

BA (Honours) Examination 2023
Semester VI
Economics
Course CC -13
Indian Economics – II

Time: 3 Hours

Full Marks: 60

Questions are of equal value
Answer any four questions

1. Critically discuss the major claims of neo-liberal reforms in India and counter arguments of dissenting economists.
2. Critically discuss demonetization experience in India.
3. Do you think that the policies related to 'export led growth' has become successful in India? Give reasons behind your argument.
4. Critically discuss the policies related to 'stabilizaion' in Indian economy as a part of the economic liberalization in India.
5. What were the main reasons of Industrial stagnation in India since mid 1960's.
6. What are the basic features of mode of production debate in Indian agriculture? Discuss.
7. Do you think that land reform in India has been redundant, since India experienced a successful green revolution? Critically discuss.
8. Write short notes (any two)
 - (a) Asiatic mode of Production
 - (b) Colonialism and backwardness.
 - (c) 'Efficiencies' of family farm, capitalist farm and co-operative farm.
 - (d) Diseconomies of small scale production and land reform.

(1)

B.A. (Honours) Examination, 2023

Semester-VI

Economics

Course- CC-14

(Introduction to Econometrics)

Time: 3 hours

Full Marks: 60

Questions are of value as indicated in the margin.

Question No. 1 is compulsory and answer any three questions from the rest.

1. Select the Correct answer from the following questions: - 15x1=15

- (i) The number of explanatory variables in a simple regression is....
- a) One b) Zero c) Two d) More than Two
- (ii) In a two-variable regression, Y is the dependent variable and X is the independent variable. The correlation coefficient between Y and X is 0.8. For this, which of the following is correct?
- a) 8% of variations in Y are explained by X
- b) 64% of variations in Y are explained by X
- c) 0.8% of variations in Y are explained by X
- d) 80% of variations in Y are explained by X
- (iii) $E(U_i, U_j) = 0$, when $i \neq j$ is termed as,
- a) ~~Heteroscedasticity~~ b) Multi-Collinearity
- c) No Auto-Correlation d) Homoscedasticity
- (iv) The book 'Principles of Econometric^S A Modern Approach using EVIEWS' was authored by.....
- (a) Sankar Kumar Bhaumik (b) Arther S Goldberger c) H. Theil d) J R N Stone
- (v) Explanatory Variable is also known as.....
- a) ~~Repressor~~ b) Explained Variable
- c) Response Variable d) Dependant Variable

(2)

(vi) The assumption of Homoscedasticity was expressed as....

- a) $E(U_i)^2 = \sigma_i^2$ b) $E(U_i)^2 = \sigma^2$ c) $E(U_i)^2 = 0$ d) $E(U_i) = 0$

(vii) Choose the correct one from the following

- a) $0 \leq r^2 \leq 1$ b) $0 < r^2 < 1$ c) $0 \geq r^2 \geq 1$ d) $0 > r^2 > 1$

(viii) The combination of Time series and Cross section data is termed as.....

- (a) Primary data (b) Secondary data (c) Panel data (d) None of these.

(ix) The problem of Heteroscedasticity was expressed as.....

- a) $E(U_i)^2 = \sigma_i^2$ b) $E(U_i)^2 = \sigma^2$ c) $E(U_i) \neq 0$

$$\begin{aligned} \textcircled{a} E(U_i^2) &= \sigma_i^2 \\ \textcircled{b} E(U_i^2) &= \sigma^2 \\ \textcircled{c} E(U_i) &= \sigma_i \end{aligned}$$

(x) Linear Regression is estimated through:

- a) WLS (b) OLS, (b) MLE, (c) Both (b) & (c) d) None of the above

(xi) Given regression co-efficient $b = 2$ and standard error of 0.5, the value of t ratio is:

- a) 2 b) 4 c) 1 d) 2.5

(xii) Student 't' test was formulated by

- a) William Sealy Gosset b) Carl Friedrich Gauss
c) Durbin Watson d) Both b and c

(xiii) The statistical properties of OLS estimators are

- (a) Linearity, Unbiasedness, and minimum variance
(b) Linearity and Unbiasedness
(c) Unbiasedness, and minimum variance
(d) Linearity and minimum variance

