

Sub : **PLAN 471** (Natural Hazard and Distance Management)

Full Marks: 210

Time : 3 Hours

USE SEPARATE SCRIPTS FOR EACH SECTION

The figures in the margin indicate full marks.

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

Abbreviations have their usual meanings.

1. (a) Describe different steps for flood management in Dhaka city with respect to- **(15+10=25)**
  - (i) Traditional Disaster Management Cycle.
  - (ii) Expand- Contract Model.
- (b) “Rainwater harvesting is a complementary multipurpose retention strategy”- Explain this statement in the context of Bangladesh. **(10)**
2. (a) “Magnitude of earthquake depends on types of plate movement”- Explain this statement with necessary illustrations. **(15)**
- (b) “Despite having different legislative measures, Dhaka city is still losing its wetlands in an alarming rate”- Explain this statement. **(15)**
- (c) “Intensity of earthquake is greatly affected by soil type”- Explain this statement. **(5)**
3. (a) Describing the vulnerability (pressure) as well as the measures to address the vulnerability (release) for local flood risk reduction and management in Dhaka city by developing a pressure and release (PAR) model. **(28)**
- (b) “There is a need to recognize the distinctive contexts for introduction of physical risk reduction measures into building or infrastructure”- Describe the contexts and their applicability in the Dhaka city. **(7)**
4. (a) “Vulnerability to earthquake varies largely with location, time of occurrence and building characteristics”- Explain this statement with relevant examples. **(12)**
- (b) Discuss the challenges of earthquake risk mitigation in Dhaka city. **(11)**
- (c) Discuss the financial and economic tools for disaster risk reduction in context of Bangladesh. **(12)**

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

5. (a) Briefly describe the mechanisms of tornado formation. **(15)**
- (b) Write down the similarities and dissimilarities between tornado and cyclone. **(12)**
- (c) “Drought planning should have three main components”-Explain. **(8)**

**PLAN 471**

6. (a) Describe the factors that contribute towards the decay of cyclone. (13)
- (b) Bangladesh Meteorological Department (BMD) has shown great danger signal 'X' (ten) the coastal areas and maritime ports of Bangladesh due to the formation of cyclone Mora in the Bay of Bangal. If you are given the responsibility to prepare disaster management plan, what measures would you take for the emergency response of cyclone Mora to protect the lives and properties of coastal people? (12)
- (c) Discuss the causes of pest infestation. (10)
7. (a) Explain how does river erode materials from its bed and bank. Briefly describe the ways in which these eroded materials are carried down. (20)
- (b) What is illegal logging? How does it affect deforestation? (7)
- (c) Explain socio-cultural and economic vulnerability in the context of cyclone hazard. (8)
8. (a) Give a brief outline of the two main characteristics of desertification. (14)
- (b) What do you understand by risk profiling? (5)
- (c) What is the influence of sea bed and tides on the height of storm surge? (8)
- (d) How land use planning can act as a risk reduction measures of drought? (8)
-

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) There is local government system in most of the countries. Yet many challenges and problems have emerged in governing towns and cities. Hence urban governance approach is proposed and practiced now-a-days. Explain the context and complexities related to the introduction and operation of urban governance. (19)  
 (b) From institutional dimension urban governance models are categorized as Managerial, Corporatist, Pro-growth and Welfare-oriented. Explain, briefly, these models. (16)
2. (a) Keeping in mind the features of good governance, design activities to improve the governance of street hawker issue in city corporation of Dhaka. (15)  
 (b) Show the relationship between the activities mentioned in the previous question with the features of good governance. Justify the relationship you have shown. (10+10)
3. (a) Differentiate between government and governance. (15)  
 (b) LGED's Urban Governance Improvement Project worked on five key areas – Citizen awareness and participation, Women's participation, Integration of urban poor, Financial accountability and sustainability and lastly Administrative transparency. For each area several activities were undertaken. Mention two from each area. (20)
4. Write short notes on the followings: (35)
  - (a) Weak Mayor-Council Structure
  - (b) Strong Mayor-Council Structure
  - (c) Commission System
  - (d) Council-Manager System
  - (e) Greater London Authority Structure

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

5. (a) "Though urban planners are involved both in urban planning and management there are fundamental differences between urban planning and urban management" – explain the differences. (8)

