

L-4/T-2/URP

Date : 07/06/2014

BANGLADESH UNIVERSITY OF ENGINEERING AND TECHNOLOGY, DHAKA

L-4/T-2 BURP Examinations 2011-2012

Sub : **PLAN 453** (Environmental and Resource Economics)

Full Marks : 210

Time : 3 Hours

The figures in the margin indicate full marks.

USE SEPARATE SCRIPTS FOR EACH SECTION

SECTION – A

There are **FOUR** questions in this section. Answer any **THREE**.

1. (a) Distinguish between – **(5×3=15)**
 - (i) Renewable and non-renewable resource,
 - (ii) Private property right and state property right,
 - (iii) Average cost and marginal cost.

(b) Describe increasing and decreasing block pricing for water resource management. **(10)**

(c) Briefly state the limitations of Travel Cost Method (TCM). **(10)**

2. (a) The allocation of ground water confronts free-access common property problem. Explain briefly. **(18)**

(b) Suppose you have estimated people's willingness-to-pay in order to guarantee the use of the wetlands at eastern fringe for the inhabitants living surrounding the area through Contingent Valuation Method (CVM). What validity check would you do for the results obtained? Explain briefly. **(12)**

(c) Define 'scarcity rent'. **(5)**

3. (a) Briefly explain the strategies you would like to follow for managing Sundarban (a common pool resource) of Bangladesh. **(20)**

(b) Distinguish between – **(5×3=15)**
 - (i) Bequest value and existence value,
 - (ii) Stated preference and revealed preference,
 - (iii) Compliance costs and indirect costs of protecting and enhancing natural environment.

4. (a) What is contingent valuation method? **(4)**

(b) How do the characteristics of a specific environmental resource, extent of policy intervention and payment vehicle influence people's willingness-to-pay for that resource? Explain with relevant examples. **(5×3=15)**

(c) "An efficient allocation of surface water must strike a balance among a host of competing users". Explain briefly. **(16)**

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PLAN 453

SECTION – B

There are **FOUR** questions in this section. Answer any **THREE**.

5. (a) "As urban and regional planner one has to learn and implement the tools and techniques of environmental economics to improve quality of life of the citizens". – explain. (6)
- (b) "Neo-classical economical thinking is often blamed for environmental degradation" – do you agree? Justify your answer with appropriate diagram. (15)
- (c) Explain how 'spaceship economy' is completely opposite of 'cowboy economy'. (8)
- (d) Describe the basic covenants of 'steady state' economy? (6)
6. (a) Explain with appropriate diagrams how three efficiency conditions have to be fulfilled to attain pareto optimality. (15)
- (b) Why social welfare can not be achieved through social choice? (15)
- (c) What are the issues raised by the critics against "Tragedy of Common" concept as developed by G. Hardin? (5)
7. (a) Explain graphically why economic instruments are better than command and control instruments. (10)
- (b) "Both material flow and material balance model link environment and economics, their difference lies how they treat residue of production" – justify the statement. (10)
- (c) "Environmental economists used many tools to modify market and manage pollution. Some of those are also used by urban and regional planners for urban management" – name and describe the tools that are used both by economists and planners. (8)
- (d) Describe the different shades of green economics. (7)
8. (a) Write short notes on (Any three) (7×3=21)
- (i) Externalities,
- (ii) Hick and Kaldor corrections,
- (iii) Coase theorem,
- (iv) Median Voter theorem.
- (b) You have been assigned to develop appropriate non economic tools to manage environmental pollution. What are the issues you would consider before choosing a particular set of tools? (14)
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L-4/T-2/URP

Date : 11/05/2014

BANGLADESH UNIVERSITY OF ENGINEERING AND TECHNOLOGY, DHAKA

L-4/T-2 BURP Examinations 2011-2012

Sub : **PLAN 413** (Urban Management and Governance)

Full Marks : 210

Time : 3 Hours

The figures in the margin indicate full marks.

USE SEPARATE SCRIPTS FOR EACH SECTION

SECTION – A

There are **FOUR** questions in this section. Answer any **THREE**.

1. (a) Why does traditional governance usually fail to attract new ideas and employ young and visionary experts? How can good governance ensure scopes for creativity and competition in urban planning practice? (12)
- (b) Despite increasing role of private sector, formal public institutions are crucial actors in ensuring good governance. Justify the statement. (10)
- (c) Competition for being a 'global city' on one hand enhances the image of the city to the foreigners and investors, but on the other hand it might result in overlooking of local needs and interests. With this statement in mind, describe how globalization is a paradox in the context of urban governance. (13)
2. (a) Identify the problems of governance in Dhaka. (10)
- (b) Propose a model for better urban governance of Dhaka through a schematic diagram. (10)
- (c) Justify your model, proposed above, by describing how it will address the weakness of existing urban governance mechanism in Dhaka. (15)
3. (a) The 'idea of justice' is not limited to equal distribution; process and ultimate results-benefits and burdens of distribution should also be considered. With respect to the statement describe different concepts of justice. (15)
- (b) Based on different concepts of justice state examples of existence of justice-injustice or ways to ensure justice in a single sector or intervention having urban planning concern. (10)
- (c) While analyzing justice-injustice in any planning intervention motive or politics behind the intervention must be studied. Justify the statement with necessary example. (10)
4. Write short notes on the followings: (35)
 - (a) Role of Civil society for better urban governance
 - (b) Fragmented city
 - (c) Good governance and democracy
 - (d) Problems of pro-growth approach of governance.