(xiv) Multicollinearity is used to denote,

- (a) The presence of linear relationships among explanatory variables
(b) The presence of non-linear relationships among explanatory variables
(c) The presence of linear relationships among dependent variables
(d) The presence of linear relationships among endogenous variables

(xv) Specification bias or specification error means

- a) Leaving out important explanatory variables
b) Including unnecessary variables
(c) Choosing the wrong functional form between Y and X variables
d) All of the above

(3)

2. In the context of two variable linear model, prove that OLS estimators are BLUE.

(i) Consider the following regression model

$$Y_i = \beta X_i + \epsilon_i$$

Find out the estimate of β .

iii) Proof that $r^2 = 1 - \frac{RSS}{TSS}$, r^2 = Coefficient of determination.

5+5+5=15

3. Define the following with explanations –

(i) null hypotheses

(ii) alternative hypotheses

(iii) critical region

(iv) type I error

(v) type II error

(vi) power of a test.

2+2+3+2+2+4=15

4. (i) What is Neyman-Fisher factorization theorem?

ii) If X_1, X_2, \dots, X_n is a i.i.d random sample from $N(\mu, \sigma^2)$ where σ^2 is known. Find the sufficient estimator of μ and σ^2 .

iii) What do you mean by degrees of freedom?

iv) Evaluate degrees of freedom for a given sample of sequence $X = 3, 6, 2, 8, 4, 2, 9, 7, 12$

3+7+3+2=15

5. (i) Explain the maximum likelihood method of point estimation. State the properties of maximum likelihood estimator.

ii) Consider some i.i.d observations based on a sample from $N(\mu, \sigma^2)$ where μ and σ^2 are both unknown. Find the maximum likelihood estimators of population mean μ and population variance σ^2 .

3+4+8=15

6. (i) What do you mean by “sampling fluctuation”?

ii) If X_1, X_2, \dots, X_n is a simple random sample of size n from a finite population of size N units with mean μ and variance σ^2 , show that

(i) $E(\bar{X}) = \mu$ and (ii) $\text{Var}(\bar{X}) = \frac{\sigma^2}{n}$ in SRSWR and $\frac{\sigma^2 (N-n)}{n(N-1)}$ in SRSWOR.

3+(4+8)=15

(4)

7. A political party is investigating whether spending in marketing (me_t) (measured in thousand Euros) is an appropriate strategy in order to gain more members in the parliament (M_t) for the next elections:

$$M_t = \beta_0 + \beta_1 me_t + u_t$$

In order to estimate the above regression model, data of the last five elections is collected obtaining the following estimated regression:

$$M_t = 2.684 + 0.025 me_t, p=0.000, \text{ absolute value of the } t = 5 \text{ and}$$

$$R^2 = 0.392$$

- (i) Interpret the intercept term, estimated slope coefficient and the determination coefficient of Determination.
- (b) Find the predicted members in the parliament if the political party is thinking of ~~in~~ spending about 750,000 Euros in marketing for the next elections. Also find the values of estimated parameter. (5+10)

B.A. (Honours) Examination, 2023
Semester–VI
Economics
Course – DSE-3
(Group A: Environmental Economics)

Time: Three Hours

Full Marks: 60

Questions are of value as indicated in the margin.

Answer *any four* questions: -

1. Suppose a water body in your locality will be converted into real estate. Many people, including you, do not want the water body to be converted into real estate. Explain how you would try to find the value of the water body using the Contingent Valuation Method. In this context, explain the relevant problems with such a method. (12+3)
 2. Explain the concept of “strong sustainability”. Explain the difference between “strong sustainability” and “weak sustainability”. (10+5)
 3. Explain how the Coase theorem can solve the problem of market failure. Explain the problems faced in applying the Coase theorem. (10+5)
 4. Explain the various Quantity based instruments for pollution control. In this context, explain the concept of pollution offset. (12+3)
 5. Explain how a country’s macroeconomic policies affect its natural environment. In this context, explain the Environmental Kuznets Curve. (10+5)
 6. Explain how the first and the second law of thermodynamics help us to understand the environment-economy interaction. Explain what do you understand by the “Gaia Hypothesis”? (10+5)
 7. Explain how asymmetric information in a society creates problem for the conservation of environmental assets. In your opinion, explain how such problems be solved. (12+3)
 8. Write short notes on the following: - (8+7)
 - (a) Pigouvian Tax
 - (b) Tragedy of the Commons
-

