Ministry of Education

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

Band: three (3)

Program: - Bachelor of Science (B.Sc.) degree in public health

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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 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

A graduate Public Health Professional, given the knowledge, attitude and skills acquired from the program is expected to fulfill the following minimum requirements:

- Assess community health needs, prioritize, identified problems and Intervene on the identified health and health related problems

- Plan, implement and evaluate public health interventions programs at Health Care settings.
- Collect, document, process, analyze, and disseminate health information
- Participating in health promotion, prevention and control of diseases
- Provide curative and rehabilitative services
- Provide early diagnosis, basic treatment and referral of difficult cases
- Provide comprehensive outpatient and inpatient services.
- Perform minor surgical and obstetric procedures
- Perform medical diagnostic and therapeutic procedures
- Mobilize individuals, families and communities for different public health activities
- Undertake operational health researches and involve in data management process
- Organize and participate to prevent and control disaster and emergency situations
- Promote and engage in inter-sectoral activities

Knowledge

- Identify the basic principles and functions of management
- Describe basic principles involved in management of resources.
- Describe the history of health services in Ethiopia and determinants to Health
- Understand its concepts and strategies of primary health care
- Appreciate different schemes of financial health care
- Describe concepts of parasitism, the relationships between parasites and host, between parasites and environment
- Illustrate the life cycle of specific parasites and identify the important parasitic agent affecting human health
- Describe some important arthropods responsible for the transmission of disease causing parasites
- Comprehend basic concepts and principles of Environmental Health and Ecology applicable to disease prevention and health promotion.
- Understand importance of Nutrition in Health Promotion and Disease Prevention
- Explain the links between diet and disease and describe prevention and management of nutritional problem
- Understand elementary concepts of economics and its significance.
- Analyze determinants of demand and cost of production in health care
- Appraise the roles and limitations of markets and government in the finance and organization of health care.

- Compare different systems of funding and organizing health care in terms of cost containment, equity, efficiency and incentives.
- Identify the common behavioral factors linking prevention of unintended pregnancy, STIs and HIV,
- Discuss the potential physical, emotional, economic, and social consequences of unintended pregnancy, STI infection, and HIV infection on adolescents

Skill

Exercise the way to manage health team

•Design Organizational change

•Identify and intervene environmental and ecological factors related to human health

•Correctly measure & interpret anthropometric indices

•Properly assess , identify problem and counsel the mothers on child feeding practice

•Plan for needs assessment, implementation, and monitoring and evaluation phases of reproductive health, HIV/AIDS and sexual and gender-based violence activities for emergency-affected populations

•Provide high quality and standard practice of sexual and reproductive health service

•Calculate and interpret various measures of central tendency and dispersion.

•Identify and make use of data from existing health records.

•Acquaintance with research proposal writing, critical appraisal of scientific paper

•Take patient history and perform a systematic physical examination for the approach towards diagnosing health problems.

•Identify Bio- physical and Bio-chemical abnormalities.

•Order appropriate and feasible lab and other investigations

Diagnose medical disorders of patients and put differential diagnosis of the disorders

•Mange patient disorders by prescribing the correct medications, by providing counselling, follow-up , care and prevention of internal diseases

•Acquire the working skill to handle the essential lifesaving surgical skills under a rural setting..

•Develop skills in paediatrics history taking, physical examination, routine laboratory investigations and diagnostic techniques in order to arrive at a diagnosis.

•Manage sick children and acquire skills in teaching mothers about childcare.

•Develop skills in Gynecologic and obstetrics history taking, examination & investigations in order to make a diagnosis and learn fundamentals of management of obstetric and Gynaecological problems

•Develop skill to manage abnormal Obstetric & Gynecologic cases including those requiring operative procedures and decide on cases that needs hospital attention

•To provide safe care to women during all stages of labor and to her new born

•To recognize deviation from the normal course of labour

Learn principles of management of obstetric and Gynecologic emergencies

Attitide

- Understand code of ethics for medical practice and public health services
- Applies ethical theories and principles to make decisions related to health care delivery
- applied principles of professional conduct in their future relationships with patients, nurses and other health workers and organizations providing health care
- Understand ethical issues related to research involving human subjects
- Understand and interpret public health laws
- Assist clients/patients, in the performance of those activities contributing to health or its recovery.
- Efficient use of available resources
- Keep cliens privacy while providing health care service
- Appropriate client provider interaction
- Providing equitable health care service
- Recognize important social and psychological aspects of patient care and apply principles and concepts in helping individuals in need of health care.

