

**Chittagong Veterinary and Animal Sciences University**  
**One Health Institute**  
**Masters in Public Health (MPH)**  
**July-December Semester Final Examination 2019**  
**Course title: Health Economics, Policy Planning and Ethics (Theory)**  
**Code: HEP-602**  
**Full marks: 40, Time: 2 hours**

(Figures in the right margin indicate full marks. Answer any 5 questions from the following)

1. a. Define health economics. 2  
b. Write its importance. 2  
c. Briefly describe different types of economic evaluation. 4
2. a. What is opportunity cost. 3  
b. Hernia operation in government hospital is not cost effective now a days –Justify. 5
3. a. Define ethics. 1  
b. Briefly describe principles of research ethics. 3  
c. Write very important 04 articles of Helsinki declaration. 4
4. a. Briefly describe research ethics related to vulnerable groups. 4  
b. Briefly describe 04 issues of publication ethics 4
5. a. Write 4 goals of national health policy 4  
b. What are the common problems of our health care delivery system. 4
6. a. Draw planning cycle. 3  
b. Describe components of planning process. 5



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**Masters in Public Health (MPH)**  
**July-December Semester Final Examination 2019**  
**Course title: Communication and Behavior (Theory)**  
**Code: COB-602**  
**Full marks: 40, Time: 2 hours**

(Figures in the right margin indicate full marks. Answer the following questions)

1. Define public health communication? What is the importance of communication in public health? 8
2. What are the components of communication? How are you overcome the barrier of communication? 8
3. Write down the different models of communication. Describe shanon weaver model. 8
4. Name some important theories of communication. Briefly describe health believe theory. 8
5. What is social cognitive theory? How you apply this theory in tuberculosis prevention and screening? 8



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**Masters in Public Health (MPH)**  
**July-December Semester Final Examination 2019**  
**Course title: Environmental and Occupational Health**  
**Code: EOH-602**  
**Full marks: 40, Time: 2 hours**

(Figures in the right margin indicate full marks. Answer any 5 questions from the following)

- |    |   |     |
|----|---|-----|
| 1. | a. Mention occupational accident according to OSHA.   | 1   |
|    | b. Illustrate disabling injuries that may occur in office.                                    | 3   |
|    | c. What are the health problems faced by the farmers in Bangladesh?                           | 4   |
| 2. | a. Define occupational health.  | 1   |
|    | b. What are the objectives of occupational health?  | 3   |
|    | c. Mention the role of different organizations causing environmental pollution in Bangladesh. | 4   |
| 3. | a. What is workplace disparity?   | 2   |
|    | b. Write work organization impact due to disparities.   | 2   |
|    | c. Contingent work influence organizational environment in different ways- justify it.        | 4   |
| 4. | a. Enumerate cancer situation in different occupations.                                       | 2   |
|    | b. Illustrate the special features of occupational cancer.                                    | 2   |
|    | c. Narrate the remedial measures to reduce the morbidity and mortality from this curse.       | 4   |
| 5. | a. What are the problems faced by the modern society due to industrialization?                | 4   |
|    | b. Discuss the control and logical measures in this perspective on situation analysis.        | 4   |
| 6. | Write short notes on any four:  | 2X4 |
|    | a. WHMIS  |     |
|    | b. Radiation hazard   |     |
|    | c. Sickness absenteeism   |     |
|    | d. Pneumoconiosis   |     |
|    | e. First aid  |     |
|    | f. Walking on objects   |     |



**Chattogram Veterinary and Animal Sciences University**

**MPH (One Health)**

**July-December, 2019**

**Subject: Molecular Epidemiology**

**Course code: MOE 602**

**Total Marks: 40; Time: 2 hours**

**(Figures in the right margin indicate full marks. Answer any four questions)**

- |   |   |   |    |
|---|---|---|----|
| 1 | a | Define gene, genome and DNA   | 2  |
|   | a | Explain the mechanism of transcription and translation in mammals                               | 8  |
| 2 | a | Explain mechanism of selectable marker and insertional inactivation to identify the right clone | 7  |
|   | b | Differentiate cloning vector from expression vector.  | 3  |
| 3 | a | What do you mean DNA sequencing?  | 2  |
|   | b | What is Sangers's reagent? How it helps to unfold an unknown sequence.                          | 8  |
| 4 | a | What is probe and hybridization?  | 2  |
|   | b | Explain Southern hybridization technique  | 8  |
| 5 |   | Elucidate different mechanism for production of transgenic animals                              | 10 |



