

## SYLLABUS FOR GATEWAY ASSESSMENT-1 [MANAGERIAL LEVEL-1] FOR THE MEMBERS OF NATIONAL INSTITUTE OF BANKING AND FINANCE, PAKISTAN

### INTRODUCTION

The syllabus contents of Gateway Assessment-1 have been designed for [JAIBP/AIBP/FIBP] holders of National Institute of Banking and Finance, Pakistan comprise of three areas of expertise i.e., Management Information Systems (MIS), Enterprise Management, and Fundamentals of Cost and Management Accounting. The contents collectively provide a comprehensive foundation for navigating the intricacies of contemporary business. MIS focuses on information technology integration, securities and IT Audit, while Enterprise Management delves into strategic planning, organizational dynamics, and leadership. Fundamentals of Cost and Management Accounting contribute financial insights, covering cost concepts and budgeting.

### LEARNING OUTCOMES

- Upon successful completion of Gateway Assessment, candidates will be able to:
- Enhance skills to leverage Management Information Systems for efficient data management
- Equip with a well-rounded skill set combining technological, strategic, and financial competencies.
- Have a proficiency in decisions making that contribute to organizational success.
- Get preparedness for leadership roles in diverse business environments.
- Use competency in strategic planning and implementation.
- Understand various organizational structures and dynamics.

PART	SYLLABUS CONTENT AREA	WEIGHTAGE
<b>FUNDAMENTALS OF COST &amp; MANAGEMENT ACCOUNTING:</b>		
A	<b>THE NATURE, SOURCE AND PURPOSE OF MANAGEMENT INFORMATION</b>	50%
	1. Introduction to management accounting	
	2. Cost classification	
	3. Cost behaviour	
	<b>COST ACCOUNTING SYSTEM</b>	
	4. Accounting for Materials	
	5. Accounting for Labour	
	6. Accounting for Overheads	
	<b>COST ACCOUNTING TECHNIQUES AND METHODS</b>	
	7. Absorption and marginal costing	
	8. Job, Batch and Service costing	
	9. Process costing	
10. Process costing, joint products and by-products		
	<b>STANDARD COSTING</b>	
	11. Standard costing	
	12. Variance analysis	
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<b><u>ENTERPRISE MANAGEMENT:</u></b>		
B	<b>ENTERPRISE AND OPERATIONS MANAGEMENT</b>	25%
	13. Enterprise Management	
	14. Operations management and its importance for Management Accounting	
	15. Production Techniques	
	16. Plant maintenance	
	17. Production planning and control	
	18. Productivity and Efficiency Evaluation	
	19. Quality management	
	<b>HUMAN CAPITAL MANAGEMENT</b>	
	20. Human Resource Management	
	21. Human Resource Practices	
	<b>MARKETING MANAGEMENT</b>	
	22. Marketing and business strategy	
	23. Marketing plans, branding and communications	
	24. Developments in marketing	
	<b>PERFORMANCE MANAGEMENT</b>	
	25. Enterprise performance management	
	26. Performance measurement tools	
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<b><u>MANAGEMENT INFORMATION SYSTEMS:</u></b>		
C	<b>INFORMATION SYSTEMS</b>	25%
	27. Emerging Technology in E-Business	
	28. Infrastructure and Operations	
	29. Information and Databases	
	30. System Concepts	
	31. Systems acquisition / development process	
	32. Financial Technology (Fintech) in accounting:	

### 33. Digital Transactions

#### IT AUDIT

- 34. The Process of Auditing Information Systems
- 35. Auditing Systems Acquisition / Development Process
- 36. Information Security Management (ISM)
- 37. Business Continuity and Disaster Recovery

**Total**

**100%**

**Note:** The weightage shown against each section indicates, study time required for the topics in that section. This weightage does not necessarily specify the number of marks to be allocated to that section in the examination

### DETAILED CONTENTS

#### **PART – A (FUNDAMENTAL OF COST AND MANAGEMENT ACCOUNTING):**

##### **THE NATURE, SOURCE AND PURPOSE OF MANAGEMENT INFORMATION**

#### **1. Introduction to Management Accounting**

- What is management accounting
- Definitions
- The changing role of management accounting
- Data and information
- The purpose of management information
- Sources and categories of information
- ICMA and its role in management accounting

#### **2. Cost classification**

- The Concepts of Cost
- Total Product/Service costs
- Direct Costs and Indirect Costs
- Functional Costs
- Fixed Costs, Variable Costs, semi-variable & Step fixed Cost
- Production and Non-Production Costs
- Cost Codes
- Cost Units, Cost Objectives and Responsibility Centres

#### **3. Cost Behaviour**

- Cost behaviour and levels of activity
- Graphical representation of different types of costs
- Cost behaviours patterns
- Determining the fixed and variable elements of semi-variable costs and High and Low point method
- Linear Equations and Graphs

