



Ministry of Education

Test Blueprint for National Exit Examination to be held in 2015 E.C

Band: 05

**Program: Bachelor of Arts Degree in Business Administration and
Information Systems (BAIS)**

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1. Introduction

The Ministry of Education of Ethiopia has announced the implementation of exit exam for all undergraduate program students (public and private), beginning with the 2022/2023 academic year, in order to improve the quality of graduates produced by higher learning institutions. The exit exam aimed at checking whether students have acquired the required knowledge, skills and attitudes or not. To implement this, it requires determining competency areas for a specific program, which is already completed. Based on the competency areas prepared, it needs to plan the construction of tests.

Planning of a test is a first and vital step in the construction of an achievement test. An achievement test demands very systematic and careful planning, as a fact that good planning is a symbol of success. Tests are the tools that provide scores that measure level of student learning and study program learning outcomes. In order to achieve the valid and reliable measurement of student learning and program learning outcomes, the development of valid and reliable test is the mandatory. Test should be able to measure student performance in all dimensions of knowledge, skill and attitude. The carefully planned test construction contributes to improve the overall quality of the test in terms of test content validity, difficulty level, discrimination power and test reliability. Test preparation is not an easy task; it requires a careful planning and guideline to make the task simple. Test construction needs the preparation of test blue print. Test blueprint is defined as a complete plan that explains how to develop a test. The term refers to a map or specification of assessment to ensure that all aspects of the curriculum and educational domains are covered by the assessment programs over a specified period of time. It helps curriculum developer's/test constructors to match various competencies with the course content and the appropriate modality of assessment.

Generally, test blueprint will help to ensure tests: 1) Appropriately assess the achievement of instructional objectives of the course; 2) Appropriately reflect key course goals, objectives

and the material learned or covered during the instruction period; and 3) Include the appropriate item formats along with the knowledge and skills being assessed.

Keeping this in mind, the team has prepared this test blueprint document in order to help the test developers or content specialists in their process of valid and reliable test construction. The major points considered in the process of preparing this test blue print guideline were the core competencies that have been already identified for the themes of courses, the course contents, course credit hours, and the learning outcomes with their corresponding levels of achievement by learning domains. In line with these, the number of test items that should adequately assess the performance of students in all the content topics will be determined through discussion with the content specialists who construct the blueprint and test for their corresponding study program.

Therefore, the main purpose of this manual is to give direction on how to develop blueprint for content specialists so that they can develop a test blueprint for their respective program.

2. Objective of test blueprint

Test blueprint preparation is generally opted to assist the preparation of a test that is representative, broadly sampled, and consisting of complete knowledge domain expected of the Ethiopian higher education students on completion of their study program. The specific objectives of test blueprint are to:

- Facilitate the construction of a representative and balanced test items for the selected courses in accordance with the competencies identified.
- Guide test developers or writers to write or set appropriate test items.

3. Expected Profiles of Graduates

The program is aimed at producing graduates with the right knowledge base, skills and attitudes towards application of Business Administration and Information Systems concepts.

3.1. Knowledge

Thus, upon successful completion of the program, graduates will be able to:

- Understand the existing and emerging information technologies and systems and their impact on the management and leadership of business organizations;
- Understand business processes;
- Know information requirements;
- Familiarize with business solutions and technical specifications for the supporting systems;
- Analyze business processes, assess information requirements, create business solutions and technical specifications for the supporting systems
- Evaluate the design and development of databases and commercial web applications
- Collaborate with and lead a team of professionals in network environment;
- Discuss how organizational information resources are managed effectively and efficiently
- Analyze how various decision support systems are developed to help business managers in decision making;
- Evaluate the best ways of collecting, processing, and disseminating information for all organizational units
- Comprehend effective and efficient ways of using information for various business purposes within the ranks of the organization;
- Explain how security of organizational information systems is controlled and managed
- Analyze business processes to facilitate for decision making and problem solving
- Understand individual differences, group behavior and organization level behavior in people management
- Discuss the ways by which organizations initiate new ideas and innovate new processes and products
- Evaluate how appropriate and robust organizational strategies are designed to shape or cope up with changing organizational environment.
- Understand the dynamic nature of business environment
- Know elements in a project life cycle
- Discuss the strategic management process

3.2. Skill

- Get expertise to design and develop database applications and commercial web applications using the latest languages, databases, and web technologies;
- Acquire expertise in the latest communication technologies;
- Develop interpersonal and communication skills to effectively interact with various information systems;
- Work and lead professionals in network environment;
- Manage organizational information resources effectively and efficiently;
- Help business managers in decision making by developing various decision support systems, by collecting, processing and disseminating information for all organizational units and by promoting the use of information for various business purposes within all the ladders of the organization;
- Control and manage security of organization's information systems;
- Critically analyze business processes and make rational decisions to solve organizational problems;
- Apply quantitative tools to solve managerial problems;
- Manage human resources of an organization by understanding individual differences, group behavior and organization level behavior;
- Initiate, innovate and manage various projects; and
- Design appropriate and robust strategies to shape or cope up with changing organizational environment.

