Ministry of Education

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

Band: Four (4)

Program:-Bachelor of Science (B.Sc.) degree in Psychiatry (Psychiatry nursing, psychiatry professional and post basic psychiatry)

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Contents

1. Introduction....3
2. Objective/ Significance of Test Blueprint Document....4
2.1. Objective of the test blueprint Document....4
2.2. Significance of Test Blueprint Document....4
3. Expected profile of the graduates....5
4. Objective of the program....7
4.1. General Objective....7
4.2. Specific objectives....8
5. Themes and courses to be included in the exit exam....8
Table 1: Themes and course to be included in the exit exam....9
6. Share of the Themes/Courses/Items in Percentage (%)....10
Table 2: Share of the themes/courses/items and KSAs in percentage (%)....10
7. Test blueprint Table (Table of Specification)....12
Table 3: Test Blue-Print table....12
8. Calculation on share of themes, courses, competencies for a Program....21
Table 4: Calculation on share of themes, courses, competencies for a Program....21
9. Share of Competencies (KSA) per Courses / Summery/....23
Table 5: Share of Competencies (KSA) per Courses....23
10. Conclusion....24

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 developers/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.

2. Objective/ Significance of Test Blueprint Document

2.1. Objective of the test blueprint Document

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.

2.2. Significance of Test Blueprint Document

It is important to set competency areas of the subject matter (program) in order to measure the how much graduates are acquired with skills, knowledge and attitudes. Test blueprint is a three-dimensional chart that shows the placement of each question in respect of the objective and the content area that it tests. The following shows us the significance of the test blueprint;

- Test blueprint used for examination contains the strategy of exam by an educational institution;
- a test blueprint will help us plan which questions to include in your exam and ensure that it adequately assesses the learning objectives of the course; and

- It defines the knowledge, skills and attitude you want to assess and will enable you to build purpose-driven, successful assessments.

3. Expected profile of the graduates

Upon completion of the BSc psychiatry program with successful completion of the expected courses in the curriculum, "No Grade 'F'", minimum of grade 'C' in modules of core and supportive courses and minimum CGPA of 2.0, the **graduates have to: -**

- Provide health promotion and community mental health services.
- Provide clinical mental health services (collect, analyses relevant patient data, establish priorities, make appropriate decision for implementation and evaluate achievements of the services) and work effectively as a member of mental health-care team.
- Provide basic physical care for mentally ill patients with self-care deficit and altered physiologic functions in psychiatry clinical set up.
- Provide psychiatric rehabilitation services, including psychosocial services for physically disabled and behaviorally disturbed clients based on the need at all health settings.
- Apply professional, ethical and legal principles as well as evidence based practice in providing services to mentally ill clients.
- Communicate effectively with individuals, family and communities, including proper documentation and keeping record, formal and technical writings.
- Exercise leadership and management in the area of mental health services.
- Involve in conducting need based research on the identified mental health problems and utilize the research findings as an evidence to improve the quality of care.
- Apply different methodological skills and teaching aids in the teaching-learning process and use evaluation techniques.

Psychiatry nursing graduates will be able to acquire the following competencies:

Knowledge:

- Recognize community's level of awareness about mental illness.
- Identify common mental health problems in the community
- Recognize impact of mental illness in the community

- Understand the role of community in improving mental health.
- Understand principles, approaches and methods to promote mental health and prevent mental illness.
- Know the key concepts of psychiatric triage
- Know historical background of mental health
- Understand the basic psychopathology.
- Know bio-psycho-social and spiritual models of mental illnesses.
- Understand mental illness in special population (like patients with chronic communicable and non-communicable medical diseases, infants, vulnerable children and adolescents, traumatized, pregnant and lactating mothers, elderly).
- Know the range of interventions and therapies that can contribute to recovery, including biological, psychological & social approaches.
- Understand common misconceptions toward mental illness.
- Understand the burden of recovery process

Skill

- Apply relevant community assessment and work to strengthen the health system targeted to mental health problems.
- Design and engage in mental health programs at school, prison, camps, work place...etc.
- Apply principle of effective communication
- Advocate culturally suitable mental health service and function effectively as a member of community health-care team.
- Assess the impact of mental illnesses in the community.
- Develop research proposal skills and writing research reports and professional articles;
- Apply critical socio-economic phenomenon observation and data analysis skills;
- Apply psychiatric principles in public emergency and disaster management.
- Decide on prioritization of psychiatric cases.
- Direct the patients to the case team it has to be treated.
- Involve in the provision of individualized rehabilitation service (pharmacological, psychological, social therapies).
- Support clients to explore, express their aspirations for recovery and work towards achievement.
- Enable clients, families and significant others to make informed decision

