

Economics Discipline, Khulna University
BSS (Hons) 4th Year 1st Term Final Examination 2026; Session: 2024-2025
Course No.: 0311 15 Econ 4101; Course Title: Project Planning and Evaluation Technique
Full Marks: 60; Time: 03 Hours

The figures in the right margin indicate marks.

Section A

There are 04 questions in this section. Answer any 03 questions.

1. a) Define project planning. [CLO1; L1] 02
b) Explain the basic features of a project. [CLO1; L2] 03
c) Explain the purposes of undertaking development projects in developing countries like Bangladesh. [CLO1; L5] 05
2. a) Analyze the importance of project planning, including project idea generation, screening, and Terms of Reference (TOR) in effective project management. [CLO3; L4] 05
b) Evaluate the significance of market analysis, technical analysis, and financial projections in determining project feasibility and sustainability. [CLO3; L5] 05
3. a) What is Project Proforma? [CLO2; L1] 02
b) Describe the concept of Technical Assistance Project Proforma. [CLO2; L2] 03
c) Explain the major steps involved in formulating a development budget. [CLO2; L5] 05
4. a) 'NPV is considered superior to other capital budgeting techniques.' – Explain the statement. [CLO3; L2] 05
b) Develop a mechanism of BMRE that would be effective for promoting industrial development. [CLO6; L6] 05

Section B

There are 04 questions in this section. Answer any 03 questions.

1. a) Explain how an optimal portfolio is selected based on risk-return preference. [CLO3; L4] 05
b) Discuss the impact of inflation on capital budgeting and investment decisions. [CLO4; L4] 05
2. a) Explain the negative factors that delay or disrupt project scheduling in Bangladesh. [CLO1; L2] 05
b) Distinguish between NEC and ECNEC. [CLO6; L4] 05
3. Consider a project whose activities are given below and answer the 3(a), (b) and (c):

Activity	1-2	1-3	1-5	2-3	2-4	3-4	3-5	3-6	4-6	5-6
Duration (in week)	8	7	12	4	10	3	5	10	7	4
- a) Draw the network diagram and calculate earliest start, earliest finish, latest start, and latest finish time. [CLO5; L3] 04
b) Determine the critical path of the project. [CLO5; L5] 03
c) Determine total float, free float, and independent float. [CLO5; L5] 03
4. a) Discuss the roles and responsibilities of the Planning Commission in evaluating and approving development projects in Bangladesh. [CLO6; L4] 05
b) Evaluate the significance of five-year plans in achieving national development objectives in Bangladesh. [CLO6; L5] 05

N.B.: 'CLO' refers to 'Course Learning Outcome'; 'L' refers to Level of Bloom's Cognitive Domain.

Economics Discipline, Khulna University
BSS (Hons) 4th Year 1st Term Final Examination 2026; Session: 2024-2025
Course No.: 0311 15 Econ 4103; Course Title: Intermediate Econometrics
Full Marks: 60; Time: 03 Hours

The figures in the right margin indicate marks.

Section A

There are 04 questions in this section. Answer any 03 questions.

1. a) List down and explain the core steps of an econometric research. [CLO1; L3] 06
b) Using a hypothetical example, explain the problem of omitted variable bias in the case of econometric model specification. [CLO2; L3] 04

2. a) What is a simultaneous equation model? [CLO1; L1] 01
b) Why is simultaneity considered a problem in econometrics? [CLO1; L1] 04
c) Identify the cases in which simultaneity problem violate OLS assumptions. [CLO3; L3] 05

3. a) Outline the steps involved in the Two-Stage Least Squares (2SLS) estimation method. In what sense is 2SLS an “Instrumental Variable” (IV) estimator? [CLO1; L2] 05
b) Estimating the reduced-form equations by regressing price (P) and quantity (Q) separately on per capita real consumption expenditure (X), obtain the ILS estimates: $\hat{\beta}_0$ and $\hat{\beta}_1$. [CLO3; L3]

Given,

$$\begin{aligned}\hat{P}_t &= 145.50 + 0.35X_t \\ se &= (22.30) \quad (0.07) \\ R^2 &= 0.82\end{aligned}$$

$$\begin{aligned}\hat{Q}_t &= 98.20 + 0.84X_t \\ se &= (15.40) \quad (0.12) \\ R^2 &= 0.75\end{aligned}$$

Where,

P = Price, Q = Quantity, and X = Per capita real consumption expenditure 05

4. a) Justify the use of dummy variables in econometric analysis. [CLO1; L5] 02
b) Analyze the role of the omitted category in avoiding the dummy variable trap. [CLO2; L4] 04
c) How would you interpret interaction dummy coefficients? Explain with an example. [CLO5; L1] 04

Section B

There are 04 questions in this section. Answer any 03 questions.