BA (Honours) Examination 2023
Semester VI
Economics
Course DSE 3
(Group B. Financial Economics)

Time 3 hrs

Full Marks 60

Questions are of value as indicated in the margin
Answer **any four** questions

1. Explain briefly the characteristics of the Money Market. Why is the interest rate in the Money Market typically low? Explain the difference between Treasury Bills and Commercial Paper. Which of these two will have a lower interest rate and why? (5+2+3+5)
2. Distinguish between a Coupon Bond and a Perpetuity. Calculate the present value of a 3 year Coupon Bond with a Face Value of Rs.10000/-and coupon rate of 6% if the current market interest is 8%. How is the Value affected if the market interest rate goes up to 9%. (5+6+4)
3. Discuss some of the factors that affect the demand and supply of bonds. How does an increase in expected inflation affect the rate of interest? Distinguish between default risk and interest rate risk. (5+5+5)
4. Stock Market Find the Mean and Variance of a Portfolio composed of 3 stocks with mean returns \bar{r}_i , $i = 1, 2, 3$, variances σ_i , $i = 1, 2, 3$, co-variances $\sigma_{12}, \sigma_{23}, \sigma_{31}$ and weights, w_i , $i = 1, 2, 3$. What is the Efficient Portfolio Frontier and why is the efficient portfolio frontier positively sloped (9+6)
5. Briefly discuss the Markowitz model. Solve the Markowitz problem with two assets where $\bar{r}_1 = 12, \bar{r}_2 = 15, \sigma_1 = 20, \sigma_2 = 18, \sigma_{12} = .01$. (6+9)
6. What is the capital market line? Explain in this context what you mean by the price of risk. (8+7)
7. Discuss the Capital Asset Pricing Model. In this context explain the role of Asset β in making investment decisions regarding the asset. (10+5)
8. Consider a very large number (N) of risk averse customers insuring their house property valued at W against theft. The loss from theft is estimated at Rs 1 Lakh. The probability of theft (which is independent of each other) is estimated to be 2%. Show that a risk neutral and competitive insurance company would set the premium rate at 2%. How much insurance would the customers buy in this case? (6+9)

B.A (Honours) Examination, 2023

Semester- VI

Economics

Paper- DSE-4

(Development Economics II)

Time: 3 Hours

Full Marks:60

Questions are of value as indicated in the margin

Question No. 1 is compulsory. Attempt any THREE from the rest.

1. Answer any three of the following: 3×5=15
 - (i). How does the microeconomic theory of fertility relate to the theory of consumer choice?
 - (ii). Why do you think that economic development is not sufficient for women empowerment?
 - (iii). What is the impact of globalization in developing countries?
 - (iv). How does education stimulate rural-urban migration?
 - (v). How does poor health conditions in developing countries harm the productivity of workers?
2. Critically examine the relationship between income growth and population growth. In this context, discuss the Malthusian theory of population. 15
3. Why are health and education so closely linked in the development process? Why is increase in individual income not sufficient to improve health and education? 7+8
4. Distinguish between private and social benefits and costs of education. What economic factors give rise to the wide divergence between private and social benefit-to-cost valuations in most developing countries? Explain. 10+5
5. Briefly discuss the importance of gender equality in sustainable development. 15
6. Discuss the major aspects of economic reforms taken up by the developing countries during the 1990's along with their implications from the point of view of development . 15
7. How are population growth, poverty and land scarcity interrelated? Explain how these problems can create a vicious circle of events. 15

BA (Honours) Examination 2024
Semester VI
Economics
Course CC -13
Indian Economics –II

Time: 3 Hours

Full Marks: 60

Questions are of values indicated in the margin
Answer any four questions

1. Critically analyze the “India Employment Report 2024” produced by International Labour Organization and Institute for Human Development.
15
2. Critically analyze the experience of demonetization in India held in 2016.
15
3. Critically discuss the major claims of neo-liberal reforms in India and the counterarguments presented by dissenting economists.
15
4. Do you think that the policies related to ‘globalization and free trade’ can be a major source of development in India? Give reasons behind your argument.
15
5. Critically analyze the policies related to ‘stabilization’ in Indian economy as a part of the economic liberalization in India.
15
6. Critically discuss A. K. Sen’s explanation of the inverse relationship between farm size and productivity. What is the alternative explanation in the light of Marxian analysis? Critically discuss Sen’s policy oriented justification in favour of land reform in this context.
7+5+3 = 15
7. Do you think that land reform in India has been redundant, since India experienced a successful green revolution? Critically discuss.
15
8. Write short notes (any two) 7.5+7.5 = 15
 - (a) Pre-colonial economic system in India.
 - (b) Indian colonialism and backwardness.
 - (c) ‘Efficiencies’ of family farm, capitalist farm and co-operative farm.
 - (d) Alternative hypotheses of industrial stagnation in India since mid 1960s.