Attitudes

- Respect community's dignity, culture, values, and norms.
- Reflect respectful, interactive and companionate behavior.
- Respect diversity.
- Empower people and value their perspectives
- Adhere to norms of the society.
- Respect opinions and views of the community
- Obey principles of effective communication.
- Exercise empathy in screening patients.
- Demonstrate compassionate, respectful and caring behavior
- Respect for the right and belief of others.
- Acknowledge the importance of cultural influences on life style and mental health practices.
- Apply compassionate, respectful, caring behavior, inclusiveness, and impartiality in clinical practices.
- Acknowledge the autonomy and right of clients.
- Show empathy towards clients.
- Accept the complexity of needs and aspirations across diversity.

4. Objective of the program

4.1. General Objective

General objectives are the following:

- The main purpose of the undergraduate degree in psychiatry is to provide an educational program through which the graduates will be prepared to assume responsibility in the promotion, prevention, and curative and rehabilitation service to people as psychiatry professional.
- It is expected that graduates are capable of teaching, conducting and participating in research areas to improve the mental health service delivery system.

4.2. Specific objectives

The specific objectives of this program are to prepare:

- BSc Psychiatry students who provide high quality, culturally sensitive preventive, curative, Promotive and rehabilitative clinical service in compassionate, respectful, ethical and professional manner at individuals, family and community levels and at all level of health care settings.
- BSc Psychiatry students, who conduct psychiatry clinical assessment, diagnose and manage mental health problems.
- BSc Psychiatry students who promote mental health and prevent mental health problems at individuals, family and community levels, and at all level of health care settings.
- BSc Psychiatry students, who are able to understand, lead and manage self, other, health care teams and the health system.
- BSc Psychiatry students who are committed for lifelong learning and to continue improvement of their profession and their career growth.
- BSc Psychiatry students who can effectively facilitate learning their field of expertise and be role model for their learners.
- BSc Psychiatry students who are able to advocate their profession and mental health for society and other professionals.
- BSc Psychiatry students who are able to conduct research and apply evidence-based practice to improve clinical, community service and health care system.
- BSc Psychiatry students who are able to critically think, make decisions, frame, communicate, information management, use technology, solve problems and develop new solutions for new problems.

5. Themes and courses to be included in the exit exam

This document has been compiled with **four themes** consisting of **four modules and seven courses** for exit examination for achieving the competencies level of BSc psychiatry graduates that are expected to acquire. According to the direction suggested by the head of quality and competency improvement desk (at MoE), during the preparation of this document, there was a general consensus that a specific program should consider a total of **10-15 lists of courses.** In BSc psychiatry program, there are numbers of courses that were provided in sequences like

Common Courses, Medical Surgical, Maternal and Child Health; but the core modules and courses are clearly presented and have been selected in this document. Accordingly, this exit examination document has identified **four core modules and seven courses** delivered at different semesters and academic calendars.

Table 1: Themes and course to be included in the exit exam

S.N	List of themes	List of modules/Courses	Module/ course code	ECTS	Remark
1	**Promotion/ prevention**	Health promotion & disease prevention	SPH 2042	5	
		Community psychiatry	Psyc 3043	5	
		Research Methodology	SPH 4032	5	
2	**Curative**	Foundation of Psychiatry I	Psyc 2053	2	
		Foundation of Psychiatry II	Psyc 2063	2	
		Major Psychiatry I	Psyc 3023	6	
		Major Psychiatry II	Psyc 3033	7	
		Minor Psychiatry	Psyc 3063	6	
		Child & Adolescent Psychiatry	Psyc 3073	5	
3	Psychiatric Rehabilitation	Substance related and Addictive disorders	Psyc 3053	7	
		consultation liaison psychiatry	Psyc 4053	6	
4	Professional, ethical/legal practice	Ethics and Forensic psychiatry	Psyc 3033	1	
Total(Aggregate)				57	

6. Share of the Themes/Courses/Items in Percentage (%)

Table 2: Share of the themes/courses/items and KSAs in percentage (%)

