

2023

**ECONOMICS — HONOURS**

**Paper : CC-11**

**(International Economics)**

**Full Marks : 65**

*The figures in the margin indicate full marks.*

*Candidates are required to give their answers in their own words  
as far as practicable.*

**Group - A**

1. Answer *any ten* questions : 2×10
- (a) In a world of two countries and two commodities with one factor, if one country has absolute advantage in the production of both the commodities, is trade ever possible between the two countries?
  - (b) When will a production possibility frontier be convex to the origin?
  - (c) What is Revealed Comparative Advantage (RCA)?
  - (d) What is community indifference curve?
  - (e) What is meant by specialization gain?
  - (f) What will be the shape of the offer curve under constant opportunity cost?
  - (g) Define unit isoquant.
  - (h) What is interest arbitrage?
  - (i) What do you mean by factor intensity reversal?
  - (j) What is the significance of Marshall-Lerner condition?
  - (k) What is Metzler Paradox?
  - (l) Does factor price equalization through commodity trade occur in sector specific model?
  - (m) What is prohibitive tariff?
  - (n) Does Jones (1971) model possess decomposable property?
  - (o) What determines the slope of BP curve in the IS-LM-BP model?

**Group - B**

Answer *any three* questions.

2. Explain the 'decomposability property' of the Jones (1965) model. 5
3. What is meant by trade triangle? Signify the implications of all three sides of the trade triangle. 2½+2½

**Please Turn Over**

4. State and explain Rybczynski theorem. 2+3
5. What will be the value of optimum tariff for a small country? Why? 3+2
6. What is envelope condition? How is this condition used in trade models? 2½+2½

**Group - C**

Answer *any three* questions.

7. (a) Show that there is a one-to-one correspondence between commodity price ratio and factor price ratio in the absence of factor intensity reversal.  
(b) Do you think that incomplete specialization is a necessary condition of the Factor Price Equalisation theorem? Explain your answer.  
5+5
  8. (a) What do you mean by elasticity of offer curve and elasticity of demand for imports?  
(b) Derive the value of elasticity of offer curve when the curve is upward rising.  
(c) What will be the value of import demand elasticity for this curve? 4+4+2
  9. (a) "We find fixed coefficient technology in Jones (1971) model"— True / False? Justify.  
(b) Examine the implications of price magnification effect in the context of Jones (1971) model. 3+7
  10. Examine foreign trade multipliers with and without foreign repercussions. Which one is higher and why? 7+3
  11. Assuming perfect capital mobility, use the IS-LM-BP model to show (a) monetary policy does not work under fixed exchange rate regime, but (b) the same policy is very effective under flexible exchange rate regime. 5+5
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**2023**

**ECONOMICS — HONOURS**

**Paper : CC-12**

**(Indian Economics)**

**Full Marks : 65**

*The figures in the margin indicate full marks.  
Candidates are required to give their answers in their own words  
as far as practicable.*

**Group - A**

1. Answer *any ten* questions :

2×10

- (a) What do you mean by demographic dividend?
- (b) Is there any gender disparity in Education in India?
- (c) Mention any two major objectives of economic reforms in India.
- (d) Mention any two economic crisis that occurred in the late 1980s.
- (e) How do we measure poverty in India?
- (f) How can we measure income inequality in India?
- (g) Mention any two causes behind the macroeconomic crisis of 1991 in India.
- (h) Define repo rate.
- (i) How FDI is different from FPI?
- (j) What are the provisions of Right to Education Act, 2009?
- (k) What is meant by Plan Holiday?
- (l) Mention two major objectives of tax reforms policy in India.
- (m) What is decentralised planning?
- (n) Distinguish between MODVAT and CENVAT.
- (o) Define Capital Adequacy Ratio (CAR).

**Group - B**

Answer *any three* questions.

5×3

2. Analyze the demographic trends and their implications for economic development in India.
3. Explain the major structural changes in the post-reforms period in India.

