- f) Discuss the reporting implications of the findings of going concern reviews.

3. Written representations

- a) Explain the purpose of and procedure for obtaining written representations.
- b) Discuss the quality and reliability of written representations as audit evidence.
- c) Discuss the circumstances where written representations are necessary and the matters on which representations are commonly obtained.

4. Audit finalization and the final review

- a) Discuss the importance of the overall review of evidence obtained.

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b) Explain the significance of unadjusted differences.

G REPORTING

1. Audit reports

- a) Describe and analyze the format and content of unmodified audit reports.
- b) Describe and analyze the format and content of modified audit reports.

2. Reports to management

- a) Identify and analyze internal control and system deficiencies and their potential effects and make appropriate recommendations to management.

3. Internal audit reports

- a) Describe and explain the format and content of internal audit review reports and other reports dealing with the enhancement of performance.
- b) Explain the process for producing an internal audit report.

Recommended Books

1. BPP Learning Media F8 Audit and Assurance
2. Kaplan Publishing F8 Audit and Assurance
3. International Standards on Auditing, International Framework for Assurance Engagements and International Standards on Review Engagement issued by IAASB & IAPC and published by ICAP as Handbook. (ISAs and ISRE mentioned in syllabus)
4. Code of Ethics for Forensic Accountants issued by IFAP
5. Companies Ordinance, 1984.
6. Advanced Auditing by Dr. Khawaja Amjad Saeed.
7. Practical Auditing by Javed H. Zubairi.

DIFA Syllabus Level II

Paper 10 Information Technology (Marks: 100)

Objective

The objective of this syllabus is to provide the students with adequate knowledge of the following areas and their applications with particular reference to business and finance:

1. Computer Hardware and Related Matters	10
2. Information Systems	10
3. Computer Programming and Software Applications	20
4. System Development and Internal Controls	20
5. Computer Practical Examination	40

1. Computer Hardware and Related Matters:

1.1 Parts and accessories of computer

- Recent developments in computer hardware

1.2 Networking

- Networking components
- Network configuration and design
- Types of networks
- Use of communication devices
- Transmission medium
- Network administration and controls

2. Information Systems:

a. Fundamentals of Information Systems

- General system concepts
- System architectures

b. Organizational Information Systems

- Information flow in an organization
- Management Information System
- Transaction Processing Systems
- Financial reporting systems
- Order processing and inventory control systems
- Personnel systems
- Sales and marketing systems
- Integrated systems

c. Commonly used ERPs

d. Knowledge Based Systems

- Decision Support System (DSS)

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- Executive Information System (EIS)
- Expert System (ES)

e. Transaction processing in business and accounting applications

- General application processing
- Data entry/ capturing / editing
- Master file update
- Reporting and queries
- Processing modes
- Batch processing
- On-line processing
- Real time processing
- Distributed processing
- Multi tasking
- Multi processing

3. Computer Programming and Software Applications:

a. Introduction to Computer Programming

Basic principles and concepts of program writing

b. Flow Charts

- Benefits and limitation of flowcharts
- Types of flowcharts

c. Decision Tables

- Benefits and limitation of decision tables
- Types of decision tables

d. Computer Aided Software Engineering (CASE)

Types of CASE tools, their applications and advantages

e. Operating System

Introduction to commonly used operating systems including DOS, Windows, Novell NetWare, Unix and Linux

f. Utility Software

Compression utilities, disk maintenance utilities, antivirus programs and audio and videosoftware etc., their features, benefits and limitations

g. Communication Software

Features, benefits and limitations of Internet browsers, email software, chatting programs, telephony via Internet and video conferencing etc.

h. E-Commerce

Basic concepts covering:

- Current trends in e-commerce
- E - commerce Tools and technologies
- Electronic data capture

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- Publishing systems
- Communication systems
- E-commerce services for example electronic trading, online banking and online informationservices etc.
- Electronic Payment Systems
- Payment options
- Security technologies

i. Web Hosting and Surfing

- Website hosting
- Downloading software from web
- Use of search engines

4. Introduction to System Development and Control Activities

a. Systems Development Life Cycle (SDLC)

- Feasibility study based on investigation and analysis of existing systems
- Structured systems analysis, planning, designing and implementation
- Evaluation and control of Information Systems and needs
- Documentation
- Post implementation review

b. Data organization and access Methods

- Data structures and file organizations
- Access methods and file maintenance
- Types of data files

c. Database Management System (DBMS)

Introduction to commonly used DBMS like Oracle and SQL Server etc. (their characteristics, advantages and limitations)

d. Control Activities

Introduction to:

- Control design
- General controls
- Preventive, detective and corrective controls
- Audit trails

e. Control over Data Integrity, Privacy, and Security

- Logical access controls
- Physical access controls
- Program security techniques
- Data security and public networks
- Monitoring and surveillance techniques

f. Disaster Recovery Planning

- Threat and risk management
- Software and data backup techniques
- Alternative processing facility arrangements
- Disaster recovery procedural plan

5. Computer Practical Examination

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IFAP will conduct a practical examination of 2 hours duration to test hands on experience covering 40% credit of the course. Theory paper of Information Technology will cover 60%. The result shall be based on the combined marks obtained at practical and theory examinations. The computer practical examination will be held soon after the Intermediate examination.

