

P - II (1+1+1) H / 19 (N)

2019

ECONOMICS (Honours)

Paper Code : III-A & B

[New Syllabus]

Full Marks : 100

Time : Four Hours

**Important Instructions
for Multiple Choice Question (MCQ)**

- Write Subject Name and Code, Registration number, Session and Roll number in the space provided on the Answer Script.

Example : Such as for Paper III-A (MCQ) and III-B (Descriptive).

Subject Code :

III	A	&	B
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Subject Name :

- Candidates are required to attempt all questions (MCQ). Below each question, four alternatives are given [i.e. (A), (B), (C), (D)]. Only one of these alternatives is 'CORRECT' answer. The candidate has to write the Correct Alternative [i.e. (A)/(B)/(C)/(D)] against each Question No. in the Answer Script.

Example — If alternative A of 1 is correct, then write :

1. — A

- There is no negative marking for wrong answer.
- No student will be allowed to leave the examination hall before completion of the examination.
- Using abusive language or employing any other unfair means, he/she will render himself/herself liable to disqualify.
- Use of any mobile phone, calculator or log table etc. in the examination hall is prohibited, except specially instructed in the question paper.

মাল্টিপল চয়েস প্রশ্নের (MCQ) জন্য জরুরী নির্দেশাবলী

- উত্তরপত্রে নির্দেশিত স্থানে বিষয়ের (Subject) নাম এবং কোড, রেজিস্ট্রেশন নম্বর, সেশন এবং রোল নম্বর লিখতে হবে।

উদাহরণ — যেমন Paper III-A (MCQ) এবং III-B (Descriptive)।

Subject Code :

III	A	&	B
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Subject Name :

- পরীক্ষার্থীদের সবগুলি প্রশ্নের (MCQ) উত্তর দিতে হবে। প্রতিটি প্রশ্নে চারটি করে সম্ভাব্য উত্তর, যথাক্রমে (A), (B), (C) এবং (D) করে দেওয়া আছে। পরীক্ষার্থীকে তার উত্তরের স্বপক্ষে (A) / (B) / (C) / (D) সঠিক বিকল্পটিকে প্রশ্ন নম্বর উল্লেখসহ উত্তরপত্রে লিখতে হবে।

উদাহরণ — যদি 1 নম্বর প্রশ্নের সঠিক উত্তর A হয় তবে লিখতে হবে :

1. — A

- ভুল উত্তরের জন্য কোন নেগেটিভ মার্কিং নেই।
- কোন অবস্থাতেই পরীক্ষার্থীকে পরীক্ষাচলাকালীন পরীক্ষাকেন্দ্রের বাইরে যাওয়ার অনুমতি দেওয়া যাবে না।
- অবাঞ্ছিত কোন শব্দ ব্যবহার করা অথবা অবৈধ কোনো কাজকর্মে লিপ্ত থাকলে ছাত্র/ছাত্রী তার পরীক্ষা বাতিলের জন্য নিজেই দায়ী থাকবে।
- প্রশ্নপত্রে নির্দেশিত বিশেষ নির্দেশ ছাড়া পরীক্ষাকক্ষে মোবাইল ফোন, ক্যালকুলেটর অথবা লগ-টেবিল ইত্যাদি ব্যবহার নিষিদ্ধ।

Paper Code : III-A

Full Marks : 20

Time : Thirty Minutes

Choose the correct answer.

Each question carries 2 marks.

1. For the demand and supply functions $Q_d = 10 - p$ and $Q_s = 3p - 2$, the equilibrium price and quantity combination is —

- (A) (6, 4)
- (B) (5, 5)
- (C) (7, 3)
- (D) (3, 7)

2. For perfect complementarity between two goods x & y , $MRS_{xy} = ?$

- (A) 0
- (B) 1
- (C) ∞
- (D) None of the above

3. The production function $Q = \frac{LK}{L+K}$ is homogeneous of degree —

- (A) Greater than one
- (B) One
- (C) Less than one
- (D) Zero

4. Consumer's surplus for a free good, whose demand function is $P = 64 - x^3$

- (A) 320 sq unit
- (B) 194 sq unit
- (C) 208 sq unit
- (D) 304 sq unit

5. If cost function is $c = q^3 - 3q^2 + 50q + 10$, what is the value of MC at $q = 2$?

- (A) 50
- (B) 10
- (C) 3
- (D) 20

6. In a fair game which of the following condition holds good?

- (A) Maximin > Minimax
- (B) Minimax > Maximin
- (C) Maximin = Minimax = 1
- (D) Maximin = Minimax = 0

7. If $e_p = 1$, AR = 10, then MR = ?

- (A) 0
- (B) 1
- (C) 2
- (D) ∞

Turn Over

8. A discriminating monopolist practices price discrimination in two markets A and B with elasticities

$$E_A = 1.2 \text{ and } E_B = 1.5$$

What will be $P_A / P_B = ?$

- (A) 1 : 2
 (B) 2 : 1
 (C) 1 : 3
 (D) 3 : 1
9. The demand function is given as $Q_d = 20 - 6p - p^2$. Price elasticity at $P = 2$ is —

- (A) $|e_p| = 0$
 (B) $|e_p| = 1$
 (C) $|e_p| = 2$
 (D) $|e_p| = 5$

10. Find the saving function if $MPC = 0.75$, $\bar{C} = 40$

- (A) $40 - 0.25y$
 (B) $-40 - 0.25y$
 (C) $-40 + 0.25y$
 (D) $40 + 0.25y$

Turn Over

2019

ECONOMICS (Honours)

Paper Code : III-B

[New Syllabus]

Full Marks : 80

Time : Three Hours Thirty Minutes

The figures in the margin indicate full marks.

