



ଓଡ଼ିଶା ରାଜ୍ୟ ମୁକ୍ତ ବିଶ୍ୱବିଦ୍ୟାଳୟ, ସମ୍ବଲପୁର, ଓଡ଼ିଶା
Odisha State Open University, Sambalpur, Odisha
Established by an Act of Government of Odisha.

ASSIGNMENTS

ASSIGNMENT CODE:

Course Code: BEC-1(Assignment-1 & 2)

Course Code: BEC-2 (Assignment-1 & 2)

SESSION: 2019-20

Bachelor of Arts (Honours) in Economics

BAEC

Please read the instructions carefully before attempting assignment questions.

INSTRUCTIONS FOR DOING ASSIGNMENTS

Dear Learner,

You are required to submit your assignment response within the stipulated time in order to become eligible to appear in the term-end examination. The assignments will be evaluated by the counsellors at your Study Centre. Please submit your assignment response to the Coordinator of your Study Center. For a 4 credit course, there is one Assignment and for 6 credit course, there must be minimum 02(two) Assignment.

Purpose of Assignments:

1. Assignments are part of the continuous evaluation process in Open and Distance Learning (ODL) system. Due weightage is given to the marks/grades you obtain in assignments. This will help you for better performance in the term-end examination. If you secure good grades/marks in assignments, your overall performance will improve.
2. Assignments are also a part of the teaching-learning process in the ODL system. Your assignment, after evaluation, will be returned back to you with specific and general comments by the evaluator. This will help you to know your strength as well as your weakness. Thus, it will establish two-way communication between learner and evaluator.

How to Write Assignments:

Please read the instructions for writing the response of an assignment before you start writing your answer.

1. Write your name, programme code, the course title, enrolment no. and study centre name with code in the top sheet of the assignment answer booklet. the format is given below.

PROGRAMME TITLE: _____

ENROLMENT No.: _____ **NAME:** _____

ADDRESS: _____

COURSE CODE: _____ **COURSE TITLE:** _____

ASSIGNMENT CODE: _____ **STUDY CENTRE:** _____

DATE: _____ **SIGNATURE:** _____

2. Before attempting the assignments, please go through the course materials carefully, understand the same and write answers in your own language and style.
3. **Write the answers in your own handwriting.** Give sufficient margin in the left side of each page so that the evaluator will give comments on each paragraph/page.
4. Your handwriting should be neat and readable.

Weightage for each Assignments:

For courses without having Practical

1. Each Theory Assignment will carry 25% weightage and term-end examination will carry 75% weightage.
2. Each assignment will be of 100 marks. But it will carry 25% weightage.
3. You have to score minimum pass mark i.e. 40% or P (Pass) Grade in 10-point scale for each assignment. In case you do not submit the assignment or get fail mark in the assignment you have to re-submit in the next year.

For courses having Practical

1. Each Theory Assignment will carry 15% weightage and each Practical Assignment will carry 10% weightage and term-end examination will carry 75% weightage.
2. Each assignment will be of 100 marks. But it will carry 25% weightage.
3. You have to score minimum pass mark i.e. 40% in each assignment. In case you do not submit the assignment or get fail mark in the assignment you have to re-submit in the next year.

SUBMISSION DATES FOR ASSIGNMENTS

July-2019 Session

Sl. No.	Course Code	Name of the Course	Last Date of Submission	Day (As per Calendar)
Assignment-I				
1	BEC-1	Micro Economic Analysis	20th October 2019	Sunday
2	BEC-2	Mathematical Methods for Economics I		
Assignment-II				
3	BEC-1	Micro Economic Analysis	3rd November 2019	Sunday
4	BEC-2	Mathematical Methods for Economics I		

NOTE:

For 4 Credit Course (one Assignment)

Submission dates: Third Sunday in the month of October

For 6/8 Credit Course (two Assignment)

Submission dates: 1st Assignment Submission: Third Sunday (**October**)

2nd Assignment Submission: First Sunday (**November**)

ASSIGNMENTS-1

INTRODUCTORY MICROECONOMICS

(BEC-1)

Full Mark – 100

(Answer all the questions, which is Compulsory)

GROUP- 'A'

Q. No. 1 Answer within one word or one sentence each

Marks: 1 × 10= 10

- a) What do you mean by Opportunity cost?
- b) Define property right.
- c) When consumer's income decreases, what happens to the demand curve?
- d) Who introduced ordinal utility theory?
- e) Define "Utility" according to Jeremy Bentham.
- f) Why the sign of Substitution effect is always negative mathematically?
- g) What is shape of demand curve for Giffen goods?
- h) What is an input?
- i) What is the shape of Isoquants in production analysis?
- j) What is the shape of long run average cost curve?

Group 'B'

Q. No 2. Short answer-type Questions (Word Limit: 50 Words)

Marks:2×10 = 20

- a) What are the four principles of Prof. Mankiw?
- b) Explain the concept of income elasticity of demand.
- c) What is producer surplus?
- d) Define indifference curve.
- e) What is the equilibrium condition of Marshallian law of equi-marginal utility?
- f) What income- consumption curve reflects?
- g) Explain Giffen Paradox.
- h) Define Production Function.
- i) What is the shape of Average Fixed Cost (AFC) curve? Why?
- j) What is Iso-Product curve?