**One Health Institute**  
**Masters in Public Health (MPH)**  
**July-December Semester Final Examination 2019**  
**Course title: Ecology**  
**Code: ECO-602**  
**Full marks: 20, Time: 2 hours**

(Figures in the right margin indicate full marks. Answer any 4 (FOUR) questions from the following)

1. a) Explain *ecosystem approaches to health*? Do we need a basic understanding of ecology to plan public health system? Why? 1+1
- b) Explain the terms *impact, adaptation, mitigation* and *resilience* in context of climate change and health? 3
2. a) How climate change affect human health in terms of risks and responses. 2
- b) Name the major climate sensitive infectious diseases with their causes. 3
3. a) Elucidate Carbon cycle and mention its impacts on mankind. 2
- b) What are the major ecosystems of the world? Give examples of producers, different levels of consumers and decomposers in the food web of an one of those ecosystems. 3
4. a) Give three examples of public health issues faced in Bangladesh which are linked to anthropogenic changes to ecosystem. 1+2
- b) Name few zoonotic diseases linked to altered food-web which are going to be major health concern in the future 2
5. a) Why biological diversity should be conserved? Give your comment on biological diversity in different types of ecosystem. 2
- b) Briefly write about the microplastic pollution of ocean ecosystem. How is it affecting us? What shall we do to prevent it? 1+1+1
6. a) List the components of a healthy ecosystem. 2
- b) What is food-pyramid? How are we changing it to make our future gloomy? 3
7. a) Define and classify ecosystem services with examples. 1+2
- b) Give four examples of the relationship between environmental changes and the existing infectious diseases on a global scale. 2



**Chittagong Veterinary and Animal Sciences University**  
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**Masters in Public Health (MPH)**  
**July-December Semester Final Examination' 2019**  
**Course Title: Anthropology (Theory)**  
**Course code: ANP-602**  
**Full marks: 40; Time: 2 hours**  
**Date: 17.12.2019**  
**Total script: 30 (Thirty)**

(Figures in the right margin indicate full marks. Answer any 4 (four) questions from the following)

1. a. What do you mean by Anthropology? Briefly describe the different kinds of Anthropology. 2+3=5  
b. Briefly describe the role of Anthropology in public health study. 5
2. a. Enumerate the social problems that affect the community health. 4  
b. What is juvenile delinquency? Describe the factors associated with juvenile delinquency. 2+4=6
3. a. Describe the causes of gender discrimination. 5  
b. Briefly describe the role of culture and religion in reduction of gender abuse related to community health. 5
4. a. Take care of maternal health is the root of better child health-Explain. 5  
b. Explain the man made pollutions that affect environmental health. 5
5. a. Elucidate the factors associated with the social changes in Bangladesh. 5  
b. Write down the importance of language and communication. 5



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**July-December Semester Final Examination 2018**  
**Course title: Health Economics, Policy Planning and Ethics (Practical)**  
**Code: HEP-602**  
**Full marks: 20, Time: 1 hour**