**Please Turn Over**

4. Compare and contrast the regional variations in growth and development in India.
5. What are the banking sector reforms suggested by Narasimham Committee?
6. Do you think in recent years the composition of external trade has changed in India?

**Group - C**

Answer *any three* questions.

10×3

7. Evaluate the labour market reforms in India and their impact on employment and workers' rights.
  8. Discuss the relationship between education, health, and economic development in the context of Indian economy.
  9. What is the relationship between economic growth, poverty and inequality? Explain in the context of Indian economy.
  10. What are the policies taken to promote exports by India? How far these policies were successful in promoting growth?
  11. What is Capital Account Convertibility? Can you recommend for full convertibility in the capital account in India?
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2023

**ECONOMICS — HONOURS**

**Paper : DSE-A-1 and DSE-A-2**

*The figures in the margin indicate full marks.*

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as far as practicable.*

**Paper : DSE-A-1**

**(Applied Econometrics)**

**Full Marks : 50**

**Group - A**

1. Answer *any five* questions :

2×5

(a) What is meant by 'panel data'?— Give a suitable example.

(b) In the classical linear regression model given by

$$Y_i = \beta_1 + \beta_2 X_{2i} + \beta_3 X_{3i} + u_i$$

(with all its usual assumptions), find  $E(Y_i)$  and interpret it.

(c) In the regression model

$$Y_i = \beta_1 X_i^{\beta_2}$$

how do you incorporate the stochastic disturbance term  $u_i$  so that parameters can be estimated by Ordinary Least Square method?

(d) The model

$$Y_i = \beta_1 + \beta_2 X_i + u_i$$

satisfies all the usual assumptions of the classical linear regression model with the following exception :

$$E(u_i^2) = \sigma^2 X_i \quad (X_i > 0)$$

Identify the problem and transform the model so as to remove it.

(e) What are instrumental or proxy variables?

**Please Turn Over**

- (f) From the data for 46 states in the USA for a given year the following regression results are obtained :

$$\log C : 4.30 - 1.34 \log P + 0.17 \log Y$$

$$\text{S.E.} : (0.91) \quad (0.32) \quad (0.20)$$

$$\bar{R}^2 = 0.27$$

where  $C$  = Consumption of a commodity per year  
 $P$  = Real price of the commodity  
 $Y$  = Per capita real disposable income.

- (i) What is the income elasticity of demand for the commodity?  
 (ii) Is it statistically significant?  
 (g) What is non-stationary time series data?  
 (h) What are the consequences of omitting a relevant variables?

### Group - B

2. Answer *any two* questions :

- (a) For a given data set, the plot reveals that the explained variable ( $Y_i$ ) is increasing more slowly than the explanatory variable ( $X_i$ ).  
 (i) Suggest a possible functional form of the above.  
 (ii) Do you have a linear regression model?  
 (iii) What does the slope coefficient measure? 2+1+2
- (b) (i) For an estimated multiple regression equation,  $R^2$  is found to be high but most of the slope coefficients individually are statistically insignificant. Identify the problem that can explain such a phenomenon.  
 (ii) Do you get precise estimates of the coefficients in the presence of the above problem? Explain your answer by the help of a suitable example. 2+3
- (c) As the criterion of model selection, how would you compare between the  $R^2$  criterion and the Adjusted  $R^2 (= \bar{R}^2)$  criterion? 5
- (d) The quarterly data of expenditure on consumer durables for 20 years are obtained. To deseasonalize the data using dummy variables, the following two models are used :

$$\text{Model 1 : } \hat{Y}_t = \hat{\alpha}_1 D_{1t} + \hat{\alpha}_2 D_{2t} + \hat{\alpha}_3 D_{3t} + \hat{\alpha}_4 D_{4t}$$

$$\text{Model 2 : } \hat{Y}_t = \hat{\alpha} + \hat{\beta}_2 D_{2t} + \hat{\beta}_3 D_{3t} + \hat{\beta}_4 D_{4t},$$

where  $D_{it}$  is the dummy for the  $i$ -th quarter,  $i = 1, 2, 3, 4$

Which model will you choose and why?