B.A. (Honours) Examination, 2024

SEMESTER-VI

Subject: Economics

Course: Introductory Econometrics (CC-14)

Time: 3 hours

Full Marks: 60

Attempt any FOUR from the following questions

(4 x 15 = 60 Marks)

1. (a) Define Muticollinearity.
(b) State and explain the consequences of Muticollinearity.
(c) What are the remedial measures for tackling the Muticollinearity problem?
(3+8+4=15)
2. (a) What do you mean by Heteroscedasticity?
(b) How would you solve the problem of presence of Heteroscedasticity in the Simple Linear Regression Model?
(c) Define AR (1), MA(1) and ARMA(1,1).
(3+6)+ (3×2)=15
3. Write short notes on the following.
(a) Ramsey's RESET for a mis-specified regression model (7.5)
(b) Dummy Variable Trap (7.5)
4. (a) In the K variable linear regression model, obtain the unbiased estimator of the error variance (σ^2)?
(b) How is the correlation coefficient in a 2 variable models different from the regression coefficient? Explain.
(10+5=15)
5. (a) What are degrees of freedom (df)? Explain its significance in statistical analysis.
(b) Distinguish between population regression function (PRF) and sample regression function?
(c) Distinguish between Ratio scale and Nominal Scale variables. (5+5+5=15)
6. Consider the following information on family weekly consumption expenditures (C in Rs.) and weekly family income (Y in Rs.).

Family No	C (Rs.)	Y(Rs.)
1	70	80
2	65	100
3	90	120
4	95	140
5	110	160
6	115	180
7	120	200
8	140	220
9	155	240
10	150	260

- (a) Estimate the marginal propensity to consume (MPC) and its standard error.
- (b) Calculate the R^2 of the regression.
- (c) What will be the conditional mean value of C corresponding to $Y = 280$. (9+3+3=15)
7. (a) What are the differences in assumptions and estimates of population parameters by the method of maximum likelihood (ML) and the ordinary least square (OLS)?
(b) What are the properties of a good estimator?
(c) What are Type I and Type II errors? (9+3+3=15)

B.A. (Honours) Examination, 2024

Semester-VI

Economics

**Course – DSE-3 – Group-A
(Environmental Economics)**

Time: Three Hours

Full Marks: 60

Questions are of value as indicated in the margin.

Answer *any four* questions: -

1. Explain using the stock-flow concept, the difference between conservative pollutants and assimilative wastes. Which one do you think is more harmful? In this context, explain what you understand by the “threshold effect”? 8+2+5
 2. What do you understand by the “tragedy of the commons”? In this context, explain how two parties can strategically stop the tragedy through mutual understanding. 5+10
 3. Explain how the “Pigouvian tax” can be used to solve the pollution problem. In this context, explain what you understand by “double dividend”. Mention some of the drawbacks of using the Pigouvian tax. 8+3+4
 4. Explain the interlinkage between the economy and the environment. In this context, explain the causes of “Absolute Scarcity” of the environment and how it affects the ‘Global Life Support Services’. 10+5
 5. Explain the various Indirect Methods of valuation of the environment. What method would you use to understand the impact of pollution on drinking water? 10+5
 6. Suppose there are many factories in a particular area emitting pollution. The government decides to implement “Tradeable Pollution Permits” (TPPs) in the area. Explain mathematically or otherwise how firms would optimize their pollution under the TPP constraint. In this context, explain the problems associated with TPPs. 10+5
 7. In the Hartwick-Solow model of Sustainable Development, explain what you understand by the “Sustainable Development Index”. In this context, explain what you understand by “Natural Minimum Capital Stock”. 10+5
 8. Write short notes on the following: - 7+8
 - a. Non-convexity problem of the environment
 - b. Environmental Kuznets Curve
-