1.
 - a) What is a qualitative response regression model? [CLO1; L1] 01
 - b) Why is OLS often inappropriate for qualitative response variables? [CLO2; L1] 05
 - c) Using a hypothetical example, critically explain how a Logit model can analyze binary choice decisions. [CLO5; L3] 04

2.
 - a) Derive the mathematical properties of a unit root process and its implications for time series stationarity. Elaborate on the Augmented Dickey-Fuller (ADF) test procedure. [CLO1; L2] 05
 - b) Define the concept of cointegration. Describe how the Engle-Granger or Johansen test can be used to detect cointegrating relationships between variables. [CLO1; L2] 05

3.
 - a) Compare the Fixed Effects (FE) model and the Random Effects (RE) model in panel data analysis. [CLO4; L4] 04
 - b) Consider the following panel data model used to study the determinants of firm productivity:

$$loutput_{it} = \beta_0 + \beta_1 lcapital_{it} + \beta_2 llabor_{it} + \beta_3 lrd_exp_{it} + \beta_4 lpatent_{it} + \alpha_i + u_{it}$$

Where, $loutput_{it}$ is the $\ln$ (total revenue/output of firm i in year t), $lcapital_{it}$ is $\ln$ (capital stock), $llabor_{it}$ is $\ln$ (number of employees), lrd_exp_{it} is $\ln$ (expenditure on research and development), and $lpatent_{it}$ is $\ln$ (number of patents filed by the firm). The data set is based on a panel of $i = 150$ manufacturing firms over $t = 10$ years. The variable α_i is an unobserved firm-specific effect.

 - i) What assumptions are required for the Random Effects (RE) estimator of the model to be consistent? If the assumption hold, will OLS be superior to the Random Effect estimator? [CLO4; L4] 03
 - ii) What are the advantages of using the Fixed Effects (FE) estimator for the model over the RE estimator? What is the key idea of the Fixed Effects transformation underlying this estimator? [CLO4; L4] 03

4. Write short notes on the following: [CLO1; L2]
 - a) Pooled OLS Regression; 03
 - b) Static versus Dynamic Forecasting; and 03
 - c) ARMA versus ARIMA model. 04

Economics Discipline, Khulna University
BSS (Hons) 4th Year 1st Term Final Examination 2026; Session: 2024-2025
Course No.: 0311 15 Econ 4105; Course Title: Industrial Economics
Full Marks: 60; Time: 03 Hours

The figures in the right margin indicate marks.

Section A

There are 04 questions in this section. Answer any 03 questions.

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| 1. | a) Differentiate between microeconomics and industrial economics. [CLO1; L1] | 03 |
| | b) Explain the scopes and objectives of industrial economics. [CLO1; L2] | 03 |
| | c) How do economies of scale contribute to industrial efficiency. [CLO1; L3] | 04 |
| | | |
| 2. | a) Differentiate between firm and industry with suitable examples. [CLO2; L2] | 02 |
| | b) Explain the key advantages that the large-scale firms can enjoy over the small-scale firms. [CLO2; L2] | 03 |
| | c) How does the strategies of a firm in a particular market shape its performance based on the perspective of SCP paradigm? [CLO2; L4] | 05 |
| | | |
| 3. | a) What do you mean by economic efficiency? [CLO1; L2] | 02 |
| | b) Identify the key internal forces that work as the determinants of economic efficiency. [CLO1; L3] | 02 |
| | c) A manufacturer is planning to make two products using three inputs; say, labour, machine-hours, and one raw material. One unit of product 1 requires one man-hour, one machine-hour, and two units of the raw materials. Similarly, one unit of product 2 requires three man-hours, one machine-hour, and one unit of the raw material. The total amount of the inputs is fixed and given as 18 man-hours, 8 machine hours, and 14 units of the raw material per day. The manufacturer expects \$10 and \$20 as price for the two products in the market. What should be the most efficient output of the two products? Solve the problems with graphical solutions and highlight the feasible region. [CLO6; L4] | 06 |
| | | |
| 4. | a) Explain the key determinants of industrial concentration. [CLO3; L2] | 03 |
| | b) Suppose there are eight soap manufacturing firms in Khulna city. The top three have 40%, 30%, and 20% market share respectively. Each of the other five firms have 2% market share. Based on Hirschman-Herfindahl index, calculate the market concentration and evaluate the concentration level. [CLO3; L4] | 03 |
| | c) Explain how monopoly arises in the market and analyze the social cost of monopoly. [CLO2; L4] | 04 |