#### **COST ACCOUNTING SYSTEMS**

#### **4. Accounting for Materials**

- What is inventory control
- Ordering, Receipt and Issue of Raw Materials (Re-Order Level, Maximum level, minimum level danger level)
- Storage of Raw Materials
- Inventory Control Levels
- Economic Order Quantity Model
- ABC Controls for inventory)
- Accounting for Material Costs
- Inventory Valuation
- FIFO (First in First out)
- LIFO (Last in First out)
- AVCO (Average Cost)

#### **5. Accounting for Labour**

- Classification of Labor Direct and indirect labour

- Measuring labour activity
- Remuneration methods (time-based systems, piecework systems and individual and group incentive schemes)
- Treatment and calculation of Overtime and idle time
- Recording labour costs
- Labour turnover
- Accounting for labour costs

#### **6. Accounting for Overheads**

- Classification and collection of Overheads
- Overhead absorption rates and basis of absorption
- Overhead allocation
- Overhead apportionment and reapportionment
- Overhead absorption
- Blanket absorption rates and departmental absorption rates
- Over and under absorption of overheads.

#### **COST ACCOUNTING TECHNIQUES AND METHODS**

#### **7. Absorption and Marginal costing**

- Absorption Cost
- Marginal Cost and Marginal Costing
- Difference between marginal and absorption costing
- Principle of Marginal Costing
- Marginal Costing and Absorption Costing and the calculation of profit and inventory under both the methods
- Reconciling Profit
- Marginal Costing versus Absorption Costing

#### **8. Job, Batch and Service costing**

- Costing Method
- Job Costing
- Batch Costing
- Service Costing

#### **9. Process costing**

- The basics of process costing
- Losses in process costing
- Losses with scrap value
- Losses with a disposal cost
- Valuing closing work in progress
- Valuing opening work in process: FIFO method
- Valuing opening work in process weighted average cost method
- Cost of Production report

#### **10. Process costing, joint products and by-products**

- Joint products and by- products
- Dealing with common costs
- Joint products in process accounts

- Accounting for by products
- Methods of Allocation of joint cost

### 11. Standard costing

- Standard costing (Explain standard costing using examples)
- Preparation of standards
- Uses of standard costing
- Other aspects of standard costing (Purpose and Limitations of standard costing)

### 12. Variance analysis

- Variances
- Direct material variances (Total, Price and usage variance)
- Direct labour variances (total, rate and efficiency variance)
- Variable overhead variances (total, expenditure and efficiency variance)
- Fixed overhead variances (total, expenditure, volume, capacity and efficiency variance)
- Reasons for cost variances
- Sales variances (Price and Volume Variances)
- Operating statements
- Deriving actual data from standard cost details and variances
- Inter-relationships between variances

## PART - B (ENTERPRISE MANAGEMENT)

### OPERATIONS MANAGEMENT

#### 13. Enterprise Management

- Understanding the nature of Enterprise management
- The challenges facing businesses in 21st century, including the impact of legal, ethical, political, social, economic, international and technological issues
- Evaluate alternative approaches to Enterprise management;

#### 14. Operations management, and its importance for Management Accounting

- Definition
- Mintzberg 's Effective Organization
- Strategic Importance

#### 15. Production Techniques

- Job Method
- Batch Method
- Process /Flow Method

#### 16. Plant Maintenance

- Plant Maintenance Process

#### 17. Production Planning and Control

- Material Requirements Planning (MRP)
- Manufacturing Resource Planning II (MRP II)
- Enterprise Resource Planning (ERP)
- Optimized Production Technology (OPT)
- Understating of production as a process of converting or transforming resources in to Products.

#### 18. Productivity and Efficiency Evaluation

- Methods of Managing Operational Capacity

#### 19. Quality Management

- Understanding the concept of 'Quality' and 'Quality Management'

- The Scope of Quality Management
- Quality Management Approaches
- Total Quality Management (TQM)
- Managing Quality using TQM
- Continuous Improvement (Kaizen)
- Lean Production
- Total Productive Maintenance (TPM)
- The TQMEX Model
- Service Quality Approaches
- International Organization for Standardization (ISO)

### HUMAN RESOURCE MANAGEMENT

#### 20. Human Resource Management

- Human Resource (HR), Human Capital and Human Resource Management (HRM)
- Human Resource Management Theories
- Employee Motivation: Remuneration
- Employee Motivation: Other Factors
- HR Management in Different Types of Organization (Working Arrangements)
- HRM Process including 'HR Plan', 'Recruitment', 'Selection & Placement', 'HR Performance Appraisal', 'Pay and Perks', 'Training & Development', 'Decruitment' etc.
- Code of Conduct and Ethical Behaviour

#### 21. Human Resource Practices

- Reliable HR Practices
- Human Resource Development (HRD) and HRD Approaches / Techniques

### MARKETING MANAGEMENT

#### 22. Marketing, and Business Strategy

- Market, Marketing and Marketing Management
- Marketing Philosophies
- The Marketing Environment
- Marketing, and Corporate Strategy
- Marketing Strategy

#### 23. Marketing Plans, Branding and Communications

- Marketing Action Plans
- Branding
- Marketing Communications

#### 24. Developments in Marketing

- Consumer Behaviour
- Marketing for Not-for-Profit Organizations
- Internal Marketing
- Corporate Social Responsibility, and Social Marketing

