

B.A. (Honours) in Economics Examination, 2022
Semester-IV
Economics
Paper - CC-08
(Intermediate Microeconomics-II)

Time: 3 Hours

Full marks: 60

Questions are of value as indicated in the margin

Question No. 1 is compulsory. Attempt another FOUR from the rest.

1. (a) Prove that the slope of the marginal revenue curve is twice of that of the inverse demand curve.
(b) Explain why there is no unique supply curve in monopoly?
(c) Explain the phenomenon of deadweight loss in case of monopoly?
(d) Mathematically show the relationship between the equilibrium price ratio of different markets under third degree price discrimination with the elasticities of demand of the markets. 5+5+5+5
2. Examine the effects on consumer surplus and producer surplus when the government imposes specific tax on a monopolist. 10
3. Diagrammatically elucidate the long run equilibrium of a firm in a monopolistically competitive market. 10
4. (a) What do you mean by Bertrand paradox?
(b) Examine the Stackelberg model of quantity leadership in an oligopolistic market. 3+7
5. Consider a duopoly market where the demand curve is given by $P = 360 - Q$ and $Q = Q_1 + Q_2$. Marginal costs of Firm 1 and Firm 2 are $MC_1 = 60$ and $MC_2 = 120$, respectively. Calculate the equilibrium output, price, and profit of each firm if they decide to follow Cournot mechanism. 10
6. What is Pareto efficiency? Diagrammatically explain how Pareto efficiency in production is achieved in a 2X2X2 general equilibrium structure. 2+8
7. Write notes on (any TWO): 2X5
 - (a) Dominant firm price leadership model in oligopoly.
 - (b) Prisoners' dilemma.
 - (c) Backward bending labour supply curve.
 - (d) Monopsonistic exploitation in the factor market.

B.A. (Honours) Examination, 2022
Semester -IV (CBCS)
Economics Course: CC-09
(Intermediate Macroeconomics - II)

Time: 3 Hours

Full Marks: 60

Questions are of value as indicated in the margin
Answer any four (04) of the following questions

1. What are the impacts of a money wage cut in the Classical Macroeconomic model? Why and how do these impacts change in the Complete Keynesian framework under usual conditions of demand shortage? How do the outcomes alter under a depressionary situation? Explain graphically.
5+5+5 = 15
2. Derive an expectation augmented short-run aggregate supply curve using the Workers' Misperception model. How does this curve shift in the long run and generate a long-run aggregate supply contour?
10+5 = 15
3. What is Lucas critique? Show the Policy Irrelevance result in the New Classical model using an expectation augmented Phillips Curve. In this context, discuss a possibility of policy relevance and the Barro critique on that.
3+5+5+2 = 15
4. Suppose the saving-income ratio, capital-output ratio and the depreciation rate of capital stock of a country are denoted by s , c and δ respectively. Now derive the generalised version of the Harrod-Domar model of economic growth of that country when $\delta = 0$. If the warranted rate of growth exceeds the natural rate of growth then what will happen to the actual rate of growth of the economy? Explain.
10+5 = 15
5. Based on the usual assumptions, derive the Solow's steady-state of an economy having exponential growth of labour force. How does the exogeneous technological progress affect that steady-state?
10+5 = 15
6. What do you mean by the Marginal Efficiency of Capital? Briefly discuss the Tobin's model of money demand. State the accelerator theory of investment in brief.
5+5+5 = 15
7. Write short notes on any two of the following:
7.5+7.5 = 15
 - a. Effective demand problem.
 - b. Double Crowding Out effect in CKM.
 - c. Menu Cost and price rigidity.
 - d. Staggered wage and policy relevance.
8. Write short notes on any two of the following:
7.5+7.5 = 15
 - a. Golden rule of capital accumulation.
 - b. Quantity theory of money.
 - c. Jorgenson's theory of investment.
 - d. AK model of economic growth.

B.A. (Honours) Examination, 2022
Semester-IV (CBCS)
Economics
Course: CC-10
(International Economics I)

Time: 3 Hours

Full marks: 60

Questions are of value as indicated in the margin

Answer **Question no 1** and **any three** from the rest of the following questions

1. Consider a country, call it Home, which produces computers (C) and food (F) using capital (K) and labor (L). The techniques of production in each industry are Leontief, and hence unit factor requirements are fixed and given by: $a_{KC} = 3$; $a_{KF} = 1$; $a_{LC} = 2$ and $a_{LF} = 4$. Note a_{ij} is the number of units of factor i required to produce a unit of good j .
 - a. Which industry is capital intensive? How does the capital-labour ratio in each industry depend on the Relative wage W/R ? Note W and R are per unit price of labour and capital respectively.
 - b. Suppose that the world price of computers is Rs 16/- and the world price of food is Rs 12/-. Assume that Home country produces both goods. What are the free trade factor price levels of W and R ?

(5+2)+8

2.
 - a. "In the absence of international trade, the relative prices of goods are equal to their relative unit requirements"-Prove this statement in the context of Ricardian Model.
 - b. Use this model to show the possibility of trade between two countries.

7+8

3.
 - a. Show that the gains from trade can be decomposed into two parts, viz; gains from specialisation and gains from exchange.

- b. In Heckscher-Ohlin set up, will there be any gain from trade for a country where all factors of production are completely immobile across sectors?

8+7

4. State and explain Factor Price Equalization theorem graphically. Discuss the conditions under which Factor Price equalization theorem will not be valid.

9+6

5. a. Which one is more preferable to a country for improving the terms of trade: an import tariff or an export subsidy? Explain with reasons.
- b. What is meant by an optimum tariff? Derive the formula for the optimum tariff.