3.3. Attitude

- Appreciate the role of emerging information technologies and systems and their impact on the management and leadership of business organizations
- Constructively critique the analysis of business processes, information requirements, business solutions, and technical specifications for organizational systems;
- Suggest better ways of designing and developing database applications
- Recommend better ways of applying latest communication technologies for business and improving interpersonal and communication skills to effectively interact with various information systems
- Collaborate with and lead a team of professionals in network environment

- Suggest for more effective and efficient approaches of managing organizational information resources
- Recommend for the development of various decision support systems to help business managers in decision making;
- Appreciate the collection, processing, and dissemination of information across all organizational units
- Engage in control and management of organizational information systems security
- Recommend for more effective utilization of quantitative and qualitative tools to identify business problems, analyze business processes, and make decisions to solve organizational problems;
- Motivate and inspire human resources for organizational goal accomplishment
- Appreciate individual differences, group behavior and organization level behavior
- Actively engage in the design of appropriate and robust strategies to shape or cope up with changing organizational environment.

4. General Objectives

The BAIS program is designed to provide students with a strong educational foundation that prepares them as information systems professionals with strong business knowledge background. The academic program consists of a specially designed curriculum that emphasizes conceptual, analytical, technical, and interpersonal skills. The major area offers students comprehensive training in the application, use and management of Information Systems to prepare them provide effective information services and support to organizations. The course work is designed to provide technical and conceptual skills associated with the use of information technology in business and non-business organizations with major focus of innovation through the use of ICT.

5. Specific Objectives of the Program

Upon successful completion of BAIS program courses, the students will be able to:

1. Develop business oriented systems professionals who have experience in improving organizational processes while in participating in problem solving teams in project oriented environments.
2. Identify organizational opportunities that can be enhanced by the use of information technology.

3. Develop communication competence needed to act as a liaison between technical and non-technical members of system development teams.
4. Design various aspects of information systems, including programming, database, software, web application, telecommunication and human interface components in collaboration with cross functional teams.
5. Lead and manage teams responsible for developing and supporting information systems.
6. Participate in product innovation using information technology.
7. Prepare students for Information Systems consultancy services with some experience.

6. Themes, List of Courses and Total Credit Hour of the Selected Courses

S.N	List of Themes	List of Courses	ECTS	Credit Hours
1	Business Information Systems Application & Management	Information Systems Management	5	3
		SAD I: Fundamentals of System Analysis and Design	5	3
		E-commerce	5	3
		Web page development	5	3
		Business Intelligence and Decision Support System	5	3
		Total	25	15
2	Application of Mathematics and Statistics in Business	Business Statistics	5	3
		Operations Research	5	3
		Risk Management and Insurance	5	3
		Total	15	9
3	Database Design and Implementation	Database Systems & Database Design and Programming Using SQL	5	3
		Total	5	3
4	Resource and Process Management	Operations Management	5	3
		Project Management	5	3
		Principles of Marketing	5	3
		Human Resource Management	5	3
		Organizational Behavior	5	3
		Strategic Management	5	3
		Total	30	18
5	Financial Management and Budgeting	Cost and Managerial Accounting	5	3
		Financial management	5	3
		Total	10	6
	Total		85	51

TEST BLUE PRINT

Band: 5

Name of the program: Bachelor of Arts Degree in Business Administration and Information System

Expected profile of the graduate:

General objective :

Specific objectives :
Themes and lists of questions

Themes and lists of courses:
Total credit hour of the themes: 51

Total credit hour of the themes: 31	
Total credit hour of the course:	

Total credit hour of the course:	
Test Blueprint	

Test Blueprint

Themes	share of the theme	Courses under the themes	Share courses	Cr. H.	Competencies/General Objectives	Contents/Chapters	Share of contents	Learning Outcome																				
									Learning outcomes and test weight																			
									Cognitive							Affective					Psychomotor							
									Remembering	Understanding	Applying	Analyzing	Evaluation	Creating	Total	Receiving	Responding	Valuing	Organizing	Characterizing	Total	Limitation	Manipulation	Precision	Articulation	Naturalization	Total	No. items