4.OBJECTIVES OF THE PROGRAM

2.2 General Objective

- To produce competent Public Health professionals who undertake promotive, preventive, curative and rehabilitative services including management and implementation of PHC services compatible to the needs of the population

2.3 Specific Objectives

- Assessing community health needs and prioritize identified problems
- Intervening on the identified health and health related problems of the community
- Promoting health, preventing and controlling disease
- Providing curative and rehabilitative health services
- Managing health services and health offices
- Undertaking operational and problem solving researches
- Having professional attitudes, ethical conducts and social responsibilities;
- Undertaking Caring, Compassionate and Respectful service with ICT and entrepreneurial skill

5.Categorizing Courses of the Program in the themes

National Exit Examination in Public health program for undergraduate students' competency has two themes. These are clinical and public themes .Under major clinical theme, four courses such as internal medicine, surgery, paediatrics and Obstetrics and Gynaecology are included. Public health , Biostatistics, epidemiology, Research Methods ,Health Service Management ,Health economics ' Population development , Reproductive health , Human nutrition, Environmental health and Health education course are categorized under public themes. , For exit exams documentation the themes in Public health program can be generalized by the table here below:

Table 1:thems and courses included in the test blue print

S. No	List of Themes	List of courses	Course code	C.hrs
1	**Major clinical them**	Internal medicin	PubIMed3121	7
		Surgery	Surg3122	7
		Pediatrics	Paed3123	7
		Obstetrics and gynaecology	ObGy3124	7

S. No	List of Themes	List of courses	Course code	C.hrs
2	**Public theme**	Health service management	PubH2073	3
		health economics	PubH2073	2
		Human nutrition	PubH2061	2
		Environmental health and ecology	PubH2082	3
		Introduction to Public health	PubH2081	1
		Reproductive health	PubH2062	2
		Biostatistics	PubH3101	4
		Epidemiology	PubH3102	3
		Research methods	PubH3104	2
		Health education	PubH3084	2

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	Analyze	Evaluate	Create			
Major clinical Share = 53.84%	Internal medicine		7	7/28= 0.25	0.25*53.84= 13.46	1	2.46	3	2		2	1	2	13.46
	Surgery		7	7/28= 0.25	0.25*53.84= 13.46	3	3.46	4				2	1	13.46
	Gynacology and obstetrics		7	7/28= 0.25	0.25*53.84= 13.46	3			6		1	2	1.46	13.46
	Pediatrics		7	7/28= 0.25	0.25*53.84= 13.46	2	-	-	3	3	1.46	3	1	13.46
	Theme one total credit		**28**			**9**	**5.92**	**7**	**11**	**3**	**4.46**	**8**	**5.46**	**53.84**
Public health Share = 46.16% items from the total	Health service management		3	3/24 = 0.125	0.125*46.16= 5.77	2.3	1.17			2.3				5.77
	Health economics		2	2/24 = 0.083	0.083*46.16= 3.83	1.28	0.64	1.92						3.84
	Human nutrition		2	2/24 = 0.083	0.083*46.16= 3.83	0.64		0.64		0.64			1.92	3.84
	Environmental health and Ecology		3	3/24 = 0.125	0.125*46.16= 5.77		2.46	2.46					0.88	5.8

	Introduction to public health		1	0.041	0.041*46.16=1.89	0.96	0.96							1.92
	Reproductive health		2	2/24 = 0.083	0.083*46.16= 3.83	1	1					0.56	1.28	3.84
	Biostatistics		4	4/24= 0.166	0.166*46.16=7.66	1.27	2.54						3.85	7.66
	Epidemiology		3	3/24 = 0.125	0.125*46.16= 5.77	2.16	2.16		0.72				0.77	5.81
	Research methods		2	2/24 = 0.083	0.083*46.16= 3.83	1.29						1.27	1.27	3.83
	Health education		2	2/24 = 0.083	0.083*46.16= 3.83	0.96	1					0.88	1	3.84
	Theme two total credit		**24**			**11..86**	**11.93**	**5.02**	**0.72**	**2.94**		**2.71**	**10.97**	**100%**

Table 2:Share of the Themes/Courses/Items in Percentage (%)

Themes	Name Courses	Credit hour	Share of the themes in %	General Objective/ Expected Competencies to be measured	Specific Objectives/ Learning Outcomes	Competencies								Total %s
						Knowledge						Skill	Attitude	
						Remembering	Understanding	Application	Analysis	Evaluation	Creation/			
Major clinical	Internal medicine(weight =0.25)	7	53.84	. Use acquired acknowledge, skill and experiences and understanding of internal diseases and approaches how to diagnose, treat and care of patients with internal diseases.	✓ perform a systematic physical examination ✓ To demonstrate history taking approach ✓ Distinguish between normal and abnormal physical findings. ✓ Identify differential diagnosis of the major medical disorders ✓ Able to distinguish the most common disease internal to human body from history and other diagnostic investigation (e.g laboratory findings) ✓ Plan appropriate treatment investigation plan	1	2.46	3	2		2	2	1	13.46