Themes	Course Name	Learning	Credit hour	Weight of course or proportion	Number of test items from each course	Cognitive						Affective	P	Total
						Remember	Understand	Apply	Analyze	Evaluate	Create			
Promotion/ prevention Share = 26.3% items from the total	Health promotion & disease prevention		5	5/15= 0.33	0.33*26.3 = 8.7	0.81	1.74	2.92	1.14	1.11	0. 18	0.8	-	8.7
	Community psychiatry		5	5/15= 0.33	0.33*26.3 = 8.7	0.62	2,2	2.62	1.84	0.62	0. 57	0.23		8.7
	Research Methodology		5	5/15= 0.33	0.33*26.3 = 8.7	0.75	2.64	2.31	1.65	0.58	0. 63	0.14		8.7
	Theme one total credit		**15**											
Curative Share = 49.1% items from the total	Foundation of Psychiatry I		2	2/28= 0.07	0.07*49.1= 3.44	0.16	1.86	1.27	0.15	-	-	-		3.44
	Foundation of Psychiatry II		2	2/28= 0.07	0.07*49.1= 3.44	0.51	1.43	1.19	0.13	0.18	-	-		3.44
	Major Psychiatry I		6	6/28= 0.21	0.21*49.1= 10.31	1.22	2.73	3.02	0.84	8.84	0. 66	-	-	10.31

	Major Psychiatry II		7	7/28=0.25	0.25*49.1=12.28	1.91	2.67	4.93	1.33	0.51	0. 93	-	-	12.28
	Minor Psychiatry		6	6/28=0.21	0.21*49.1=10.31	0.87	1.2	5.7	1.68	.26	0. 39	0.21	-	10.31
	Child & Adolescent Psychiatry		5	5/28=0.18	0.18*49.1=8.34	0.66	2.61	3.37	0.88	0.43	0. 39			8.34
	Theme two total credit		**28**											
Psychiatric Rehabilitation Share = 22.8% items from the total	Substance related and Addictive disorders		7	7/13= 0.54	0.54*22.8= 12.31	2.63	4.56	3..96	0.46	0.43	0. 27	-		12.31
	consultation liaison psychiatry		6	6/13= 0.46	0.46*22.8= 10.49	1.14	2.29	3.83	1.12	1.15	0. 96	-		10.49
	Theme three total credit		**13**											
Professional, ethical/ legal practice Share = 1.8% items from the total	Ethics and Forensic psychiatry		1	1/1 = 1	1*1.8= 1.8	0.17		0.34	0.82		0. 24	-	0.23	1.8
	Theme four total credit		**1**											
Total for the program			57											

7. Test blueprint Table (Table of Specification)

Table 3: Test Blue-Print table

Ministry of Education (Table 3) Higher Education Sub-sector Test Blueprint (Table Specification) for BSc. in Psychiatry Nursing													
Themes and Share of the team	**Name of the Courses and share of the course**	**Cr Hr**	**General objective/Competency**	**Specific objectives /learning outcomes**	**Learning outcomes**								**No. of items**
					Cognitive						**Affective**	**Psychomotor**	
					Remembering	Understanding	Application	Analysis	Evaluation	Creation/			
Promotion/ prevention (26.3%)	Health promotion & disease prevention (8.7%)	5	Understand epidemiological principles, approaches and methods to promote mental health and prevent mental illness.	• Identify common mental health problems in the community • Recognize community level of awareness about mental illness. • Build team involving resource persons to ensure necessary multifaceted assistance.	0.81 %	1.74 %	2.92 %	1.14 %	1.11%	0.18%	0.8 %	-	8.7 %
	Community psychiatry (8.7%)	5	Understand the role of community in improving	• Conduct relevant community assessment and work to strengthen	0.62 %	2.2%	2.62 %	1.84 %	0.62%	0.57%	0.23%	-	8.7 %

			mental health.	the health system targeted to mental health problems. • Mobilize the community. • Build team involving resource persons to ensure necessary multifaceted assistance. • Apply principle of effective communication								
	Research Methodology (8.7%)	5	Understand the basic apply basic research method to investigate health problems at as it applies to undergraduate Psychiatry students to the improve quality of service; promote the health status of patients and families and communities.	• Conduct relevant community assessment and work to strengthen the health system targeted to mental health problems. • Acquire skill and knowledge helps them to identify, analyse and prioritize community based mental health and health related problems. • Integrate newly devised and	0.75 %	2.64 %	2.31 %	1.65 %	0.58%	0.63%	0.14%	-	8.7 %%

				approved national protocols and guidelines in to day to day practice. • Apply and maintain up-to-date psychiatry nursing practice.									
Curative (49.1%)	Foundation of Psychiatry I (3.44%)	2	The course is designed to introduce psychiatry services by applying knowledge of biomedical sciences and psychiatry code of ethics and moral obligations	▪ Understand and apply ethical decision-making skills in psychiatry practice. ▪ Understand and point out infection prevention and patient safety principles ▪ Apply the basic concepts of biochemistry in psychiatry practice ▪ Provide basic and holistic patient care	0.16 %	1.86 %	1.27 %	0.15 %	-	-	-	-	3.44 %
	Foundation of Psychiatry II (3.44%)	2	The course is intended to equip students with adequate opportunity to learn the theoretical background of psychiatry	• Comprehend basic normal functions of human body systems • Identify and Apply the knowledge and skills of anatomy in psychiatry practice • Apply the knowledge	0.51 %	1.43 %	1.19 %	0.13 %	0.18%	-	-		3.44 %

