

P - II (1+1+1) H / 18 (N)

2018

ECONOMICS (Honours)**Paper Code : III-A****[New Syllabus]**

Full Marks : 20

Time : Thirty Minutes

Important Instructions for OMR Sheet

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2. Write / Fill your Name, Roll number, Registration number, Regn. Session, Exam Date and Exam Session in the space provided on the OMR Sheet.
3. Each item has four alternative responses marked (A), (B), (C) and (D). You have to darken the circle as indicated below on the correct response against each item.
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7. Use only Blue/Black Ball point pen. Use of any mobile phone, calculator or log table etc. in examination hall, is prohibited.

3/111-800

OMR Sheet-এর জন্য জরুরী নির্দেশাবলী

- ১। OMR Sheet এর নির্দেশিত স্থানে সঠিক Subject Name, Subject Code এবং Paper Code লিখতে/পূরণ করতে হবে। OMR Sheet এর পিছনের পাতায় Subject Code গুলি দেওয়া আছে এবং Paper Code টি প্রশ্নপত্রে উল্লেখ আছে।
- ২। OMR Sheet এর নির্দেশিত স্থানে Name, Roll number, Registration number, Regn. Session, Exam date এবং Exam Session লিখতে/পূরণ করতে হবে।
- ৩। প্রতিটি প্রশ্নে চারটি করে সম্ভাব্য উত্তর, যথাক্রমে (A), (B), (C) এবং (D) করে দেওয়া আছে। পরীক্ষার্থীকে সঠিক উত্তরের গোল ঘরটি নীল/কালো কালিতে পূরণ করতে হবে।
- ৪। সঠিক উত্তর কেবলমাত্র উত্তর পত্র অর্থাৎ OMR Sheet-এর নির্দিষ্ট স্থানে গোল ঘর পূরণ করেই দিতে হবে। অন্য কোনো উপায়ে দেওয়া উত্তরের মূল্যায়ন হবে না।
- ৫। পরীক্ষার্থীর ফোন নম্বর OMR Sheet এর কোনো অংশে লেখা যাবে না। কোনোরূপ অবাঞ্ছিত শব্দ লেখা বা দুর্নীতির আশ্রয় নিলে পরীক্ষার্থী নিজেই তার জন্য দায়ী থাকবে।
- ৬। পরীক্ষা শেষে উত্তর পত্র (OMR Sheet) সংশ্লিষ্ট তত্ত্বাবধায়কের নিকট জমা দিয়ে পরীক্ষা কেন্দ্রের বাইরে বেরোতে হবে এবং কোনোভাবেই পরীক্ষা কেন্দ্রের বাইরে OMR Sheet টি আনা যাবে না।
- ৭। শুধুমাত্র নীল/কালো বল পয়েন্ট কলম ব্যবহার করতে হবে। পরীক্ষাকক্ষে মোবাইল ফোন, ক্যালকুলেটর অথবা লগ-টেবিল ইত্যাদি ব্যবহার নিষিদ্ধ।

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(2)

Answer *all* the questions in OMR sheet.

Choose the correct answer.

Each question carries 2 marks.

1. Consumer's equilibrium conditions is expressed as —

(A) $\frac{MU_x}{MU_y} = \frac{P_x}{P_y}$

(B) $\frac{MU_x}{MU_y} > \frac{P_x}{P_y}$

(C) $\frac{MU_x}{MU_y} < \frac{P_x}{P_y}$

(D) None of these

2. The production function $Y = \sqrt{K.L}$ is homogeneous of degree —

(A) one

(B) greater than one

(C) less than one

(D) none of these

Turn Over

3. The relation among AR , MR and $|e|$ can be expressed as —

(A) $MR > AR \left[1 - \frac{1}{|e|} \right]$

(B) $MR < AR \left[1 - \frac{1}{|e|} \right]$

(C) $MR = AR \left[1 - \frac{1}{|e|} \right]$

(D) $MR = AR \left[1 + \frac{1}{|e|} \right]$

4. If the total cost function is given by $C(q) = 3q^2 + 100q + 350$ then the MC at $q = 10$ will be —

(A) 100

(B) 160

(C) 150

(D) 0

5. Find the consumption function if $MPC = 0.8$ and $C = 40$ when $Y = 0$ —

(A) $C = 40 + 0.8Y$

(B) $C = 40 - 0.8Y$

(C) $C = 32 + 40Y$

(D) $C = 32 - 40Y$

6. The Lerner index can be simplified as —

(A) $\frac{1}{|e|}$

(B) $|e|$

(C) $\frac{1}{p}$

(D) p

7. Consider the game and find the value of the game —

| | | | | | |
|--------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| | | <i>P - B</i> | | | |
| | | <i>B₁</i> | <i>B₂</i> | <i>B₃</i> | <i>B₄</i> |
| <i>P - A</i> | <i>A₁</i> | 3 | -1 | 4 | 2 |
| | <i>A₂</i> | -1 | -3 | -7 | 0 |
| | <i>A₃</i> | 4 | -6 | 2 | -9 |