BA (Honours) Examination 2024

Semester VI

Economics

Course DSE 3

(Group B: Financial Economics)

Time 3 hrs

Full Marks 60

Questions are of value as indicated in the margin

Answer **any four** questions

1. (a) What are Treasury Bills?
(b) Why are the rate of interest on Treasury Bills typically very low?
(c) Explain the main objectives of the Central Bank in buying and selling Treasury Bills
3 + 3 + 9
2. (a) Distinguish between a Coupon Bond and a Zero Coupon Bond.
(b) Calculate the present value of a 5 year Coupon Bond with a Face Value of Rs.50000/-and coupon rate of 6% if the current market interest is 8%.
(c) How is the present value affected if the market interest rate goes upto 9%.
3+ 8 + 4
3. (a) Discuss some of the factors that affect the demand and supply of bonds.
(b) How does a business cycle expansion affect the rate of interest through change in the demand and supply of bonds?
6 + 9
4. (a) Explain what you mean by the Term Structure of Interest Rates.
(b) Consider the Expectations Theory of Term Structure. The one-year interest rates over the next four years are expected to be 6%, 7%, 8%, and 9% respectively. Given this information, what are the interest rates on a two-year bond and a four-year bond?
4 + 11
5. (a) Briefly discuss the Markowitz model.
(b) Solve the Markowitz problem with 2 assets where $\bar{r}_1 = 15, \bar{r}_2 = 12, \sigma_1 = 20, \sigma_2 = 18, \sigma_{12} = .02$.
(c) Can you find the minimum variance problem of this portfolio
3 + 9 + 3
6. (a) Explain (without proof) what you mean by the One Fund Theorem
(b) In this context discuss what you mean by the Capital Market Line.
(c) Can you find the equation of the Capital Market Line
6 + 6 + 3
7. (a) State and Prove the Capital Asset Pricing Model.
(b) Suppose the risk free rate of return be 8% and the market portfolio have an expected rate of return of 12% and a standard deviation of 15%. Consider an asset that has a covariance of 0.045 with the market. Find the asset β and the expected return of the asset.
10 + 5
8. (a) Show that a risk neutral insurance company will set an "actuarially fair" premium in a perfectly competitive insurance market?
(b) Will it continue to do so if the insurance market is imperfectly competitive?
(c) If the premium rate is "actuarially fair" show that the consumer will buy "full insurance"
6 + 2 + 7

B.A (Honours) Examination, 2024
Semester- VI
Economics
Paper- DSE-4
(Development Economics II)

Time: 3 Hours

Full Marks:60

Questions are of value as indicated in the margin

Question No. 1 is compulsory. Attempt any THREE from the rest.

1. Answer any three of the following: 3×5=15
 - (i). How can the developing countries avoid the Malthusian population trap?
 - (ii). Why are health and education closely linked in the development challenge?
 - (iii). How is the microeconomic theory of fertility related to the theory of consumer choice?
 - (iv). Explain how the Coase theorem can solve the problem of market failure.
 - (v). Did the fall of the Berlin Wall signal the beginning of globalization?
2. What is an optimum population? Discuss the different approaches to the optimum theory of population. 5+10
3. Distinguish between private and social benefits and costs of education. What economic factors give rise to the wide divergence between private and social benefit-to-cost valuations in most developing countries? Explain. 6+9
4. What do you mean by women empowerment? Do you agree that economic development leads to women's empowerment? Give reasons for your answers. 3+12
5. What are the roles of women's education in development? Mention the present status of women's education in developing countries? 5+10
6. Explain the difference between "strong sustainability" and "weak sustainability". What are the challenges to achieve "strong sustainability" for a country like India? 10+5
7. Critically evaluate the impact of globalization on poverty and inequality. 15