Group 'C'

Q. No 3. Medium answer-type Questions (Word Limit:75 Words)

Marks: 3×10 = 30

- a) What is the significance of Graphs in economics?
- b) Distinguish between Point elasticity and Arc elasticity of demand.
- c) How consumer surplus is influenced by changes in the price of a commodity?
- d) Differentiate between cardinal approach and ordinal approach.
- e) How Hicks method is different from Slutsky method in interpreting real income?
- f) Define budget constraint with equation.
- g) What do you mean by Law of diminishing marginal product?
- h) Explain the concept of Marginal Rate of Technical Substitution(MRTS)?

- i) Distinguish between Fixed cost and Variable cost.
- j) Explain the relationship between average product and average variable cost curves?

Group 'D'

Q. No 4. Long answer-type Questions (Word Limit: 500 Words)

Marks: $10 \times 4 = 40$

- a) Explain the concept of "Elasticity of demand". Illustrate graphically the point method of elasticity.
- b) Discuss consumer's equilibrium using Ordinal Utility Approach.
- c) Discuss the three stages of production . Explain why the law of diminishing returns operates?
- d) Discuss graphically the relationship between cost and product curves. In what respect long-run cost curve is different from Short-run cost curve?

ASSIGNMENTS-I

MATHEMATICAL METHODS FOR ECONOMICS I

(BEC-2)

Full Mark – 100

(Answer all the questions, which is Compulsory)

GROUP- 'A'

Q. No. 1 Answer within one word or one sentence each

Marks: 1 × 10= 10

- a) Define Empty Set?
- b) What do you mean by Universal discourse?
- c) Explain Equal Set .
- d) What do you mean by whole numbers?
- e) What are imaginary numbers?
- f) What is domain?
- g) Show profit Function symbolically.
- h) What is an equation?
- i) Define the concept of "Limit".
- j) When a real function is said to be continuous?

Group 'B'

Q. No 2. Short answer-type Questions (Word Limit: 100 Words)

Marks:2 × 10 = 20

- a) Differentiate between Finite Set and Infinite set.
- b) Show $A \cup B$ with the help of Venn diagram.
- c) What "Difference of Set" implies?
- d) How irrational number is expressed?
- e) Distinguish between Complex numbers and Prime numbers?
- f) What do you mean by relation?
- g) Show the Demand Function?
- h) Distinguish between Function and Equation?
- i) Define Average Variable Cost.
- j) What is Budget Function?

Group 'C'

Q. No 3. Medium answer-type Questions (Word Limit: 200 Words)

Marks: 3 × 10= 30

- a) Give 3 example of Null Set.
- b) If $A = \{1,2,3,4,5\}$; $B = \{1,14,5\}$; $C = \{6,7,8\}$. Find (i) $A \cup B$ (ii) $A - B$ (iii) $B - A$
- c) Define intersection of Set through venn diagram .
- d) List out the type of fractions.
- e) What is constant ? What are the types of constant?
- f) Define Identity Relation and Inverse Relation.
- g) Explain Saving Function and Investment Function.
- h) What are the two methods of solving simultaneous equation?

- i) The total cost of a firm is $TC = Q^3 - 6Q^2 + 2Q + 50$. Find (i) Average Cost & Marginal Cost.
- j) If $AC = 2q^2 - 15q + 30 + 16/q$. Find AFC and AVC.

Group 'D'**Q. No 4. Long answer-type Questions (Word Limit: 500 Words)****Marks: $10 \times 4 = 40$**

- a) What is Function? What are different types of Function?
- b) What do you mean by simultaneous equation? Solve the following simultaneous equation by Elimination method. $2x + 3y = 13$; $x + 7y = 23$.
- c) Write short notes on:-
- i) Subsets
 - ii) Supersets
 - iii) Propersets
 - iv) Power Set
 - v) Complement of Set
- d) Find the equilibrium price and quantity for the following demand function and supply function .

$$Q_d = 20 - 7p$$

$$Q_s = -4 + 5p$$

ASSIGNMENTS-II

INTRODUCTORY MICROECONOMICS

(BEC-1)

Full Mark – 100

(Answer all the questions, which is Compulsory)

GROUP- 'A'

Q. No. 1 Answer within one word or one sentence each

Marks: 1 × 10= 10

- a) Define Homogeneous Product.
- b) What do you mean by Short Run?
- c) What do you Mean by Long Run?
- d) If the firms in an industry are price taker, what according to you would be the market structure?
- e) What do you mean by identical products?
- f) What according to you would be the market structure, if the firms have horizontal demand curve?
- g) What do you mean by Total Revenue?
- h) What do you mean by Marginal Revenue?
- i) What do you mean by Average Revenue?
- j) What do you mean by Normal Profit?