Group - A

[Short Answer Type Questions]

Answer any four questions.

10×4=40

1. Find the demand for the commodities q_1 and q_2 for the consumer, given the following data.

$$U = f(q_1, q_2) = q_1^{1.5} q_2$$

$$P_1 = 3, P_2 = 4 \text{ and Income} = 100$$

10

2. A constant elasticity of substitution (CES) production function is given by $Q = 5[0.3X_1^{-2} + 0.7X_2^{-2}]$. Show that the production function obeys constant returns to scale. Calculate the elasticity of substitution from the above production function.

10

3. Given the following demand and cost functions of two firms I and II, determine Cournot's equilibrium output, profit and prices of each firm :

$$P = 90 - 0.5(q_1 + q_2),$$

$$C_1 = 0.5q_1$$

$$C_2 = 0.5q_2$$

10

4. Consider a three sector economy

$$C = 5 + 0.25 (Y - T)$$

$$I = 85, T = 10, G = 15$$

- (i) Find the equilibrium level of national income.
- (ii) Calculate the change in equilibrium level of income if Govt. expenditure is increased by 10 unit.
- (iii) Find the value of tax multiplier. 3+3+4

5. (a) The joint cost function of two product x and y is $c = x^2 + 3y^2 + 3xy$ and their prices are 7 and 20. Find the amount of total revenue, total cost and profit when objective of the firm is to maximise profit.

- (b) Find the general solution of the difference equation $2y_{t+1} - 4y_t = 0$. 6+4

6. Given $A = \begin{bmatrix} 0.1 & 0.3 & 0.1 \\ 0 & 0.2 & 0.2 \\ 0 & 0 & 0.3 \end{bmatrix}$ and final demands are F_1, F_2, F_3 . Find the output

levels consistent with the model. What will be the output levels if $F_1 = 20, F_2 = 0$ and $F_3 = 100$? 10

7. Solve the following game by reducing it, using the dominance property

$$\begin{bmatrix} 0 & 0 & 0 & 0 & 0 \\ 4 & 2 & 0 & 2 & 1 \\ 4 & 3 & 1 & 3 & 2 \\ 4 & 3 & 4 & -1 & 2 \end{bmatrix}$$

10

Turn Over

8. Solve the LPP using graphical method.

$$\text{Minimize, } Z = 4x_1 + x_2$$

$$\text{subject to } x_1 + 2x_2 \leq 3$$

$$4x_1 + 3x_2 = 6$$

$$3x_1 + x_2 \geq 3$$

$$x_1, x_2 \geq 0$$

10

Group - B

[Essay Type Questions]

Answer any two questions. 20×2=40

9. (a) Prove that diminishing marginal utility is neither necessary nor sufficient to ensure convexity of indifference curve.

(b) Show that sum of income elasticities weighted by total expenditure proportions equals unity.

(c) A consumers demand function is $Q = \frac{K}{P^n}$, where 'K' and 'n' are positive constants. Show that price elasticity of demand is constant. 10+5+5

10. (a) What would be the ratio $\frac{D_t}{Y_t}$, as $t \rightarrow \infty$, in the Domar Model ?

where D_t = National Debt at time 't'

Y_t = National income at time 't'

Domar Model :

$$\frac{dY}{dt} = \beta \cdot Y_t$$

$$\frac{dD}{dt} = \alpha \cdot Y_t, \quad \alpha > 0, \quad \beta > 0$$

with initial conditions $D(0) = D_0$ and $Y(0) = Y_0$.

(b) Manufacturing and marketing costs C are related to the number of items x , by $\frac{dC}{dx} + 2C = 2 + 2x$

Find C as a function of x , if $C = 0$, when $x = 0$. 10+10

11. (a) Find the demand vector D consistent with output vector

$$X = \begin{bmatrix} 21 \\ 25 \\ 18 \end{bmatrix} \text{ and the Coefficient Matrix } A = \begin{bmatrix} 0.2 & 0.3 & 0.2 \\ 0.4 & 0.1 & 0.2 \\ 0.1 & 0.3 & 0.2 \end{bmatrix}$$

(b) Prove that the Hawkins Simon condition is necessary for the economic viability of an open Leontief system. 10+10

12. (a) A production function is given as $q = 7K^{0.5} L^{0.3}$. If the price of K and L are Rs. 2 and Rs. 3 respectively, obtain the equation of expansion path.