BA (Honours) Examination, 2025

Semester VI

Economics

Course CC -13

Indian Economics – II

Time: 3 Hours

Full Marks: 60

Questions are of values indicated in the margin
Answer *any four* questions

1. Critically discuss A. K. Sen's explanation of the inverse relationship between farm size and productivity. What is the alternative explanation in the light of Marxian analysis? Critically discuss Sen's policy oriented justification in favour of land reform in this context. 7+5+3 = 15
2. Critically discuss the major claims of neo-liberal reforms in India and the counterarguments presented by dissenting economists. 15
3. Do you think that the policies related to 'globalization and free trade' can be a major source of development in India? Give reasons behind your argument. 15
4. Critically analyze the policies related to 'stabilization' in Indian economy as a part of the economic liberalization in India. 15
5. How the agrarian crisis is associated with slow industrialization in India in recent decades? 15
6. Critically analyze the experience of demonetization in India held in 2016. 15
7. Critically analyze the "India Employment Report 2024" produced by International Labour Organization and Institute for Human Development. 15
8. Write short notes (*any two*) 7.5+7.5 = 15
 - (a) Pre-colonial economic system in India.
 - (b) Indian colonialism and backwardness.
 - (c) 'Efficiencies' of family farm, capitalist farm and co-operative farm.
 - (d) Alternative hypotheses of industrial stagnation in India since mid 1960s.

B.A. (Honours) Examination, 2025
Semester- VI
Economics
Course: CC -14
(Introduction to Econometrics)

Time: 3 Hours

Full Marks: 60

Questions are of value as indicated in the margin

Answer any four of the following questions:

1. State and explain the assumptions of classical linear regression in the simple linear regression model. 15
 2. How do you estimate parameters in the context of the two variables linear regression model by applying OLS method of estimation? 15
 3. State and prove the Gauss-Markov theorem in the context of OLS estimate of the slope coefficient in a simple linear regression model. 15
 4. How do you test the hypothesis when estimated partial regression coefficient in the simple linear regression model is different from the hypothesized value? 15
 5. What is Multicollinearity? State the consequences of near exact Multicollinearity in context of multiple regression models. How to solve the problem of Multicollinearity by increasing the sample size? 4+6+5=15
 6. Set up a multiple regression model in a matrix form. What are the assumptions of this model? 5+10=15
 7. Define the problem of Heteroscedasticity and first order Autocorrelation. How do you solve the problem of Heteroscedasticity by logarithmic transformation of the original model? 7+8=15
 8. Write shorts notes on the following: 7.5x2= 15
 - (i) Coefficient of determination
 - (ii) Problem of prediction in the least square model.
-

B.A. (Honours) Examination, 2025
Semester- VI
Economics
Course: CC -14
(Introduction to Econometrics)

Time: 3 Hours

Full Marks: 60

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 - (i) Coefficient of determination
 - (ii) Problem of prediction in the least square model.
-

B.A. (Honours) Examination, 2025
Semester-VI
Economics
Course – DSE-3 – Group-A
(Environmental Economics)

Time: Three Hours

Full Marks: 60

Questions are of value as indicated in the margin.

Answer *any four* questions: -

1. Explain the inter-linkage between the economy and the environment. In this context, explain the difference between stock pollutants and flow pollutants. (10+5)
 2. Explain the various kinds of market failures associated with the environment. In this context, explain how the Coase theorem can solve the problem of market failure. (10+5)
 3. In most of the pollution scenarios, it has been observed that the Government uses the 'Command and Control' method to reduce pollution. Justify this role of the government. In this context, explain the other various economic instruments that can be used for pollution control. (5+10)
 4. Explain how a country's macroeconomic policies affect its natural environment. In this context, explain the Environmental Kuznets Curve. (10+5)
 5. Suppose a water body in your locality will be converted into real estate. Many people, including you, do not want the water body to be converted into real estate. Explain how you would try to find the value of the water body using the Contingent Valuation Method. In this context, explain the problems with such a method. (12+3)
 6. Explain mathematically or otherwise how 'tradeable pollution permits' are used by the Government to control pollution by firms in a locality for a uniformly mixed pollutant. In this context, explain the problems associated with using tradeable pollution permits. (12+3)
 7. Explain the concept of 'strong sustainability'. In this context, explain the difference between 'strong sustainability' and 'weak sustainability'. (10+5)
 8. Write short notes on the following: - (8+7)
 - (a) Pigouvian Tax
 - (b) Tragedy of the Commons
-

Time: 3 Hours

Full Marks: 60

Question No. 1 is compulsory and attempt any two from the remaining questions1. Write short notes on any two 10X2 = 20

- (a) Winner's curse
- (b) Repeated games
- (c) Bayesian games
- (d) English auction and Dutch auction