PLAN 413

SECTION – B

There are **FOUR** questions in this section. Answer any **THREE**.

Provide diagram where necessary.

5. Write short notes on the followings (any five): **(5×7=35)**
- (a) Cool roof or green roof and how these should relate to zoning and building codes.
 - (b) Atmospheric inversion layer – draw its diagram, or, Draw a diagram showing how to mitigate urban heat island (UHI) effect in a residential area.
 - (c) Importance of urban management.
 - (d) Application of GIS in urban management.
 - (e) Why urban governance is critical for urban areas?
 - (f) Discuss the cheong-gye-cheon story of Korea.
6. (a) Discuss the impacts of rapid urbanization in cities of the developing countries. **(20)**
- (b) What are the urban indicators for managing fast growing cities and mega-cities? **(15)**
7. (a) Do you think urban greening, landscaping, tree plantation etc. are important aspects of urban management? Why? **(17 1/2)**
- (b) Discuss the 22 benefits of trees in urban areas. **(17 1/2)**
8. (a) Why are mega-cities vulnerable to disasters? State reasons. **(17 1/2)**
- (b) Discuss some of the catastrophes that might occur in mega-cities and how are they to be mitigated? **(17 1/2)**
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Sub : **PLAN 471** (Natural Hazards and Disaster Management)

Full Marks : 210

Time : 3 Hours

The figures in the margin indicate full marks.

USE SEPARATE SCRIPTS FOR EACH SECTION

SECTION – AThere are **FOUR** questions in this section. Answer any **THREE**.

1. (a) Draw a diagram to show the institutional set-up (by mentioning functions of each institution) of the Cyclone Preparedness Program (CPP) of Bangladesh. (15)
- (b) "The CPP of Bangladesh is a very good example for disaster management (from institutional framework perspective) and can be a replicable one" – Do you agree with the statement? Give your reasons through an example of any other disaster (with a proposed institutional framework) where you can apply this program. (20)
2. (a) Write down the seven step process of risk assessment. (10)
- (b) What is Risk Sensitive Land Use Planning (RSLUP)? Draw a diagram of RSLUP framework showing mainstreaming Disaster Risk Reduction (DRR) process in land use planning process. (5+10=15)
- (c) What is illegal logging? (5)
- (d) Explain with appropriate diagram the process of river bank erosion. (5)
3. (a) "Poor land use management by humans is a significant contributor for desertification" – Explain the statement with necessary example. (15)
- (b) Which factors are necessary for development of a cyclone storm? (12)
- (c) Write about two possible risk reduction measures of drought? (8)
4. (a) What are the differences between a Cyclone and a Tornado? (10)
- (b) Write about point and non-point sources of water pollution. (8)
- (c) Write down the gaps/weakness of GoB in implementing Disaster Risk Reduction (DRR) strategies. (12)
- (d) What is Pest Infestation? (5)

PLAN 471

SECTION – B

There are **FOUR** questions in this section. Answer any **THREE**.

5. (a) Explain the terms "Disaster" and "Hazard". (5)
(b) Which model explains the hazard from a macro perspective? Draw a neat diagram and explain its components with an example. (20)
(c) Distinguish between the terms "Mitigation" and "Preparedness" with examples. (10)
6. (a) What are the major challenges to address earthquake hazard in Dhaka city. (8)
(b) What are the determinants of vulnerability to earthquake? (15)
(c) What protective measures can be undertaken to reduce vulnerability to earthquake? Discuss how these measures are practiced in Dhaka city. (12)
7. (a) Discuss the issues which would make flood control in Bangladesh more difficult in future. (8)
(b) Briefly discuss the factors which contribute to flooding. Discuss two major causes which is responsible for urban flooding in Dhaka. (10+8)
(c) Explain how land use planning is an effective tool towards disaster risk reduction. (9)
8. (a) Bangladesh Climate Change Strategy and Action Plan (BCCSAP) is comprised of six pillars. Briefly discuss these components. (18)
(b) What are the aims of Community Based Disaster Risk Management (CBDRM)? Identify the indicators of a resilient community? (4+5)
(c) Briefly discuss the aspects those needed to be covered in post disaster review. (8)
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