**PLAN 413**

**Contd ... Q. No. 5**

- (b) You are working as policy advisor to the Honorable Minister of Housing and Public Works of the Government of People's Republic of Bangladesh. Considering uncontrolled growth of the urban areas and speculation in urban land market would you suggest him to – **(6×2=12)**
- (i) Control the growth of the cities of Bangladesh? Justify your answer.
- (ii) Intervene in the urban land market? Explain the rationale behind your answer.
- (c) Khas land is an important source for urban manager in intervening the urban land market. What are the sources for khas land in Bangladesh? **(9)**
- (d) Explain the process(es) of land re-adjustment techniques with appropriate diagram(s). **(6)**
6. (a) "Over the years, different approaches to urban management have been developed. One of the most popular of approaches for urban management is 'Third Way Approach'? Name the different approaches that have been developed for urban management and the advantages of the 'Third Way Approach' over other approaches. **(4+4)**
- (b) Explain with example the differences between – **(3×2=6)**
- (i) Equality and Equity.
- (ii) Horizontal and Vertical equity.
- (c) Describe the issues, an urban manager must consider before employing any tool to measure and evaluate the impact of any intervention. **(9)**
- (d) What is 'livability' of a city? Describe the principles one has to consider to develop a livable city according to International Center for Sustainable Cities. **(2+10=12)**
7. (a) "Taxes on income and expenditure are widely practiced tools for generating revenue for the city" – describe the tools. **(16)**
- (b) What are the traits shown by informal settlements according to the UN-HABITAT? Why there is increasing growth of informal settlements in the cities of the developing world. **(4+5=9)**
- (c) One of the major tasks of urban managers is to manage urban poverty. Explain the challenges urban managers have to address to mitigate the problems of urban poverty considering context of the issue. **(10)**
8. (a) 'The Dhaka Metropolitan Development Plan 1996-2015' suggested various tools to control growth of the city. Describe these tools with appropriate examples. **(12)**
- (b) Define land tenure. 'Land tenure constitutes a web of intersecting interests' – do you agree? Justify your answer by providing examples. **(4+8=12)**
- (c) Though eviction is unwanted, it is happening all over the developing world. Describe the reasons for eviction. What are the alternatives urban managers could offer to decision makers to avoid eviction? **(6+5=11)**
-

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**.

Use Diagrams/illustration if necessary

1. (a) Define "Environmental Economics". How do you think the concepts of scarcity, externality and market failure are related with the idea of Environmental Economics? (12)
- (b) Discuss how the general thoughts of Neoclassical economics are controversial with respect to environmental consideration. (12)
- (c) What do you understand by the term "Steady State Economics"? Mention the rules necessary to fulfill the condition of steady state economics. (3+8)
  
2. Discuss the idea of efficiency in production using concepts of Edgeworth Box and Pareto Optimality. Assume your model has capital and labor as two factors of production and, firm A and firm B as producers. (25)
- (b) Mention and discuss the five conditions those are impossible to achieve in the social choice theory of K. Arrow. (10)
  
3. (a) How does a market use priced and unpriced goods? Discuss with appropriate examples. How do you think this idea is relevant to environmental economics? (15)
- (b) Discuss "Hick-Kaldor's Compensation Principle" with an example suitable in the context of Environmental economics. (15)
- (c) Depict the socially optimum level of output considering Marginal Net Private Benefit (MNPB) and Marginal External Cost (MEC). (5)
  
4. (a) Garbage disposal is a significant problem causing environmental pollution in Dhaka City. Government authorities have two options: i) Quantity control, ii) taxation. Which one you think will be more suitable approach to address this problem? Discuss with appropriate illustrations. (20)
- (b) Discuss the way "green tax" works. (10)
- (c) Mention the problems associated with setting green tax. (5)

**URP 453**

**SECTION – B**

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

5. (a) Renewable resources are - **(5×2=10)**
- i. naturally occurred items useful to mankind,
  - ii. can be renewed within economically meaningful time horizon.
- Explain the statements.
- (b) Write short notes on -
- i. Relationship between 'scarcity' and 'opportunity cost'. **(6)**
  - ii. Economic rationality criteria for consumers and producers of an economy. **(7)**
  - iii. Linkages between environment and economics. **(12)**
6. (a) Briefly explain the implications of Hotelling's rule while allocating non-renewable resources in a dynamically efficient manner. **(23)**
- (b) Briefly discuss the limitations of Travel Cost Method (TCM). **(12)**
7. (a) Discuss the relationship between - **(10×3=30)**
- i. 'Common-pool resource' and 'tragedy of commons'.
  - ii. Water pricing and efficient use of water.
  - iii. Payment vehicle and reliable results of Contingent Valuation Method (CVM).
- (b) What is 'backstop'? **(5)**
8. (a) Environmental benefit of an open space can be indirectly estimated through hedonic analysis. Briefly discuss. **(18)**
- (b) Allocation of water resource involves both static and dynamic optimization problems. Explain the statement. **(12)**
- (c) Define 'Contingent Valuation Method' (CVM). **(5)**
-