Group 'B'

Q. No 2. Short answer-type Questions (Word Limit: 50 Words)

Marks:2×10 = 20

- a) Define Value of Marginal Product
- b) Define Marginal Physical Product
- c) Define Marginal Revenue Product
- d) What do you mean by Product Exhaustion Theorem?
- e) Why the relationship between supply of labour and wage rate reverse after a certain wage level?
- f) What do you Mean by factors of production?
- g) Which point is known as the shut down point of a perfectly competitive firm?
- h) Describe a situation when a perfectly competitive firm earns supernormal profit (using suitable diagram) .
- i) What are the factors that causes a shift in the long run and short run supply curve of perfectly competitive industry?
- j) What do you mean by Economic Profit.

Group 'C'

Q. No 3. Medium answer-type Questions (Word Limit:75 Words)

Marks: 3×10 = 30

- a) Highlight the additional conditions required for a pure competitions to become perfect competitions.
- b) Describe a situation (with suitable diagram) when a perfectly competitive firm earns normal profit.

- c) Explain Real Economies of Scale.
- d) Explain Pecuniary Economies of Scale.
- e) Explain Economies of Scope.
- f) What do you mean by Technical Economies?
- g) What do you mean by Inventory Economies?
- h) Explain why perfectly competitive firms cannot earn super normal profit in the long run?
- i) What do you mean by Managerial Economies?
- j) Explain the reasons why wage rates differ by significant amounts.

Group 'D'**Q. No 4. Long answer-type Questions (Word Limit: 500 Words)****Marks: 10 × 4 = 40**

- a) What do you mean by diseconomies of scale? Explain the factors that causes diseconomies of scale.
- b) Highlight the assumptions of perfect competitions. Give example of a market which according to you satisfies most of the assumptions of perfect competition.
- c) Derive the supply curve of a perfectly competitive firm under short run using suitable diagram.
- d) Explain various factors contributing to Selling or Marketing Economies.

ASSIGNMENTS-II
MATHEMATICAL METHODS FOR ECONOMICS I
(BEC-2)

Full Mark – 100*(Answer all the questions, which is Compulsory)***GROUP- 'A'****Q. No. 1 Define within one sentence each:****Marks: 1 × 10= 10**

- a) Partial Derivatives
- b) Product Rule of Differentiation
- c) Chain Rule of Differentiation
- d) Square Matrix.
- e) Symmetric Matrix.
- f) Row Matrix
- g) Scalar Matrix
- h) Null Matrix
- i) Diagonal Matrix
- j) Identity Matrix

Group 'B'**Q. No 2. Find the derivatives of the following with respect to x****Marks: 2 × 10 = 20**

- a) $x + 2x^2 + x^3$
- b) $x^3 + e^x$
- c) $4\log x$
- d) $x^2 + 2y^3$
- e) $2y^3 + 3$
- f) $x^2 + 5$
- g) $2x^3 - 4x + 3$
- h) $(\sqrt[3]{x})^5$
- i) $\frac{1}{x^3}$
- j) $\frac{2x+3}{3x+4}$

Group 'C'**Q. No 3. Solve the following problems****Marks: 3 × 10 = 30**

- a) Find the value of x if $\begin{vmatrix} 7 & X \\ 1 & 7 \end{vmatrix} = 44$
- b) Find the value of X if $\begin{vmatrix} (X-3) & X \\ (X+1) & (X+3) \end{vmatrix} = 36$
- c) Find Transpose of Matrix A^T if $A = \begin{vmatrix} 5 & 0 & 2 \\ 0 & 2 & 1 \end{vmatrix}$
- d) Find A and B, if $A + B = \begin{vmatrix} 7 & 0 \\ 2 & 5 \end{vmatrix}$ & $A - B = \begin{vmatrix} 3 & 0 \\ 0 & 3 \end{vmatrix}$
- e) Find A+B and A-B, If $A = \begin{vmatrix} 5 & 1 \\ 0 & 4 \end{vmatrix}$ & $B = \begin{vmatrix} 2 & 2 \\ -1 & 1 \end{vmatrix}$
- f) If $A = \begin{vmatrix} 4 & 3 \\ 2 & 5 \end{vmatrix}$ Show that $(A^T)^T = A$
- g) Find the derivative of $(x^2 + 5)(2x^3 - 4x + 3)$
- h) Find the total differential of $z = \frac{x^2 - y^2}{x^2 + y^2}$
- i) Find the total differential of $Z = (2x - y^2)(x^2 + y)$
- j) If $u = \log(x^2 + y^2 + z^2)$, find the value of $x \frac{\partial u}{\partial x} + y \frac{\partial u}{\partial y} + z \frac{\partial u}{\partial z}$.

Group 'D'**Q. No 4. Answer any 4 from Below****Marks: 10× 4 = 40**

- a) Discuss various properties of the determinant of order 3.
- b) If $A = \begin{vmatrix} 2 & 1 \\ -1 & 4 \end{vmatrix}$ & $B = \begin{vmatrix} 4 & 5 & 6 \\ 1 & 2 & 3 \end{vmatrix}$, then show that $(AB)^T = B^T A^T$
- c) Derive the relationship between AR, MR and ed
- d) Derive the relationship between AC and MC