					✓ Plan appropriate treatment for the given diagnosis ✓ Relate appropriate investigation with diagnosis ✓ To judge patients' response for treatment and complication of common systemic disorders ✓ Show a respect for patient									
	Surgery	7		Use their acquired basic knowledge and skill to tackle the most prevailing surgical injuries and to handle and manipulate essential lifesaving surgical procedures under rural settings. (weight =0.25)	✓ Distinguish the potential differential diagnosis for the given sign/symptom ✓ Recall basic knowledge in the most prevailing surgical injuries from the standpoint of first aid. ✓ Manipulate essential lifesaving surgical procedures under rural settings. ✓ Perform essential lifesaving surgical procedures under rural settings. Able to Provide patient center care	3	3.46	4				2	1	13.46
	Gyn/obse	7		Apply basic knowledge and	✓ Valuing social ,emotional needs of pregnant women ✓ Identify existing maternal and infant mortality and	3			6		1	2	1.46	13.46

				understand of the physical, social and emotional needs of the pregnant woman and identify and manage existing maternal and infant mortality and morbidity problems in the community, assess some abnormal obstetrical cases that need emergency manipulation and decide on cases that require exclusive hospital management.	morbidity problems in the community ✓ Examine some abnormal obstetrical cases that need emergency manipulation ✓ Distinguish cases that require exclusive hospital management. ✓ manage existing maternal and infant morbidity problems in the community ✓ Perform normal delivery									
	Pediatrics	7		Use basic understanding of normal growth and development of infants and children, basic mechanisms of processes peculiar to pediatrics in order to explain clinical signs and symptoms and develop skills in pediatric history taking, physical examination,	✓ understanding of basic normal growth and development of infants and children ✓ Distinguish diseases from other similar differential diagnosis ✓ Perform pediatric history taking ✓ Perform pediatric physical examination Plan pediatric diagnostic investigation Manage sick children and teach mothers about child care. Valuing the feeling of sick baby and feeling of mother	2	-	-	3	3	1.46	3	1 1	13.46

				identifying routine laboratory investigation and diagnostic techniques and able to manage sick children and teach mothers about child care.										
Total thame crh	28													53.84

Table 3:Test blueprint Table (Table of Specification)

Public health	Health service management	3	46.15	Understand and apply basic principles and function of management in health care, Organize a given health system to perform effectively and efficiently, use appreciate different schemes of financial health care and consider equity in provision of health care.	Identify the basic principles and functions of management Describe the history of health services in Ethiopia Understand concepts and strategies of primary health care Exercise managing health team Design Organizational change	2.3	1.17					2.3		5.77
	Health economics	2		Understand and apply basic concept of	Appreciate different schemes of financial health care		1.28	0.64	1.92					3.84

				Economics to the health context.	Clarify concepts of economics and its significance									
					Analyze determinants of demand and cost of production in health care									
					Appraise the roles and limitations of markets and government in the finance and organization of health care.									
					Compare different systems of funding									
					Organize health care in terms of cost containment, equity, efficiency and incentives.									
	Human nutrition	2		Understand major nutrients and their sources; the impact how nutrient/food affects our health, identify existing nutritional problems and apply appropriate nutrition interventions ,	✓ Indicate importance of Nutrition in Health Promotion and Disease Prevention	0.64		0.64		0.64		1.92		3.84

Public health	Health service management	3	46.15	Understand and apply basic principles and function of management in health care, Organize a given health system to perform effectively and efficiently, use appreciate different schemes of financial health care and consider equity in provision of health care.	Identify the basic principles and functions of management Describe the history of health services in Ethiopia Understand concepts and strategies of primary health care Exercise managing health team Design Organizational change	2.3	1.17					2.3		5.77
				Apply acquired knowledge and skills, identify and intervene environmental and ecological factors related to human health, understand basic concepts and principles	✓ Distinguish the links between diet and disease ✓ Describe prevention and management of nutritional problem ✓ Correctly measure & interpret anthropometric indices ✓ Assesse child feeding practice									