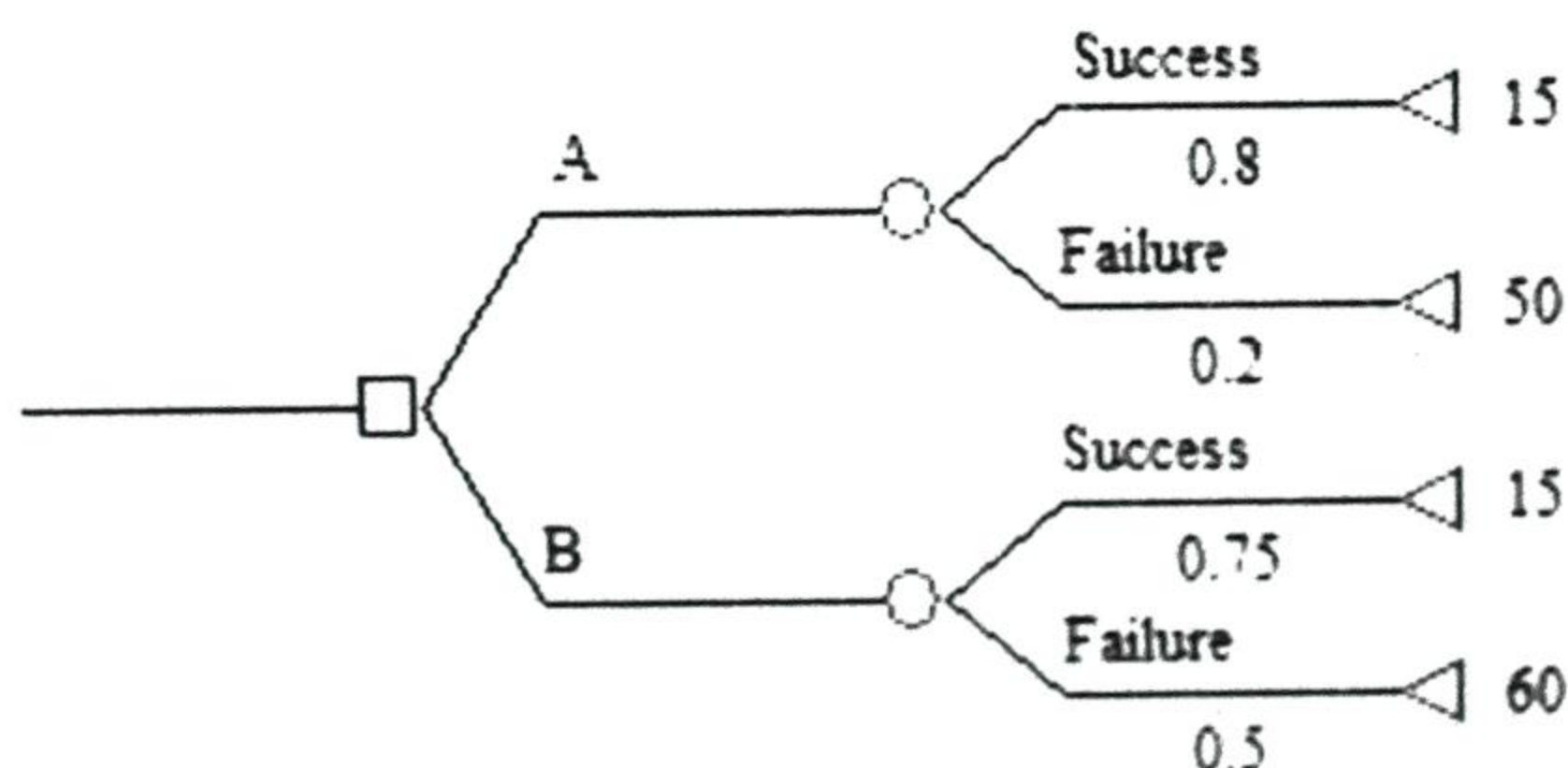
(Figures in the right margin indicate full marks. Answer any 2 questions from the following.  
 Each question contains equal mark (2X10))

1. If the market rate of interest is 11%, and the inflation rate is 5%, calculate the real rate of interest. After calculating the real interest rate, fill in the empty cells of the following table and calculate the undiscounted and discounted benefit-cost ratio, and interpret your results.

Year	Discount factor	Undiscounted		Discounted	
		Cost	Benefit	Cost	Benefit
1		37	0		
2		35	20		
3		20	30		
4		0	45		
Total					

$$PV = 1 / (1+r/100)^n$$

2. Calculate the expected monetary value for Decision A and B. The values in terminal nodes are the cost of the decision in US\$. What option will you choose?





3. 200 people are suffering from PLID disease. There are three options available for treatment – namely, bed rest, pain medication and surgery. You are interested in spending 1,500\$ for achieving per quality adjusted life years. The table represents a hypothetical cost utility analysis for this scenario. First, Fill in the empty cells of the following table. What is the treatment option you think suitable for this condition when compared to bed rest? Interpret your result.

Option	Cost per person		Total cost	QUALY gain	ICER
Bed rest	\$0		\$0	1100 QALY	NA
Pain medication	\$ 2500		\$ 500,000	1400 QALY	
Surgery	\$ 5000		\$	2300 QALY	

4. Write down the difference between:
- QALY and DALY
  - Cost effectiveness analysis Vs. Cost utility analysis
  - Financial vs. Economic costing



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July-December Semester Final Examination-2019  
Course Title-Anthropology (Practical)  
Course Code- ANP-602  
Full marks-20, Time-1 hour

Recently Bangladesh has been experiencing Dengu outbreak all over the country. What types of measures will you suggest to assess the prevalence of dengue. Do you think social awareness is imperative to control the dengue outbreak. If yes, describe briefly.



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