(A) -1

(B) 2

(C) 3

(D) 4

Turn Over

8. If the cost function is given by $C = \frac{1}{3}Q^3 + 3Q^2 - 50Q + 350$ then AFC at

$Q = 7$ will be —

(A) 100

(B) 70

(C) 50

(D) 1000

9. Given the consumption function $C = 0.8Y$ and the investment function $I = 102 - 0.2i$. The equation of the IS curve is —

(A) $Y = 500 - 10i$

(B) $Y = 450 - i$

(C) $Y = 510 - i$

(D) $Y = 505 - 2i$

10. The MC cannot be written as —

(A) $\frac{\Delta TC}{\Delta Q}$

(B) $\frac{\Delta TVC}{\Delta Q}$

(C) $\frac{\Delta TFC}{\Delta Q}$

(D) None of the above

P - II (1+1+1) H / 18 (N)

2018

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. The indifference map for a consumer in a 2-commodity framework is such that the slope of indifference curve is everywhere equal to $(-y/x)$. Here x is the quantity demanded for good x and y is the quantity demanded of good y . Show that the demand for x is independent of the price of y and the price elasticity of demand is unitary. 10
2. Prove that diminishing marginal utility is neither necessary nor sufficient to ensure convexity of indifference curve. 10
3. Assume that the consumer's satisfaction depends on in use Y and leisure, L . His utility function, defined for a time period or one day is given by

$$U = U(L, Y) = 48L + LY - L^2$$

such that

$$L = T - W; Y = rW$$

Turn Over

where W denotes the hours of work performed by the consumer, r the hourly wage rate. T the total time available

- (i) Derive the individual's supply curve of labour ; $W = W(r)$.
 - (ii) Show that irrespective of how high the wage becomes, the individual will never work more than 12 hours per day. 10
4. (i) A consumer is observed to purchase $q_1 = 20, q_2 = 10$ at prices $P_1 = 2, P_2 = 6$. He is also observed to purchase $q_1 = 18, q_2 = 4$ at the prices $P_1 = 3, P_2 = 5$. Is his/her behaviour consistent with the axioms of revealed preference theory ?
- (ii) Use Revealed Preference Theory to prove that substitution effect is negative. 4+6=10

5. Consider the macroeconomic model :

$$C_t = 0.5Y_t + 0.4Y_{t-1} + 300,$$

$$I_t = 0.2Y_{t-1} + 200$$

$$Y_0 = 6500,$$

where notation has there usual meanings. Find the equilibrium national income and examine the stability of the system. 10

6. If the demand and supply functions respectively are

$$P = 20 - 5x$$

$$P = 4 + 3x$$

Find the consumer's surplus and producer's surplus if the output and prices are determined in a perfectly competitive market. 10

7. Prove that Cobb-Douglas Production function : $Q = AL^\alpha K^\beta$ where $A, \alpha, \beta > 0$ is strictly concave when the law of diminishing returns to scale operates. 10

8. (a) What is a saddle point in a two person zero sum game ? What are its properties ?

(b) Find the maximin and minimax of the following pay off matrix :

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

Does saddle point exist here ?

5+5=10

Group - B

[Essay Type Questions]

Answer any *two* questions.

20×2=40

9. (a) State the Hawkins-Simon condition for the viability of a 2 sector Leontief Static Open Model. What is the meaning of the condition in simple economic terms.

(b) Give a geometrical interpretation of the condition.

(c) Consider the following input coefficient matrix and check the Hawkins-Simon condition.

$$\begin{bmatrix} 0.4 & 0.2 & 0.3 \\ 0.3 & 0.4 & 0.1 \\ 0.2 & 0.2 & 0.4 \end{bmatrix}$$

8+6+6=20

Turn Over

10. In a duopoly market, the demand function is

$$P = 100 - 0.5(q_1 + q_2)$$

and the duopolist costs are

$$C_1 = 2.5q_1 \text{ and } C_2 = 0.25q_2^2$$

Obtain :

(a) The reaction functions of duopolists.

(b) Stackelberg solution with Firm-I being the sophisticated leader.

(c) Stackelberg solution if Firm-II is the sophisticated leader.