Business Information Systems Application & Management	29%	Information Systems Management	20%	3	1. Understand the principles and theories of Management Information System (MIS) and its impact on organizations.	Chapter 1: Importance of Information Systems (IS) Management Chapter 2: Leadership Issues Chapter 3: Managing the Essential Technologies and Operations Chapter 4: Managing System Development Chapter 5: Supporting Work Chapter 6: The Challenges Ahead Chapter 7: Transforming and Managing Information Organizations	7	Recognize the importance of information system Evaluate different Leadership issues identify and manage essential technologies Describe different supporting works List down challenges ahead in IS		3	1		1		5			1	1	2								7
		SAD I: Fundamentals of System Analysis and Design	20%	3	1. Understand the design and development of Computer Based Information System (CBIS) in an organization. 2. Knows about the various aspects and components of System Life Cycle in a CBIS. 3. Apply the general concept of System Analysis.	Chapter I: System: An Overview Chapter II: Information Systems Development Project Chapter III: The System Development Life Cycle Chapter IV: System Selection and Planning Chapter V: System Analysis CHAPTER VI: Design of New Systems Chapter VII - System Implementation	7	Explain system development life cycle, perform system analysis, and Design new system	2	1	1	1			5									1	1	2	7	
		E-commerce	20%	3	1. Understand e-commerce and its unique features and significance 2. Develop E-commerce business plans, which include managing risk and selecting appropriate technology solutions	Chapter 1: E-Commerce Business Models and Concepts Chapter 2: E-Commerce Infrastructure: Chapter 3: Building an E-Commerce Web Site Chapter 4: E-Commerce Payment Systems and Security Chapter 5: Commerce Marketing Techniques	7	Describe and value E-commerce, Build an E-Commerce Web site	1	2				1	4					1	1			1		1	2	7

		Web page development	20%	3	1. Comprehend web page development and use web page 2. Design and develop Web page	Chapter 1: The Fundamentals Chapter 2: Web Design and Development Chapter 3: Introduction to Hyper Text Mark-up Language (HTML) Chapter 4: Cascading Style Sheets (CSS) Chapter 5: Client-Side Scripting Language Chapter 6: Introduction to Extensible Mark-up Language (XML)	6	Explain Fundamentals of Web design and development, develop web pages	5					5				1	1							6
		Business Intelligence and Decision Support System	20%	3	1. Understand the meaning, characteristics, capabilities, types & importance of Decision Support Systems. 2. Appreciate the role of emerging information technologies and systems in business organizations 3. Develop various decision support systems to help business managers in decision making	Chapter1: Introduction to Decision Support Systems Chapter 2: Human Decision Making Processes Chapter 3: Systems, Information Quality, and Models Chapter 4: Types of Decision Support Systems Chapter 5: DSS Architecture, Hardware, and Operating System Platforms Chapter 6: DSS Software tools Chapter 7: Building and Implementing Decision Support Systems Chapter 8: Models in Decision Support Systems	8	1. Define System and Information Systems, & describe System Characteristics. 2. Explain quality of information the value of models in decision Support systems. 3. Explain how decision Support Systems fit into the overall category of information systems. 4. Describe Decision Support Systems Architecture and identifying the factors to be consider in planning it. 5. Identify the types of Database management systems and their usefulness in decision support applications, identify programming languages to be used in Decision Support Systems, 6. Describe issues in building and	2	4				6		1		1					1	1		8

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Database Design and Implementation	6%	Database Systems & Database Design and Programming Using SQL		3	1. Evaluate the design and development of databases and commercial web applications 2. Design, develop, and put to use a small database system.	Chapter 1 Introduction Chapter 2: Relational Data Model Chapter 3: Conceptual Database Design- E-R Modelling Chapter 4: Logical Database Design Chapter 5: Physical Database Design Chapter 6: Query Languages Chapter 7: Advanced Database Concepts	6	Describe data base, Design and Build database systems		4					4		1		1					1	1	6
Total				3			6								4				1					1	6	
Resource and Process Management	35%	Operations Management	17%	3	1. Understand operations management strategy and competitiveness 3. Know the concept of product and service designing, process and layout selections, capacity planning 2. Apply facility location and layout system selections	Operations Function Chapter II: Operations Strategy for Competitive Advantage Chapter III: Product and Service Design Chapter IV: Process Selection and Capacity Planning Chapter V: Facility Location Chapter VI: Facility Layout Chapter VII: Quality Management and Control Chapter VIII: Aggregate Planning Chapter IX: Scheduling Operations	8	Identify operations functions Describe operations strategy for competitive advantage Explain Product and service designing Apply process selection and capacity planning concepts Evaluate facility location selection strategies List down various types of facility layouts Describe quality management and control Recognize and apply aggregate planning Analyses work scheduling		1			5	6		1		1				1	1	8		
		Project Management	17	3	1. Know basic concepts of project analysis and planning, 2. Understand sources of project ideas and project identification, 3. Prepare project documentation & project appraisal,	Unit 1-General Introduction Unit 2 Project Cycle Unit 3 - Project Identification Unit 4 - Project Preparation Unit 5 - Project Implementation, Monitoring and Evaluation Unit 6 - Social Cost	6	Characterize project management, Use project analysis tools, Initiate, innovate and manage various business projects		3	1	1			5									1	1	6

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