**Group - C**

3. Answer *any three* questions :

(a) From a sample of 209 firms the following regression results are obtained :

$$\log(\text{Salary}) = 4.32 + 0.280 \log(\text{Sales}) + 0.0174 \text{roe} + 0.00024 \text{ros}$$

$$\text{S.E.:} \quad (0.32) \quad (0.035) \quad (0.0041) \\ (0.00054)$$

$$R^2 = 0.283$$

where salary = salary of CEO

sales = annual firms' sales

roe = return on equity in percent

ros = return on firm's stock

(i) Interpret the regression taking into account any prior expectations that you may have about the signs of the various coefficients.

(ii) Which of the coefficients are individually significant at 5% level?

(iii) Can you interpret the coefficient of roe and ros as elasticity coefficients? Why or why not?

(iv) What is the overall significance of regression?

3+2+3+2

(b) Consider the following regression equation :

$$y_i = \alpha + \beta_1 x_{1i} + \beta_2 x_{2i} + u_i \quad u_i \sim \text{IN}(0, \sigma^2)$$

The data for a sample of 33 observations are noted below where observations are measured as deviations from sample mean :

$$\bar{x}_1 = 20; \bar{x}_2 = 8; \bar{y} = 30$$

$$\sum x_{1i}^2 = 15; \sum x_{1i}x_{2i} = 10; \sum x_{2i}^2 = 15$$

$$\sum x_{1i}y_i = 20; \sum x_{2i}y_i = 16; \sum y_i^2 = 32$$

(i) Estimate the parameters in the model.

(ii) Find  $R^2$  and  $\bar{R}^2$ .

(iii) Check the overall significance of the slope coefficients at the 5% level of significance. [Given  $F_{0.05}(2, 30) = 3.32$ ]

5+2+3

(c) (i) What are the common types of specification errors committed in developing an econometric model?

**Please Turn Over**

(ii) The following informations are given—

$$Y_i = \beta_1 + \beta_2 X_{2i} + \beta_3 X_{3i} + u_i \dots \text{true model}$$

$$Y_i = \alpha_1 + \alpha_2 X_{2i} + v_i \dots \text{fitted model}$$

$$\text{and } E(\hat{\alpha}_2) = \beta_2 + \beta_3 b_{32}$$

where  $b_{32}$  is the slope in the regression of  $X_3$  on  $X_2$ .

Write down and explain the conditions under which  $\hat{\alpha}_2$  will be unbiased. Does the bias of  $\hat{\alpha}_2$  vary when  $X_3$  is positively or negatively related to both  $Y$  and  $X_2$ ?

(iii) Between an underfitted model and an over-fitted model, which one do you prefer for hypothesis testing and why? 3+(2+2)+3

(d) Let the true relation between the total cost ( $Y$ ) and the total output ( $X$ ) be captured by a cubic function while the researcher fits a linear function instead. Explain the steps involved to check whether the linear model is really a misspecified one. 10

(e) (i) Mention two methods of de-trending in a time series.

(ii) Fit a linear trend to the following figures of sales for a firm and estimate the sales figure in 2029 :

Year :	2016	2017	2018	2019	2020	2021	2022
Sales ('000 tons) :	110	121	116	136	140	157	170



