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-01 , BEC-02

(Theory)

SESSION: 2020-21

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 6/8 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/January Session

Sl. No.	Course Code	Name of the Course	Last Date of Submission	No. of Assignment	Day (As per Calendar)
Theory					
1	BEC-01	Indian Economy -I	**28 February,2021**	2	Sunday
2	BEC-02	Introductory Micro Economics	**28 February,2021**	2	Sunday

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: 28th February Sunday

2nd Assignment Submission: 28th February Sunday

Format/Exam/01

ASSIGNMENTS-1

Introductory Microeconomics (BEC-01)

(Theory)

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) a) What do you mean by Autarky.
b) b) What is Market Failure?
c) c) Define Indifference curve?
d) d) What do you mean by Unitary elastic demand?
e) e) Define Giffen Goods?
f) f) What according to you is budget constraint?
g) g) What do you mean by utility?
h) h) What do you mean by Price Consumption Curve?
i) i) What do you mean by Income consumption curve?
j) What do you mean by Normal Goods

Group 'B'

Q. No 2. Short answer-type Questions (Word Limit: 100 Words) **Marks:2 X 10 = 20**

a) Explain the reasons behind disagreements among economist.
b) What do you mean by an "Economic Model"?
c) Define Pareto's welfare condition.
d) What do you mean by Marginal Rate of Substitution?
e) What do you mean by Price Effect?
f) What do you mean by Backward-Bending Labour Supply Curve?
g) What do you mean by Marginal Rate of Technical Substitution?
h) What do you mean by Iso-Cost line?
i) What do you mean by return to scale?
j) What do you mean by Expansion Path?

Group 'C'

Q. No 3. Medium answer-type Questions (Word Limit: 200 Words) **Marks: 3 X 10 = 30**

a) a) Distinguish between Arc Elasticity and Point Elasticity methods of estimating elasticity.
b) b) Explain cross price elasticity of demand.
c) c) Explain how goods can be classified on the basis of Income Elasticity of Demand.
d) d) Explain the law of eventual diminishing marginal utility?
e) e) Explain Substitution Effect.
f) f) Explain how labour supply responds to the wage rate?
g) g) Explain the way interest rate is related to household savings?
h) h) What do you mean by non-homogeneous production function?
i) i) What do you mean by Iso-Product curve?
j) j) Define production function

Group 'D'

Q. No 4. Long answer-type Questions (Word Limit: 300 Words) Marks: 10 X 4 = 40

a) Summaries the ten principles of economics as put forth by prof. N. Gregory Mankiw.

b) Explain how consumer reaches equilibrium using ordinal utility approach.

c) Explain in brief any two applications of consumer choice theory.

d) Explain the concept of producer surplus. How an increase in price may affect the producer surplus. (use suitable diagram)

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NOTE: (For Group-A, Group-B and Group-C)

(it can be a single Question or can have two parts with appropriate mark distribution)

ASSIGNMENTS-2

Introductory Microeconomics (BEC-01)

(Theory)

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) a)What do you mean by product homogeneity.
b) b) What do you mean by short run?
c) c) What do you Mean by long run?
d) d) Under which market structure the firms are price taker?
e) e) What do you mean by identical products?
f) f) Under which market structure the firm faces a perfectly elastic demand curve?
g) g) What do you mean by Total Revenue?
h) h) What do you mean by Marginal Revenue?
i) i) What do you mean by Average Revenue?
j) j) What do you mean by Super Normal Profit?

Group 'B'

Q. No 2. Short answer-type Questions (Word Limit: 100 Words) **Marks:2 X 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 shutdown point of a perfectly competitive firm?
h) Describe a situation when a perfectly competitive firm incur loses (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: 200 Words) **Marks: 3X 10 = 30**

a) What do you mean by pure competition?
b) Describe a situation (with suitable diagram) when a perfectly competitive firm earns super normal profit in the short run.
c) Explain labour Economies of Scale.
d) Explain Pecuniary Economies of Scale.
e) Explain Economies of Scope.
f) What do you mean by Advertising Economies?
g) State the main causes of labour market imperfection?
h) Explain why perfectly completive firms cannot earn super normal profit in the long run?
i) Explain the key difference between Monopoly and Oligopoly?
j) Explain the reasons why wage rates differ by significant amounts.

Group 'D'

Q. No 4. Long answer-type Questions (Word Limit: 300 Words) Marks: 4 X 10 = 40

a) a) Explain why planning curve is U shape?

b) b) Highlight the assumptions of perfect competitions. Explain how far the stock market satisfies the assumptions of perfect competition.

c) c) Derive the supply curve of a perfectly competitive firm under short run using suitable diagram.

d) d) Explain the limitation of the marginal productivity theory of distribution.

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NOTE: (For Group-A, Group-B and Group-C)

(it can be a single Question or can have two parts with appropriate mark distribution)

ASSIGNMENTS-1

MATHEMATICAL METHODS FOR ECONOMICS (BEC-02)
Theory

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 are infinite Set?
b) Define Power Set.
c) What is the Union of two sets?
d) Define Complex numbers.
e) Define Power Function
f) Define the Roster Method.
g) What are Integers?
h) What are called Complex Number?
i) Define the Polynomial Function.
j) What are empty sets?