			professional, basic biomedical science, and basic psychiatry service; introduce and demonstrate the related skills to acquire the fundamental knowledge, skills and attitudes	and skills of physiology in psychiatry practice • Analyze professional code of ethics in psychiatry profession • Apply the principles of aseptic and sterile technique when practicing patient care • Apply basic first aid and accident prevention measures. • Perform basic nursing skills in ethical and professional manner as per expected workplace standards									
	Major Psychiatry I (10.31%)	7	The aim of this course is to make students acquainted with definitions diagnosis and basic concepts of Major psychiatry I disorders	• Define different major I psychiatry disorders 2 • Describe epidemiology of different major psychiatry I disorders • Apply DSM-5 diagnostic criteria of	1.22 %	2.73 %	3.02 %	0.84 %	1.84%	0.66%	-		10.31%

				different major psychiatry I disorders • Manage patients with different major psychiatry I disorder									
	Major Psychiatry II (12.28%)	6	The purpose of this course is to make graduates equip with definition ,diagnosis and management of different major psychiatry disorders	• Define different types of clinical neuropsychiatric disorders • Apply DSM-5 diagnostic criteria of major psychiatric disorders II disorders • Apply bio-psychosocial management for patient with clinical-neuropsychiatry disorders	1.91 %	2.67 %	4.93 %	1.33 %	0.5 1%	.93 %	-	-	12.2 8%
	Minor Psychiatry (10.31%)	6	The aim of course is to make the graduates acquainted with definitions and basic concepts of minor psychiatric disorders.	• Describe some of minor psychiatric disorders • Discuss minor psychiatric disorders • Differentiate the DSM-5 diagnostic criteria of minor psychiatric disorders • Make clinical judgments and	.87%	1.2%	5.7%	1.68 %	.26 %	0.3 9%	.21 %	-	10.3 1

				decisions, based on the available evidence • Apply psychiatric screening tools used to screen minor psychiatric disorders • Differentiate different treatment options for patients with minor psychiatric disorder								
	Child & Adolescent Psychiatry (8.34%)	5	Understand, Diagnose and manage and differentiate various common childhood disorders	• Define childhood psychiatry disorder • List the Sign and symptoms of childhood psychiatric disorders • Know the DSM-V Diagnostic criteria of childhood psychiatric disorders • Differentiate the Management options for child hood psychiatric disorders	0.66 %	2.61 %	3.37 %	0.88 %	.43 %	0.3 9%	-	-	8.34 %
Psychiatric Rehabilitation (22.8%)	Substance related and Addictive disorders	7	The main purpose of this course is to understand, diagnose,	• Define substance use and addictive disorders • Identify types of substance use and addictive disorders	2.63 %	4.56 %	0.76 %	0.46 %	0.4 3%	0.2 7%	-	-	12.3 1%

	(12.31%)		manage, and differentiate various common substance use and addictive disorders.	• Explain mental health assessment related to substance use and addictive disorders • Differentiate substance use and addictive disorders • Administer pharmacological management of substance use and addictive disorders									
	Consultation liaison psychiatry (10.49%)	6	This course is intended to help students to develop skills in therapeutic communication and in developing client- clinician relationship and to manage, support and rehabilitate patients with mental illness as well as medical illness in the hospital and in the community.	➢ Recognize mental illness in clients with chronic medical problems in the health institution and in the community. ➢ Identify factors contributing to mental illness and chronic medical problem ➢ Understand the classification of mental illness based on DSM – 5. ➢ Identify psychiatric disorders and provide treatments in the health institutions and in the community. ➢ Use of Bio-Psycho-Social methods to provide appropriate care for mentally ill patients	1.14 %	2.29 %	3.83 %	1.12 %	1.15%	0.96%	-	-	10.49%

				in the health institutions and in the community while giving the medical problems. ➢ Demonstrate skills in therapeutic communications. ➢ Refer cases that require further investigation and treatment. ➢ Teach the community about preventive, curative and promotive aspects of mental health problems and maintenance of mental health.									
Professional, ethical/ legal practice (1.8%)	Ethics and Forensic psychiatry (1.8%)	1	The objective of this course is to train professionals with basic principles of ethics and forensic psychiatry..	• Identify and apply general principles of ethics in forensic psychiatry • Understand and apply Ethio -Legal aspects of forensic psychiatry • Apply mental health and psychiatry professionalism, ethics and legal practice	0.17 %	0.34 %	.82%	-	0.2 4%	-	.23 %		1.8 %