**Paper : DSE-A-2****[Economic History of India (1857-1947)]****Full Marks : 65****Group - A**

1. Answer **any ten** questions from the following : 2×10
- Explain the concept of 'Economic Drain'.
  - Mention two causes for the industrial backwardness of India under British rule.
  - How did the tariff policy pursued by the British government lead to the decay of handicrafts in India?
  - Mention any two recommendations of Fowler Committee about the currency system in India.
  - What was the main difference between the Ryotwari System and the Mahalwari System?
  - Mention two positive effects of railway expansion in India.
  - Mention two causes that led to the commercialisation of Indian agriculture.
  - Mention two industries whose protection was rejected by the government even though recommended by the Tariff Board.
  - Mention two ways in which unilateral transfer of funds from India to Britain was done.
  - Mention two features of the 'Old Guarantee System' in railway construction.
  - What is 'Ottawa Agreement'?
  - Mention two gross abuses done by the Managing Agencies.
  - What was the 'triple formula' for selection of industries for protection suggested by the first Fiscal Commission appointed in 1921?
  - Name two commercial crops that were produced during the British rule.
  - What was the 'Ratio-Controversy' originating from the recommendations of the Hilton-Young Commission?

**Group - B**

2. Answer **any three** questions from the following : 5×3
- What were the main functions of a Managing Agency?
  - What were the economic effects of 'Economic Drain'?

**Please Turn Over**

Z(5th Sm.)-Economics-H/DSE-A-1 & DSE-A-2/CBCS (6)

- (c) Discuss the consequences of commercialisation of Indian agriculture during the British rule.
- (d) What were the injurious effects of railway expansion in India?
- (e) What were the main recommendations of the Hilton-Young Commission?

**Group - C**

3. Answer *any three* questions from the following :

- (a) Discuss whether the policy of 'Discriminating Protection' contributed to the industrial development in British India. 10
  - (b) Discuss the evolution of the Indian currency system from the Silver standard to Gold Exchange standard. 10
  - (c) How do economic historians establish the phenomenon of 'de-industrialisation' in India in the 19th century? What were its effects? 6+4
  - (d) Discuss the different phases of development of Indian railways between 1844 and 1914. 10
  - (e) Discuss how land ownership structure and revenue arrangements under the Permanent Settlement changed in British India. 10
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2023

**ECONOMICS — HONOURS**

**Paper : DSE-B-1 and DSE-B-2**

**[Comparative Economic Development (1850-1950)]**

**Full Marks : 65**

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as far as practicable.*

**Paper : DSE-B-1**

**[Comparative Economic Development (1850-1950)]**

**Full Marks : 65**

**Group - A**

1. Answer *any ten* questions :

- |  |     |
|--|-----|
| (a) What does the concept of Laissez-faire imply?  | 2   |
| (b) What do you mean by a development strategy?  | 2   |
| (c) What is meant by Industrial, Trade and Technology (ITT) policies undertaken by an economy?   | 2   |
| (d) 'Regional Economic Decentralization has affected the Chinese and Russian economies differently'.<br>— Comment.   | 2   |
| (e) Name the country which is the single largest manufacturing centre in the world in terms of volume of production. Also name one country which has outperformed the former in terms of value added in this regard. | 1+1 |
| (f) Give two main reasons for the development of USA economy.  | 2   |
| (g) Which period is known as the 'Golden Age' in OECD countries?   | 2   |
| (h) Mention any two factors on which the Liberal World Order was based during 1870s.   | 2   |
| (i) Name the year when, by common agreement among the Japanese, the term viz., 'Japanese Miracle' appeared for the first time. Also, name the book where the term was mentioned first.                               | 1+1 |
| (j) Name two developed economies of Asia. Also mention the names of two economies in the world which are yet to be designated as the developed ones.   | 1+1 |
| (k) Mention any two causes behind the dramatic success of China in the international economy particularly since 1990.  | 2   |
| (l) Give any two reasons behind the human development crisis in Sub-Saharan Africa.  | 2   |

**Please Turn Over**

- (m) What was the implication of repeal of Britain's Corn law in 1846? 2
- (n) Mention the indicators of remarkable improvements in social sectors of East Asian economies during post-war economic growths. 2
- (o) For what reason did the Netherlands abolish Patent Law in 1869? 2

**Group - B**

Answer *any three* questions.