Group 'B'

Q. No 2. Short answer-type Questions (Word Limit: 100 Words) Marks:2 × 10 = 20

Write the following sets in Roster Method (for a, b and c)

a) The number of Odd Natural Numbers less than 10.
b) The set of the letters of the word INFORMATION
c) The set of the rots of the equation $x^2-6x+8= 0$
d) Write the Universal set for the following
P={11,12,13} Q={13,17,18} R={14,15,16,19}
e) What do you understand by the Complement of a set?
f) What do you mean by equal sets?
g) Give examples of five null sets
h) Explain Arbitary constants with example.
i) What would be the shape of the curve for constant functions?
j) Define Universal set with example.

Group 'C'

Q. No 3. Medium answer-type Questions (Word Limit: 200 Words) Marks: 3 × 10= 30

a) Explain the Union of a set. Diagrammatically
b) How many elements are there in P(A) if A has i) 8 elements ii)2^n elements
c) Explain a linear function with example and diagram
d) What are the two methods of solving Simultaneous Equation?
e) Define Intersections of sets.
f) What is Inverse relation? With example.

g) Explain the Exponential Function.
h) What are the two methods of solving simultaneous equations
i) Give the concept of variable and the various types.
j) Describe the difference of set with Venn diagram.

Group 'D'

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

a) Discuss about different types of functions.
b) Discuss the types of Fractions explain by using examples.
c) Describe the concept of relation in Set with example.
d) Express the following sets in Set-Builder Method
   i) A={Mon, Tue }

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ASSIGNMENTS-2

MATHEMATICAL METHODS FOR ECONOMICS (BEC-02)

Theory

(Answer all the questions, which is Compulsory) Full Mark –100

GROUP-"A"

Q. No. 1 Answer within one word or one sentence each Marks: 1 × 10= 10

Find the derivative of the following (a,b,c,d, and e)

a) Y= (1-x)
b) Y=2x
c) Y= (2+2x)
d) Y= (x+1)
e) Z= 8y
f) What do you mean by Partial differentiation
g) What is a Row Matrix?
h) What is a Column Matrix?
i) What is Lower Triangular Matrix?
j) What is Transpose of a Matrix?

Group 'B'

Q. No 2. Short answer-type Questions (Word Limit: 100 Words) Marks:2 × 10 = 20

Find the Differentiation of the following (a, b, c, d, and e)

a) Z= x+2x
b) Z= $y-3y^3$
c) Z= $x^3 e^x$
d) Z= $(x+4x)^3$
e) Z= $\frac{x^3 - y}{x + y}$
f) Give the example of a square matrix.
g) Explain scalar matrix with example.
h) What is Symmetric Matrix?
i) Add $A = \begin{bmatrix} 3 & 5 \\ 2 & 1 \end{bmatrix}$ $B = \begin{bmatrix} 4 & 5 \\ 7 & 8 \end{bmatrix}$
j) Subtract $X = \begin{bmatrix} 6 & 4 \\ 2 & 1 \end{bmatrix}$ $Y = \begin{bmatrix} 1 & 3 \\ 2 & 4 \end{bmatrix}$

Group 'C'

Q. No 3. Medium answer-type Questions (Word Limit: 200 Words) Marks: 3 × 10= 30

a) Find second order derivative of $y = 6x^2 + 2x + 3$

b) Find the highest order of the derivative of $y = 8x^6 + 2x^4 + 3x^2$

c) Find out the derivative of y= x^n

d) y= $-5x^2$

e) $y = \dfrac{6x^2 - 4}{x^2 - 6}$

f) Find the partial derivatives of u= $4x^3+8xy+y^2$

g) Find the total differentials of z= $5x^2+xy-3y^2$

h) Find the value of a, b,c ,and d when

$$\begin{bmatrix} a+b & 3c-d \\ a-3d & 6c+d \end{bmatrix} = \begin{bmatrix} 2 & 8 \\ -3 & 25 \end{bmatrix}$$

i) Find the value of x, if

$$\begin{vmatrix} x+2 & x \\ x+1 & x+3 \end{vmatrix} = 8$$

j) Find p, $\begin{vmatrix} 2 & p \\ 4 & 8 \end{vmatrix} = 12$

Group 'D'

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

a) Mathematically find out the relationship between the AR, MR and ed.

b) The demand function of a firm is Q= $200-6p-2p^2$. Calculate the Price elasticity of demand when values of P are 3, 8,and 20 respectively and interpret.

c) Multiply :

$$A = \begin{bmatrix} 2 & 3 \\ 0 & 4 \\ 2 & 2 \end{bmatrix} \quad B = \begin{bmatrix} 2 & 2 \\ 4 & 6 \\ 1 & 5 \end{bmatrix}$$

d) Solve the equations using the Cramer's Rule:

$$x + 4y + 6z = 8$$
$$3x - 4y + z = 1$$
$$6x + 3y + z = 6$$

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