(b) Under the Cournot structure of duopoly if the demand function is $p = a - bq$ where $q = q_1 + q_2$ and the cost functions of the firms are $C_1 = C(q_1)$ and $C_2 = C(q_2)$ then find

(i) reaction functions of the firms and

(ii) output level of the firms. 8+12

P - II (1+1+1) H / 19 (N)

2019

ECONOMICS (Honours)**Paper Code : IV-A & B**
[New Syllabus]

Full Marks : 100

Time : Four Hours

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for Multiple Choice Question (MCQ)**

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III	A	&	B
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Subject Name :

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Example — If alternative A of 1 is correct, then write :

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উদাহরণ — যেমন Paper III-A (MCQ) এবং III-B (Descriptive)।

Subject Code :

III	A	&	B
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Subject Name :

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- পরীক্ষার্থীদের সবগুলি প্রশ্নের (MCQ) উত্তর দিতে হবে। প্রতিটি প্রশ্নে চারটি করে সম্ভাব্য উত্তর, যথাক্রমে (A), (B), (C) এবং (D) করে দেওয়া আছে। পরীক্ষার্থীকে তার উত্তরের স্বপক্ষে (A) / (B) / (C) / (D) সঠিক বিকল্পটিকে প্রশ্ন নম্বর উল্লেখসহ উত্তরপত্রে লিখতে হবে।

উদাহরণ — যদি 1 নম্বর প্রশ্নের সঠিক উত্তর A হয় তবে লিখতে হবে :

1. — A

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- অবাঞ্ছিত কোন শব্দ ব্যবহার করা অথবা অবৈধ কোনো কাজকর্মে লিপ্ত থাকলে ছাত্র/ছাত্রী তার পরীক্ষা বাতিলের জন্য নিজেই দায়ী থাকবে।
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Paper Code : IV-A

Full Marks : 20

Time : Thirty Minutes

Choose the correct answer.

Each question carries 2 marks.

1. Economic drain took place in India during British rule in the form of —

- (A) Goods
- (B) Salary
- (C) Interest on capital applied by the foreigners
- (D) Crops

2. Under Mahalwari Settlement systems land revenue was collected by —

- (A) Zamindars
- (B) Head of the village/villages
- (C) Government
- (D) Police

3. The Reserve Bank of India was established in the year —

- (A) 1930
- (B) 1935
- (C) 1940
- (D) 1945

4. The Permanent Settlement was introduced in Bengal by —

- (A) Lord Dalhousie
- (B) Lord Carjon
- (C) Lord Cornwallis
- (D) Lord Carson

5. The first passenger train in India ran between Mumbai (Bori Bunder) and Thane on —

- (A) 1845
- (B) 1854
- (C) 1947
- (D) 1853

6. NABARD was established in India in the year —

- (A) 1980
- (B) 1881
- (C) 1979
- (D) 1982

7. In India the structural unemployment is found mostly in —

- (A) Primary sector
- (B) Secondary sector
- (C) Tertiary sector
- (D) None of the above

Turn Over

8. The Monopolies and Restrictive Trade Practices (MRTP) Act was introduced in the year —

- (A) 1960
- (B) 1969
- (C) 1971
- (D) 1972

9. New Industrial Policy was introduced in India in the year —

- (A) 1989
- (B) 1847
- (C) 1990
- (D) 1991

10. Full form of the word 'NITI' of NITI Aayog is —

- (A) National Institution for Trending Income
- (B) National Institution for Transforming Income
- (C) National Institution for Transforming India
- (D) None of the above

Turn Over

2019

ECONOMICS (Honours)

Paper Code : IV-B

[New Syllabus]

Full Marks : 80

Time : Three Hours Thirty Minutes

The figures in the margin indicate full marks.

Section - I

Group - A

[Short Answer Type Questions]

Answer any *two* questions.

10×2=20

1. Review the changes in Indian land ownership and tenancy system introduced during the British rule. 10
2. What is Permanent Settlement system? What are its features? 4+6
3. What are the effects of commercialisation of agriculture in India during the British period? 10
4. Write a note on the imperial bank of India. 10

Group - B

[Essay Type Questions]

Answer any *one* question.

20×1=20

5. Examine critically the role of foreign capital in Indian industrial development during the British rule. 20

6. (a) Discuss the features of New Guarantee System in the construction of Indian railway during the British rule.
- (b) Briefly discuss the consequences of the construction of Indian Railway during the British period. 8+12

Section - II

Group - A

[Short Answer Type Questions]

Answer any *two* questions. 10×2=20

7. Discuss the sources of industrial finance in India for large and small scale industries. 10
8. What do you mean by the food security policy of the Government of India? How does public distribution system help in this context? 4+6
9. Briefly discuss the land reform policy introduced in India during the Plan period. 10
10. Briefly discuss the problem of rural credit in India. 10

Group - B

[Essay Type Questions]

Answer any *one* question. 20×1=20

11. (a) What do you mean by the sectoral composition of national income?
- (b) Discuss the change in sectoral composition of national income that has been taken place in India during the plan period.
- (c) What are the indication of such changes? 4+10+6
12. Discuss the nature of unemployment in Indian economy. State the measures taken by the Government to solve the unemployment problem in India. 12+8

Turn Over