5×3

2. Briefly discuss the achievements of the First Five Year Plan under Stalin in USSR.
3. Make a comparative analysis of India and China on the nature of governance.
4. Differentiate, in brief, the Industrial, Trade and Technology (ITT) policies used in Germany and Sweden.
5. Evaluate the role of state-owned enterprises in industry and infrastructure of early modern Japan.
6. Explain the role of democracy in the economic growth of China and India.

**Group - C**

Answer *any three* questions.

7. Can USA be designated as the 'Bastion of Modern Protectionism'? Agree in favour of your viewpoint. 10
8. Differentiate, citing examples of economies, between 'Capitalist Developmental State' and 'Communist Dictatorship'. 10
9. Examine the nature of development crisis in Sub-Saharan Africa. Mention briefly two strategies to overcome the crisis. 6+4
10. Make a comparative analysis of India and China on the issues of poverty reduction and inequality in the realm of economic growth. 10
11. Why do we call Japan and other NICs as the East Asian Miracles? Discuss the debates on 'East Asian Miracle' that evolved during the second half of the twentieth century. 3+7

**Paper : DSE-B-2**  
**(Financial Economics)**

**Full Marks : 65**

**Group - A**

1. Answer *any ten* questions :

2×10

- (a) What is a derivative asset? Give an example.
- (b) What do you mean by internal rate of return as used in financial analysis?
- (c) Find the effective interest rate for 8% p.a. compounded quarterly.
- (d) What is the present value of ₹ 5,000 at an interest rate of 10%, to be received at the end of 2 years with continuous compounding?
- (e) If a person borrows ₹ 1,000 at 12% interest rate compounded monthly, calculate monthly payments to be made if the loan is repaid in 5 years.
- (f) What is the difference between spot rate and forward rates of interest?
- (g) What is Capital Market Line?
- (h) What is short selling of a financial asset?
- (i) State Markowitz's Two fund theorem.
- (j) What is the significance of  $\beta$  in the Security Market line as shown in CAPM?
- (k) What is meant by writing an option?
- (l) Who are the participants in options markets?
- (m) What is an optimum dividend policy?
- (n) State the main proposition of the M-M hypothesis.
- (o) What do you mean by redeemable debentures?

**Group - B**

2. Answer *any three* questions :

- (a) (i) Calculate the current price for a ₹ 1,000 par value bond with 2 years to maturity with an annual interest rate of 5%, making semi annual interest payments and annual yield is 3%.  
(ii) For a zero coupon bond with yield to Maturity 3%. 3+2
- (b) Distinguish between call options and put options using suitable diagrams. 5
- (c) What are the different types of traders? Discuss the different hedging strategies used to reduce risks. 2+3

**Please Turn Over**

- (d) Explain the impact upon the efficient region in Markowitz Model when risky portfolios can be combined with the risk free asset, assuming both borrowing or lending of risk free asset, using suitable diagram. 5
- (e) Explain any two methods of estimating the cost of equity share capital in a company. 5

**Group - C**

Answer *any three* questions.

3. The correlation  $\rho$  between assets A and B is 1 and other data are given in the table below :

Asset	$\bar{r}$	$\sigma$
A	10%	15%
B	18%	30%

$$\rho = 1$$

- (a) Find the proportion  $\alpha$  of A and  $(1 - \alpha)$  of B that define a portfolio of A and B having minimum standard deviation.
- (b) Find the value of this minimum standard deviation.
- (c) What is the expected return of this portfolio? 6+2+2
4. (a) Give the price sensitivity formula for a fixed income security.
- (b) Use this formula to calculate the change in price and the new price of a 30 year at par zero coupon bond with par value 100 and semi annual coupon payment whose yield increases from 10% to 11%. 3+7
5. What is the difference between American and European options? Distinguish between futures and forward contracts with suitable examples. 4+6
6. State Markowitz One fund theorem. Explain the process of finding the single fund in terms of the optimization problem. 2+8
7. Evaluate the following as a source of finance in a company : 5+5
- (a) Equity Shares
- (b) Debentures.