Section B

There are 04 questions in this section. Answer any 03 questions.

1. a) Differentiate between horizontal integration and vertical integration with suitable examples. [CLO5; L2] 02
 b) What are the major causes for which a firm can indulge in lateral diversification? – Identify and explain. [CLO5; L4] 04
 c) Explain the efficiency motive, market power motive, and growth motive of industrial merger. [CLO5; L3] 04

2. a) In your opinion, which are the key economic factors that determine the choice of industrial location. [CLO4; L3] 03
 b) Based on the theory of Alfred Weber, graphically analyze how regional factors affects the decision of industrial location? [CLO4; L3] 07

3. a) Analyze the role of input-output analysis in determining the inter-industry relationship. [CLO5; L3] 03
 b) Given the inter-industry transaction table below, find the technical coefficient matrix. [CLO5; L4]

Sector of Origin	Sector of Destination					Total Demand
	Steel	Coal	Iron	Auto	Final Demand	
Steel	80	20	110	230	160	600
Coal	200	50	90	120	140	600
Iron	220	110	30	40	0	400
Auto	60	140	160	240	400	1000
Value Added	40	280	10	370		
Gross Production	600	600	400	1000		

- c) Briefly explain the short-term and long-term purposes of industrial finance. [CLO3; L3] 03

4. a) Identify the major sources of industrial finance and classify them into appropriate categories. [CLO3; L1] 05
 b) Evaluate the major problems and potentials of industrialization in Bangladesh with relevance to government initiatives and EPZs. [CLO6; L5] 05

Economics Discipline, Khulna University
BSS (Hons) 4th Year 1st Term Final Examination 2026; Session: 2024-2025
Course No.: 0311 15 Econ 4109; Course Title: Economics of Climate Change
Full Marks: 60; Time: 03 Hours

The figures in the right margin indicate marks.

Section A

There are 04 questions in this section. Answer any 03 questions.

1. a) Define climate vulnerability and distinguish it from climate change. [CLO1; L1] 02
b) Critically analyze the feedback loops between climate change and economic inequality. [CLO4; L3] 03
c) Design an integrated climate-economy resilience model for developing countries vulnerable to floods and droughts. [CLO4; L6] 05
2. a) Differentiate between 'Carbon-Smart' and 'Knowledge-Smart' agricultural technologies. [CLO1; L4] 05
b) Given that the agriculture and energy sectors contribute 44% and 39% to Bangladesh's net emissions respectively, analyze how the 'Renewable Energy Policy' and 'National Agriculture Policy' aim to decouple economic growth from carbon intensity through specific resource-efficient initiatives. [CLO3; L4] 05
3. a) Explain the economic rationale for 'Circular Agriculture' as a resilience strategy for smallholder farmers, focusing on how waste-to-energy conversion and nutrient recycling stabilize livelihoods. [CLO1; L2] 04
b) Using the integrated SES-DAPSIR framework to coastal Bangladesh, explain the economic trade-off between 'gray' infrastructure (polders) and 'green' ecosystem services (mangroves) in providing shoreline protection and carbon sequestration benefits. [CLO4; L4] 06
4. a) Analyze the 'Realists' versus 'Religious' farmer archetypes identified via Q-methodology in Bangladesh's wetland areas, explaining how these subjective perceptions specifically act as a socio-psychological barrier to the adoption of climate-smart irrigation practices. [CLO2; L4] 05
b) Identify the specific governance barriers that prevent Bangladesh's Direct Access Entities (DAEs) from successfully securing Green Climate Fund (GCF) resources. [CLO5; L5] 05

Section B

There are 04 questions in this section. Answer any 03 questions.