8. Calculation on share of themes, courses, competencies for a Program

Table 4: Calculation on share of themes, courses, competencies for a Program

Themes	Course Name	Learning outcomes	Credit hour	Weight of course or proportion	Number of test items from each course	**Cognitive**						**Affective**	**Psychomotor**	Total
						Remember	Understand	Apply	Analyses	Evaluate	Create			
Theme One Share = 26 items from the total	Health promotion & disease prevention		5	5/15 = 0.33	0.33*26 = 9	1	2	2	1	2	1	-	-	9
	Community psychiatry		5	5/15 = 0.333	0.33*26 = 9	1	2	2	1	2	1	-		9
	Research methodology		5	5/15 = 0.33	0.33*26 = 9	1	1	2	2	2	1	-		9
	Theme one total credit		**15**											
Theme Two Share = 49 items from the total	Foundation of Psychiatry I		2	2/28 = 0..07	0.07*49 = 4	-	2	1	1	-	-		-	4
	Foundation of Psychiatry II		2	2/28 = 0.07	0.07*49 = 4	-	1	2	1	-	-	-		4
	Major psychiatry I		6	6/28 = 0.21	0.21*49 = 10	1	1	3	2	2	1	-		10

	Major Psychiatry II		7	7/28= 0.25	0.25*49 = 10	1	2	3	2	1	1			10
	Minor psychiatry		6	6/28 = 0.21	0.21*49 = 11	2	3	3	1	1	1	-		11
	Child and Adolescent psychiatry		5	5/28=0.17	0.17*49=9	1	1	3	2	1	1	-		9
	Theme two total credit		**28**											
Theme Three Share = 23 items from the total	Substance related and Addictive disorders		7	7/13 = 0.54	0.54*23 = 13	2	4	3	1	1	1	1	-	13
	Consultation liaison psychiatry		6	6/13 = 0.46	0.46*23 = 11	1	3	4	1	1	1	-		11
	Theme three total credit		**13**											
Theme four Share=2 items	Ethics and Forensic psychiatry		**1**	1/2=0.5	0.5*2=1			1					-	1
	Theme four total credit		**1**											
Total for the program			57			7	18	19	16	16	9	3	12	100

9. Share of Competencies (KSA) per Courses / Summery/

Table 5: Share of Competencies (KSA) per Courses

R.No.	Themes	Course Name	Cr. Hours	Share of Courses (%)	Share of Competencies (in %)			Remark
					Knowledge	Skill	Attitude	
1.	Promotion/ prevention	Health promotion & disease prevention	5	8.7	3.9	1.9	2.9	
		Community psychiatry	5	8.7	4.35	2.175	2.175	
		Research Methodology	5	8.7	4.35	2.65	1.7	
2.	Curative	Foundation of Psychiatry I	2	3.44	0.72	1.72	1.0	
		Foundation of Psychiatry II	2	3.44	0.54	1.72	1.18	
		Major Psychiatry I	6	10.31	4.82	3.55	1.94	
		Major Psychiatry II	7	12.28	5.14	4.36	2.78	
		Minor Psychiatry	6	10.31	5.16	4.58	0.57	
		Child & Adolescent Psychiatry	5	8.34	4.17	3.09	1.08	
3.	Psychiatric Rehabilitation	Substance related and Addictive disorders	7	12.31	6.16	5.64	0.51	
		consultation liaison psychiatry	6	10.49	6.22	4.27	-	
4.	Professional, ethical/ legal practice	Ethics and Forensic psychiatry	1	1.8	0.6	1.2	-	
Total (Aggregate)			57	100	46.13	36.86	15.84	

10. Conclusion

Exit exams may play a significant part in developing graduates who are knowledgeable, skilled, and have matured attitudes. It can act as a quality control for efficacy, which helps to prepare graduates who are competent. Additionally, it aids in raising the caliber and efficiency of academic programs. It can also provide a framework for collaboration across academic programs at other universities to collaborate on raising the caliber of their respective programs.

In view of this, this document is produced to assist the setting of the exit examinations for Psychiatry Nursing program, which is being delivered by Ministry of Education. To meet the graduation profile, competency and learning outcome, exit exam competency selection and identifying core course was done for 2015 E.C graduating students. As a result, preparing test blueprint is necessary to prepare fairly distributed items based on the above criteria.