2. (a) Analyze the optimal choice of risk and return of an investor with a simple portfolio having a risky asset and risk free asset in mean-variance space. (10)(b) What is capital asset pricing model (CAPM)? Using the CAPM, derive the security market line (SML) of a portfolio held in equilibrium. (3+7=10)3. (a) What is contingent consumption plan (CCP)? Explain with an example. (2+3=5)(b) Define expected utility of a fair lottery with two outcomes. In this context, define and comment on utility function of a 'risk averse' and 'risk lover' individual (2+8=10)(c) Define utility function of an individual in mean-variance space. Comment on the marginal utility (MU) of risk and return of such utility function. (2+3=5)4. (a) Distinguish private value auction from common value auction with the help of suitable examples. (4)(b) What is second-bid auction? Why it is preferred to first bid auction in construction works? (6)(c) Analyze the attainment of Nash equilibrium for first-bid and second-bid auction. (10)5. (a) How imperfect information game is different from perfect information game? (5)

(b) Consider the pay-off tables of a variant of the battle of sex (BoS) game in which Player – 1(boy) is unsure whether Player-2(girl) wants to meet him or prefer to avoid him.

Assume that Player-1 thinks that Player-2 wants to meet him with probability $\frac{1}{2}$.

Prob.1/2 Player-2 wants to meet

	B	S
B	2,1	0,0
S	0,0	1,2

Prob.1/2 Player-2 wants to avoid

	B	S
B	2,0	0,2
S	0,1	1,0

- (i) Calculate the expected pay-offs of the Player-1 for possible pair of actions of for different type of Player-2 (7)
- (ii) Find out the Nash equilibrium of Player-1 for each possible type of Player-2. (8)

B.A (Honours) Examination, 2025

Semester- VI

Economics

Paper- DSE-4 (Group-A)

(Development Economics II)

Time: 3 Hours

Full Marks: 60

Questions are of value as indicated in the margin

Question No. 1 is compulsory. Attempt any THREE from the rest.

1. Answer any three of the following: 3×5=15
 - (i) Describe the main stages of the demographic transition theory with their key characteristics.
 - (ii) What is the human capital approach to health and education?
 - (iii) How does women's education contribute to economic and social development?
 - (iv) What is the relationship between health and productivity? How does improving health contribute to higher productivity?
 - (v) What are the key phases of globalization?
2. Explain the microeconomic theory of fertility and relate it to the theory of consumer choice. Do you think that this theory is applicable to less developed economies as a realistic explanation of falling birth rates in stage III of demographic transition? 8+7
3. Examine critically the relationship between income growth and population growth. In this context, discuss the Malthusian theory of population. 15
4. Discuss the interrelationship between health and education in the development process. Why is increase in individual income not sufficient to improve health and education? Illustrate your answer with relevant examples. 6+9
5. How does women's economic participation influence their empowerment? Examine the current status of women's economic engagement in developing countries. 5+10
6. What do you mean by globalization? How does globalization affect the economic development of developing countries? 5+10
7. Examine the relationship between environment, population growth, poverty, and economic development in developing countries. How do these factors affect each other? 12+3

BA (Economics) Examination 2025
Semester-VI
Economics
Course: DSE-IV (B)
(Political Economy II)

Questions are of value as indicated in the margin

Time: 3 Hours

Answer any Four Questions

Full Marks: 60

1. (a) In the context of a primitive communal economy, give an account of the productive forces and relations of production.
(b) What were the factors that gave rise to slave mode of production? 8+7=15
2. (a) Give an account of the basic structure of Feudal mode of production.
(b) Trace the changes in the form of feudal rent system.
(c) Why did feudalism disintegrate? 4+5+6=15
3. Discuss in detail the political-economic context of the genesis of development economics as a separate discipline during the first half of the 20th century. 15
4. Discuss in detail the fundamental characteristics of traditional development economics of the mid-twentieth century. 15
5. Present a comparative analysis of the traditional and modern development discourses. 15
6. Critically discuss the Surveillance Capitalism as theorized by Shoshana Zuboff. 15
7. Analyse the ideas of "Techno-feudalism" as theorized by Yanis Varoufakis. Explain its fundamental difference with Surveillance Capitalism or any other form of mutated capitalism. 10+5=15
8. Discuss the role of China's DeepSeek in democratizing global AI technology in the recent past. 15