### PERFORMANCE MANAGEMENT

#### 25. Enterprise performance management

- Control and performance measurement
- Key Performance Indicators (KPIs)
- Strategic control and critical success factors (CSFs)
- Critical Success Factors (CSFs) VS Key Performance Indicators (KPIs)
- Budgetary control systems

#### 26. Performance measurement tools:

- Performance measures: financial and non-financial
- The balanced scorecard
- Developing a performance measurement system
- Other multidimensional measures of performance
- Performance: service departments and firms

## PART-C (MANAGEMENT INFORMATION SYSTEMS)

### INFORMATION SYSTEMS (IS)

#### 27. Emerging Technology in E-Business

- Definition of the EDI, E-Business and E-Commerce,
- E-Business Models (B2B, B2C, B2E, B2G, G2C & C2C),
- Introduction to E-commerce Architecture, E-Commerce Risks,
- Advantages of E-commerce for businesses,
- E-Business Software (SCM, ERP & CRM).
- Artificial Intelligence and its importance in Finance, Accounts, Taxation and IT Audit

#### 28. Infrastructure and Operations

- Management of IS Operations,
- IT Service Management (systems, networks and supplies)
- Change Management Process, (best practices to reduce risks)
- Computer Hardware Components and Architectures, (CPU, Devices and Media)
- Capacity Management (monitoring, scheduling, upgrading)
- Operating Systems, (functions and types)
- Computer Networks (Categories, Topologies, Architecture and Types)
- Basics of Cloud Computing

#### 29. Information and Databases

- What is a data-base?
- Data modelling; (DFD, ERD)
- Types of databases; (Introduction only)
- The roles of a data-base management system;
- Data as a resource;
- Data warehousing and Business analytics
- Importance of models.
- Information systems categories;
- Office automation systems;
- Communication systems;
- Decision support systems;
- Enterprise systems;
- Limitations
- Uses of information systems categories

#### 30. System Concepts

- Elements /Components of system
- Input
- Processing
- ✓ Output
- ✓ Controls (feedback& feed forward)
- ✓ Environment
- ✓ Boundary & interface
- Important concepts of system
- ✓ Synergy
- ✓ coupling
- ✓ cohesion

#### 31. Systems Acquisition / Development Process

- Approaches (Waterfall, spiral, Agile and Scrum, prototyping),
- Phases of SDLC (Investigation and feasibility study),
- Requirements analysis and initial design.
- Detailed design specification/ documentation.

- System installation/ implementation & maintenance),
- Project Management. (PM Triangle)
- Project planning. (PERT, CPM, intro. Importance of PM software)
- Project control methods and standards (Introduction of PERT, PRINCE, ISO 21500, CMM)

#### 32. Financial Technology (Fintech) in accounting:

- Discuss FinTech infrastructure and startups
- Discuss major technologies involved in FinTech
- Describe cloud computing and its benefits for the organization.
- Effectiveness of automation and artificial intelligence (AI)
- Define Big Data and describe how the application of big data and data analytics can improve the effectiveness of accountancy and audit.

#### 33. Digital Transactions

- Identify elements of block chain, cryptocurrencies, crowdfunding and other alternative finance technologies (design, uses and limitations).
- List out the key features and applications of Blockchain technology
- Use accounting for cryptocurrency
- Describe how payment, lending, remittances and other financial operations are made using digital technologies.

### IT AUDIT

#### 34. The Process of Auditing Information Systems

- Definition of IT Audit and Types of Audits
- Audit Mission and planning,
- Role and responsibilities of Internal. external and IT Auditors,
- Risk assessment and analysis.
- risk based audit approach,
- compliance and substantive testing,
- Internal Controls and their types, objectives and procedures.
- Performing an IT audit, (Procedure)
- CAATs,
- Control self-assessment.

#### 35. Auditing Systems Acquisition / Development Process

- Risk of inadequate system development life cycle (SDLC) and review of development procedures and methodologies,
- Review of acquisition process for outsourcing,
- Information system maintenance practices
- Process of carrying out change in software
- Library control software, review of the practice of project management tools and techniques

#### 36. Information Security Management (ISM)

- Importance of ISM,
- Understanding of Facilities (Data centres, outsourced facilities, Storage, media libraries, backup vaults, UPS & Disaster recovery sites),
- Antivirus Software implementation Strategies),

- Program and data security techniques,
- Monitoring and surveillance techniques,
- Environment Controls
- Smoke detectors,
- Fire Suppression Access management controls,
- Physical design and access controls,
- Logical access controls (user authorization matrix & Password managements / password change procedures).
- Network security (encryption, firewalls System and Humidity / Temperature),
- Media Sanitization.
- Auditing Information Security Management.

### **37. Business Continuity and Disaster Recovery**

- Defining a Disaster,
- BCP and DRP.
- BCP Process.
- Business Continuity Policy and Planning
- Incident Management
- Business Impact Analysis,
- Development of BCP.
- Insurance,
- Plan Testing
- Auditing Business Continuity
- Recovery sites, database backup/recovery methods, application backup/recovery methods