Public health	Health service management	3	46.15	Understand and apply basic principles and function of management in health care, Organize a given health system to perform effectively and efficiently, use appreciate different schemes of financial health care and consider equity in provision of health care.	Identify the basic principles and functions of management Describe the history of health services in Ethiopia Understand concepts and strategies of primary health care Exercise managing health team Design Organizational change	2.3	1.17					2.3		5.77
				of Environmental Health and Ecology applicable to disease prevention and health promotion.	✓ Counsel the mothers on child feeding practice									
	Environmental health and ecology	3			Distinguish the relationships between parasites , host, and environment •Illustrate the life cycle of specific parasites Identify the important parasitic agent affecting human health Identify environmental and ecological factors Intervene on environmental and		2.46	2.46				0.88		5.8

Public health	Health service management	3	46.15	Understand and apply basic principles and function of management in health care, Organize a given health system to perform effectively and efficiently, use appreciate different schemes of financial health care and consider equity in provision of health care.	Identify the basic principles and functions of management Describe the history of health services in Ethiopia Understand concepts and strategies of primary health care Exercise managing health team Design Organizational change	2.3	1.17					2.3		5.77
					ecological factors related to human health Describe some important arthropods responsible for the transmission of disease causing parasites Illustrate basic concepts and principles of Environmental Health and Ecology applicable to disease prevention and health promotion.									

Public health	Health service management	3	46.15	Understand and apply basic principles and function of management in health care, Organize a given health system to perform effectively and efficiently, use appreciate different schemes of financial health care and consider equity in provision of health care.	Identify the basic principles and functions of management Describe the history of health services in Ethiopia Understand concepts and strategies of primary health care Exercise managing health team Design Organizational change	2.3	1.17					2.3		5.77
	Introduction to Public health	1		Use concept of public health. Compare and contrasts the approaches in public health and clinical medicine, Identify factors affecting health. Understand relationship between health and	✓ Identify community health problems ✓ Compare and contrasts the approaches in public health and clinical medicine, ✓ Associate the relationship between health and development ✓ Describe health system and primary health care ✓ Describe indicators of health status of a	0.96	0.96							1.92

Public health	Health service management	3	46.15	Understand and apply basic principles and function of management in health care, Organize a given health system to perform effectively and efficiently, use appreciate different schemes of financial health care and consider equity in provision of health care.	Identify the basic principles and functions of management Describe the history of health services in Ethiopia Understand concepts and strategies of primary health care Exercise managing health team Design Organizational change	2.3	1.17					2.3		5.77
	Reproductive health	2		Use acquired knowledge and skill on reproductive health; provide appropriate reproductive health care service to the population. Monitoring and evaluation of RH programs and National RH Strategy.	✓ •Understand and advocate the role of women in development ✓ Apply need assessment, implementation, and monitoring and evaluation phases of reproductive health for emergency-affected populations ✓ Provide high quality and standard practice of sexual and reproductive	1	1					1.28	0.56	3.84

Public health	Health service management	3	46.15	Understand and apply basic principles and function of management in health care, Organize a given health system to perform effectively and efficiently, use appreciate different schemes of financial health care and consider equity in provision of health care.	Identify the basic principles and functions of management Describe the history of health services in Ethiopia Understand concepts and strategies of primary health care Exercise managing health team Design Organizational change	2.3	1.17					2.3		5.77
	Biostatistics	4		Understand and apply statistics to the fields of medicine and public health, managing health and health related data in research and in the delivery of health services, generating credible and	Identify the role of statistics in health sciences •Differentiate the various forms of data and variables. explain the main uses of statistical methods in the broad field of health care Use different methods of data collection, data organization and presentation and data summarization. Calculate and interpret various	1.27	2.54					3.85		7.66

Public health	Health service management	3	46.15	Understand and apply basic principles and function of management in health care, Organize a given health system to perform effectively and efficiently, use appreciate different schemes of financial health care and consider equity in provision of health care.	Identify the basic principles and functions of management Describe the history of health services in Ethiopia Understand concepts and strategies of primary health care Exercise managing health team Design Organizational change	2.3	1.17					2.3		5.77
				dependable evidence to guide health sector activities.	measures of central tendency and dispersion. Identify and use of data from existing health records.									