1. a) Analyze the socioeconomic determinants of disaster preparedness in conflict-affected contexts, explaining how factors like literacy and gender influence the 'self-adopted' coping strategies of Rohingya refugees in Cox's Bazar. [CLO2; L4] 05
b) Evaluate the 'INFORM approach' used for natural hazard risk assessment in coastal Bangladesh. [CLO3; L5] 05
2. a) Identify and explain the specific implementation barriers between national Disaster Risk Reduction (DRR) policies and local-level execution in coastal communities. [CLO1; L2] 05
b) Discuss the degree of alignment between Bangladesh's disaster management policies and the four priorities of the Sendai Framework for Disaster Risk Reduction (SFDRR) in fostering community-level resilience and sustainable development. [CLO5; L2] 05
3. a) Enunciate the 'tension within network governance' in Bangladesh, explaining why NGOs often focus on reactive interventions like emergency response rather than embracing the long-term core principles of Disaster Risk Reduction (DRR). [CLO3; L2] 06
b) Outline the core economic goals of the 'National Plan for Disaster Management (2021-2025).' [CLO5; L1] 04
4. a) Examine how disasters both hinder and reshape development trajectories in developing countries like Bangladesh. [CLO4; L3] 05
b) Evaluate whether current global governance is sufficient to prevent catastrophic risks. [CLO5; L5] 05

Economics Discipline, Khulna University
BSS (Hons) 4th Year 1st Term Final Examination 2026; Session: 2024-2025
Course No.: 0311 15 Econ 4111; Course Title: Institutional Economics
Full Marks: 60; Time: 03 Hours

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Section A

There are 04 questions in this section. Answer any 03 questions.

1. a) How the thoughts of the New Institutional Economics (NIE) emerged and enriched neoclassical economic thoughts. [CLO1; L4] 02
b) Explain the concepts of bounded rationality and opportunism in the context of New Institutional Economics (NIE). [CLO5; L4] 04
c) Evaluate the necessity of institutions in achieving economic efficiency and sustainable development in modern economies. [CLO5; L5] 04
2. a) Explain the role of norms and social conventions in shaping economic behavior and institutional performance. [CLO1; L1] 02
b) Evaluate the linkages among history, institutional development, and economic development. [CLO3; L5] 04
c) Create a model of an institutional environment that incorporates legal systems, social conventions, and cognitive science to support sustainable economic development. [CLO2; L6] 04
3. a) Identify the limitations of the conventional theory of the firm from the perspective of transaction cost economics. [CLO2; L3] 05
b) Illustrate the cases where firms sometimes internalize activities rather than relying on market exchange. [CLO2; L3] 05
4. a) Distinguish between vicious and virtuous circles of poverty with suitable examples. [CLO4; L2] 04
b) Considering the African context, evaluate the role of inclusive as well as extractive institutions in economic development. [CLO4; L5] 06

Section B

There are 04 questions in this section. Answer any 03 questions.

1. a) Distinguish between concepts of 'rule of the game' and 'games within the rule' with suitable examples. [CLO2; L2] 03
b) Apply the Prisoner's Dilemma framework to analyze pricing strategies between two competing firms in an oligopolistic market. [CLO2; L3] 03
c) Analyze the contrasts between cooperative and non-cooperative game structures and how information asymmetry affects strategic decision-making. [CLO3; L4] 04
2. a) Why is a strong property right almost mandatory for the economic development of a country like Bangladesh. – Analyze. [CLO3; L3] 04
b) Using a relevant real-world example, critically assess the Coase Theorem in the presence of high transaction costs, unequal bargaining power, and imperfect information. [CLO3; L5] 06
3. a) Analyze how information asymmetry affects market efficiency in both microeconomic markets (e.g., insurance) and macroeconomic outcomes (e.g., unemployment or inflation expectations). [CLO1; L3] 04
b) Identify the factors responsible for the moral hazard problem. How to resolve the issue? [CLO2; L3] 06
4. a) Discuss the roles of institutions in bringing economic and social changes. [CLO3; L4] 05
b) Evaluate the effectiveness of institutional building strategies in development discourse, considering competing views from development theory and public choice theory. [CLO2; L5] 05