11. Consider the following macroeconomic model :

$$Y_t = C_t + I_t$$

$$C_t = eY_{t-1}, \quad 0 < e < 1$$

$$I_t = v(Y_{t-1} - Y_{t-2}), \quad v > 0$$

when Y = Income, C = Consumption, I = Investment, v = Capital Output Ratio, e = MPC and t = time.

(a) Formulate a second order difference equation.

(b) What is the intertemporal equilibrium value of income ?

(c) Deduce the time path of income.

(d) Identify the zone in the s - v plane, where income display oscillatory and non-oscillatory movements.

(e) Identify the subzone in(d) where income exhibits damped and explosive oscillations. 4+4+4+4+4=20

12. (a) Prove that the Dual of the 'Dual Problem' is 'Primal Problem'.

(b) Obtain the Dual of the following LPP :

$$\text{Maximise } Z = 5x_1 + 3x_2$$

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

$$5x_1 + 2x_2 \leq 10$$

$$3x_1 + 8x_2 \geq 12$$

$$x_1 \geq 0, x_2 \geq 0$$

(c) Solve the above problem mentioned in (b) by simplex method.

$$5+5+10=20$$

P - II (1+1+1) H / 18 (N)

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ECONOMICS (Honours)

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[New Syllabus]

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OMR Sheet-এর জন্য জরুরী নির্দেশাবলী

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3/112-800

(2)

Answer *all* the questions in OMR sheet.

Choose the correct answer.

Each question carries 2 marks.

1. Permanent settlement was introduced in India in the year —

- (A) 1791
- (B) 1793
- (C) 1795
- (D) 1797

2. De-industrialisation in India during the British rule refers to the situation of —

- (A) shifting of labourers from agriculture to industry
- (B) advent of new industries
- (C) mechanisation of industries
- (D) decline of handicraft

3. Colonial pattern of trade in India refers to —

- (A) Export of agricultural goods
- (B) Export of industrial goods
- (C) Export of bullions
- (D) Trade with colonies

4. The Reserve Bank of India (RBI) was established in the year —

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

5. Commercialisation of agriculture refers to the situations of the —

- (A) entry of commercial persons in agriculture
- (B) increase in interest of the traders
- (C) production for selling purposes
- (D) production for consumption purposes.

6. The marketable surplus of agricultural product refers to —

- (A) the amount which a farmer call sell in the market
- (B) the amount which is sold by a farmer in the market
- (C) the amount which a farmer hoards
- (D) the amount which a farmer sells in distress.

7. In India, size of the Trade Unions is —

- (A) comparatively small
- (B) comparatively large
- (C) comparatively very large
- (D) No Trade Union exist in India

Turn Over

8. The Monopolies and Restrictive Trade Practices (MRTP) Act was introduced in the year —
- (A) 1960
 - (B) 1970
 - (C) 1980
 - (D) 1990
9. Which of the following is true about the sectoral distribution of income in India during the plan period —
- (A) relative importance of primary sector has increased
 - (B) relative importance of secondary sector has decreased
 - (C) relative importance of tertiary sector has decreased
 - (D) none of the above
10. Inflow of foreign capital in India during the British Rule was —
- (A) to fillup the gap between existing capital and required capital for industrial development
 - (B) to earn sympathy of the Indian Nationalists
 - (C) to improve the economic conditions of the people
 - (D) None of the above

Turn Over

2018

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. What were the causes of decline of Indian handicrafts during the British Rule ? 10
2. How did commercialization of agriculture take place in India during British rule ? 10
3. Write a short note on the development of commercial banking in India during the British rule. 10
4. What were the circumstances that led to the adoption of the policy of protection in 1921 ? 10

Group - B

[Essay Type Questions]

Answer any *two* questions. 20×1=20

5. (a) What were the economic benefits that railway construction brought to Indian economy ?

- (b) How far were Indian railway responsible for the decline of cottage industry ? 10+10=20

6. Discuss in brief the development of currency system in British India. 20

Section - II

Group - A

[Short Answer Type Questions]

Answer any *two* questions. 10×2=20

7. Discuss the characteristics of New Technology introduced in India during the planning period. 10
8. Show how changes in occupational pattern have brought about structural changes in Indian economy. 10
9. Discuss in brief the suggestive measures to improve the condition of the child labourers in India. 10
10. Write a short note on the 'Exit Policy' of the government of India. 10

Group - B

[Essay Type Questions]

Answer any *one* question. 20×1=20

11. (a) Examine the importance of marketing of agricultural product in India.
(b) Identify the problems of agricultural marketing.
(c) Distinguish between marketable surplus and marketed surplus. 6+8+6=20
12. (a) Discuss the role of NABARD in facilitating rural credit in India.
(b) Discuss the food security policy of the government of India. 10+10=20