Public health	Health service management	3	46.15	Understand and apply basic principles and function of management in health care, Organize a given health system to perform effectively and efficiently, use appreciate different schemes of financial health care and consider equity in provision of health care.	Identify the basic principles and functions of management Describe the history of health services in Ethiopia Understand concepts and strategies of primary health care Exercise managing health team Design Organizational change	2.3	1.17					2.3		5.77
	Epidemiology	3		Understand basic concepts of epidemiology and communicable disease epidemiology, measure disease occurrence, identify disease causation, distinguish epidemiological	✓ Define epidemiology ✓ Identify importance of epidemiology in medicine and public health, ✓ Explain the principles of Epidemiology ✓ Describe concepts of disease causation , ✓ Analyse the measures of disease and death ✓ Differentiate types of study design	2.16	2.16		0.72			0.77		5.81

Public health	Health service management	3	46.15	Understand and apply basic principles and function of management in health care, Organize a given health system to perform effectively and efficiently, use appreciate different schemes of financial health care and consider equity in provision of health care.	Identify the basic principles and functions of management Describe the history of health services in Ethiopia Understand concepts and strategies of primary health care Exercise managing health team Design Organizational change	2.3	1.17					2.3		5.77
	Research methods	2		Understand and apply basic working knowledge of health research methods, research proposal writing and application of common statistical packages.	Identify a basic working knowledge of health research method Develop research proposal and scientific paper Understand ethical issues related to research involving human subjects	1.29						1.27	1.27	3.83

Public health	Health service management	3	46.15	Understand and apply basic principles and function of management in health care, Organize a given health system to perform effectively and efficiently, use appreciate different schemes of financial health care and consider equity in provision of health care.	Identify the basic principles and functions of management Describe the history of health services in Ethiopia Understand concepts and strategies of primary health care Exercise managing health team Design Organizational change	2.3	1.17					2.3		5.77
	Health education	2		Use the three educational domains (Cognitive, affective & Psychomotor) on principles, methods & materials of health education ,understand and apply health related	✓ Illustrate communication, elements of communication and communication models ✓ Explain the principles, aims, and approaches of health education ✓ Describe the relationship between health and behaviour ✓ Mention factors that	0.96	1					1	0.88	3.84

Public health	Health service management	3	46.15	Understand and apply basic principles and function of management in health care, Organize a given health system to perform effectively and efficiently, use appreciate different schemes of financial health care and consider equity in provision of health care.	Identify the basic principles and functions of management Describe the history of health services in Ethiopia Understand concepts and strategies of primary health care Exercise managing health team Design Organizational change	2.3	1.17					2.3		5.77
				behaviours, Health Communication, research methods in health education and Health education planning & evaluation.	✓ influence human health behaviour ✓ Use the three educational domains (Cognitive, affective & Psychomotor) on principles, methods & materials of health education									

Public health	Health service management	3	46.15	Understand and apply basic principles and function of management in health care, Organize a given health system to perform effectively and efficiently, use appreciate different schemes of financial health care and consider equity in provision of health care.	Identify the basic principles and functions of management Describe the history of health services in Ethiopia Understand concepts and strategies of primary health care Exercise managing health team Design Organizational change	2.3	1.17					2.3		5.77
Total Thames chr	24													46.15

Table 4:Learning out come in terms of three domains(knowledge,Attitude and skill)

Themes	Course Name	Learning outcomes	Credit hour	Share of course from theme	Knowledge	Attitude	Skill	Share course from total program
z								
Major clinical Share = 53.84%	Internal medicine		7	0.25	10.46	1	2	13.46
	Surgery		7	0.25	109.46	2	1	13.46
	Gynacology and obstetrics		7	0.25	10	2	1.46	13.46
	Pediatrics		7	0.25	9.46	3	1	13.46
	Theme one total credit		**28**		**40.38**	**8**	**5.46**	**53.84**
Public health Share = 46.16% items from the total	Health service management		3	0.125	5.77	-	-	5.77
	Health economics		2	0.083	3.84			3.84
	Human nutrition		2	0.083	1.92	-	1.92	3.84
	Environmental health and Ecology		3	0.125	4.92		0.88	5.8
	Introduction to public health		1	0.041	1.92			1.92
	Reproductive health		2	0.083	2	0.56	1.28	3.84
	Biostatistics		4	0.166	3.81		3.85	7.66
	Epidemiology		3	0.125	5.04		0.77	5.81
	Research methods		2	0.083	1.29	1.27	1.27	3.83
	Health education		2	0.083	1.96	0.88	1	3.84
	Theme two total credit		**24**		**32.47**	**2.71**	**10.97**	**46.16**

8.Conclusion

This test blue print is prepared for graduate public health studentsfrom preliminary selected two themes which incorporates 14 courses in the competency document.These themes are categorized as major clinical and public themes. Major clinical theme includes internal medicine,surgery ,gynecological/obstetric, pediatrics.which accounts for 53.84% of the total item where as the public theme includes introduction to public health,Epidemiology,Biostatistics ,nutrition,reproductive health,health education,research methodology ,environmental health , health education and health service management which accounts for 46.16% from the total item.Further more the national exit exam for public health students should measure 72.85% of knowledge ,10.17% attitude and 16.43% skill .