Microsoft Windows and Internet

a. Windows Accessories

- System Tools
- Communication & Entertainment
- Accessibility

b. Windows Keyboard Shortcuts

c. Basic Networking Tasks

- Sharing drives, folders and devices
- Protecting files and folders on a network

d. Core Windows Tasks

- Customizing Desktop and Start Menu
- Working with files and folders
- Managing Windows
- Logging on and off
- Searching for information

e. Protecting your computer

- Locking the computer
- Screen Saver password
- Password reset disk

f. Windows Firewall

g. Internet

i. Internet browsing

- Making a dial-up connection
- Internet explorer
- Commonly used Internet search engines and web based email services
- Voice and video chatting

Microsoft Excel

a. Organizing and Analyzing Data

- Construction and application of customized formulas
- Application of advanced filters
- Performing data analysis using automated tools
- Creating PivotTable and PivotChart reports
- Application of built in functions and formulas
- Use of Tools menu commands like Goal Seek and Formula Auditing etc
- Defining, modifying, and using named ranges

b. Formatting Data and Contents

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- *Creating and modifying customized data formats*
- *Using conditional formatting*
- *Formatting charts and diagrams*

c. Sharing and Security

- *Protecting cells, worksheets, and workbooks*
- *Sharing workbooks*
- *Merging workbooks*
- *Tracking, accepting, and rejecting changes to workbooks*

d. Managing Data and Workbooks

- *Importing and exporting data to and from Excel*
- *Creating and editing templates*

e. Customizing Excel

- *Customizing toolbars and menus*
- *Creating, editing, and running macros*

Microsoft Word

a. Formatting Contents

- *Creating custom styles for text, tables, and lists*
- *Inserting and modifying objects*
- *Creating and modifying diagrams and charts using data from other sources*

b. Organizing Contents

- *Sorting contents in lists and tables*
- *Performing calculations in tables*
- *Modifying table formats*
- *Preparing letters, labels and envelopes using mail merge tools*

c. Formatting Documents

- *Creating and modifying document background*
- *Creating and modifying document index and table of contents*
- *Inserting and modifying endnotes, footnotes, captions, and cross-references*

d. Managing Word Documents

- *Application of Track Changes tool*
- *Publishing and editing Web documents*
- *Managing document versions*
- *Protecting and restricting documents*
- *Ways of viewing a Word document*

e. Customizing Microsoft Word

- *Creating, editing, and running macros*
- *Customizing menus and toolbar*

Microsoft PowerPoint

a. Creating Contents

- *Creating new presentations from templates*
- *Inserting and editing text-based contents*
- *Inserting and editing tables, charts, diagrams, pictures, shapes, graphics and objects*

b. Formatting Contents

- *Formatting text-based contents*
- *Formatting pictures, shapes, and graphics*
- *Formatting slides*
- *Applying animation schemes*
- *Applying slide transitions*
- *Customizing slide templates*
- *Working with slide master*

c. Managing and Delivering Presentations

- *Tracking, accepting, and rejecting changes in a presentation*
- *Adding, editing, and deleting comments in a presentation*
- *Comparing and merging presentations*
- *Setting up slide shows for delivery*
- *Rehearse timing*
- *Printing slides, outlines, handouts, and speaker notes*
- *Exporting a presentation to another Microsoft Office program*

Microsoft Access

a. Structuring Databases

- *Creating and modifying tables*
- *Defining and modifying field types*
- *Creating and modifying one-to-many relationships*
- *Creating and modifying queries, forms and reports*

b. Managing Databases

- *Entering, editing, and deleting records*
- *Importing and exporting data to and from Access*
- *Compacting and repairing databases*
- *Creating and modifying calculated fields and aggregate functions*
- *Sorting records*
- *Filtering records*

Microsoft Project

a. Task Management

- *Defining the project*
- *Defining general working times*
- *Listing the tasks in the project*
- *Organizing tasks into phases*
- *Scheduling tasks*
- *Linking to or attaching more task information*
- *Adding columns of customized information*
- *Setting deadlines and constraints*

b. Resource Management

- *Specifying resources (people and equipment) for the project*
- *Defining working time and availability of resources*
- *Assigning resources to tasks*
- *Linking to or attaching more resource information*

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- Adding columns of customized information

c. Project Tracking

- Saving a baseline to compare with later versions
- Incorporating progress information into the project
- Checking the progress of the project
- Tracking risks and issues associated with a project

d. View and Report Project Status

- Selecting and modifying views and reports
- Viewing critical tasks, allocation of resources and project costs
- Sharing project information with other applications
- Changing the look or contents of the Gantt chart

Microsoft Outlook / Outlook Express

a. Messaging

- Originating and responding to e-mails and instant messages
- Attaching files to messages
- Creating and modifying a personal signature for messages
- Modifying e-mail message settings and delivery options
- Creating and editing contacts

b. Scheduling

- Creating and modifying appointments, meetings, and events
- Customizing calendar settings
- Creating, modifying, and assigning tasks

c. Organizing

- Creating and modifying distribution lists
- Linking contacts to other items
- Creating and modifying notes

Recommended books

1. *Management Information Systems Strategy and Action* by Charles Parker and Thomas Case.
2. *Management Information Systems* by Gerald V. Post and David L. Anderson.
3. *Management Information Systems (Sixth edition)* by James A. O'Brien.
4. *System Analysis and Design* by Kenneth E. Kendall and Julie E. Kendall.