7+(2+6)

6. a. Define Trade Indifference curve. Derive offer curve for a particular country using trade indifference curve.
- b. Write a short note on Non-tariff barriers of trade.

(4+5)+6

7. Write the components and their subcomponents of the Balance to Payments (BOP) of a country. How do you relate the Balance of Trade (BOT) with the Balance of Payments (BOP)? Derive the foreign trade multiplier of an open economy.

7+2+6

Undergraduate Examination, 2022

Semester-IV (CBCS)

Political Science

Generic Elective Course: GEC-IV

(Indian Government and Politics – II)

Time: 3 Hours

Full Marks: 60

Questions are of value as indicated in the margin

Answer any four questions

1. Describe the legislative and administrative relations between the Union and the States. 7.5+7.5 = 15
 2. Discuss the composition, powers and functions of the Lok Sabha. 15
 3. Examine the jurisdiction and position of the Supreme Court of India. 15
 4. Examine the changing nature of the Party System in India. 15
 5. Examine the role of Caste in Indian Politics. 15
 6. Critically examine the evolution of the Panchayati Raj System in India. 15
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B A (Honours) Examination, 2022
Semester - IV
ECONOMICS
SECC -II
(Statistical Methods II)

Time: 2 Hours

Full Marks: 25

Questions are of value as indicated in margin

Answer any two of the following questions

1. (a) Define joint probability mass function and joint probability density function for two jointly distributed random variables. 3

(b) Joint distribution of X and Y is given by

$$f(x, y) = 4xye^{-(x^2+y^2)}, \quad x \geq 0, y \geq 0$$

Test whether x and y are independent. For the above joint density function, find the conditional distribution of X given Y=y 6.5

(c) Prove that expectation of the product of the two independent jointly distributed random variables is the product of their expectations. 3

2. (a) Find the number of all possible samples of size four from the population of size eight when (i) Sampling is with replacement and (ii) Sampling is without replacement. 4

(b) What is systematic sampling? Compare it with stratified simple random sampling. 8.5

3. (a) If x_i ($i=1, 2, 3, \dots, n$) is a iid observation from a population with unknown parameter θ , prove that $\sum a_i x_i$ is an unbiased estimator of θ if $\sum a_i = 1$. Also prove that the variance of that estimator will be minimum if it is sample mean. *5

(b) If $x_1, x_2, x_3, \dots, x_n$ are iid observations from $N(\mu, 64)$, find the maximum likelihood estimator of population mean μ . 4

(c) Consider two independent random samples drawn from two normal populations $N(\mu_1, \sigma_1)$ and $N(\mu_2, \sigma_2)$ with common unknown variances. Construct 99 % confidence interval and limits for $\mu_1 - \mu_2$. 3.5

4. (a) Give an outline of Neyman- Pearson theory of testing of hypotheses. 8

(b) A random sample of size 20 from a normal population gives a sample mean of 45 and sample variance of 36. Test the hypothesis that the population mean is 50. State clearly the alternative hypothesis you allow for and the level of significance adopted. It is given that $t_{0.025,19} = 2.09$ and $t_{0.005,19} = 2.86$. 4.5

Undergraduate Examination, 2023
Semester-II / Semester-IV (For BFA Only) (CBCS)
Ability Enhancing Compulsory Course (AECC-2)
Environmental Studies
(For Regular and Back Candidates)

Time : 2 Hours

Full Marks: 25

Questions are of value as indicated in the margin

The answer may be attempted either in English, Bengali or Hindi

I. Choose the correct answer:

0.5×20=10

1. Which of the following is a non-renewable source of energy?
a) Hydel b) Solar c) Biogas d) None of the above
2. Black foot disease is caused by:
a) Mercury b) Lead c) Arsenic d) Cadmium
3. Project Crocodile was launched in the year:
a) 1975 b) 1983 c) 1992 d) 1974
4. Bhopal Gas tragedy occurred on:
a) 20th November 1984 b) 25-26th April, 1986 c) 2-3rd November 1984
d) 4th December 1984
5. Environmental Protection Act was enacted in the year:
a) 1972 b) 1974 c) 1986 d) 1981
6. _____ was enacted to protect the world from Ozone layer depletion.
a) Kyoto protocol b) Nagoya Protocol c) Montreal Protocol d) Stockholm Protocol
7. The unit to measure noise level is:
a) Dobson b) Decibel c) Richter d) None of these
8. World Environmental Day is celebrated on:
a) June 5 b) July 11 c) August 6 d) September 16
9. Kashmir stag or Hangul is conserved in the _____ National Park.
a) Nanda Devi b) Dachigam c) Loktak d) All of the above
10. Which of the following site(s) is/are UN World Heritage Convention that supports biodiversity rich area?
a) Manas b) Kaziranga c) Bharatpur d) All of these
11. Discharge of warm water into river is called:
(a) Water pollution (b) River pollution (c) Thermal pollution (d) All of them

P.T.O.

(2)

12. Incineration is generally used for the management of:

- (a) Liquid waste (b) Gaseous waste (c) Solid waste (d) All of them

13. In which state Gir National Park is situated?

- a) Madhya Pradesh b) Rajasthan c) Gujarat d) Odisha

14. 'Chipko movement' was started by:

- (a) Anandi Devi (b) Mahatma Gandhi (c) Sita Devi (d) Sunderlal Bahuguna

15. The drug for Malaria is extracted from the plant of:

- a) Cinchona b) Sarpagandha c) Datura d) None of the above

16. Which one of the following is a type of grassland in India?

- (a) Himalayan pastures (b) Shola (c) Terai (d) All of these

17. Which element is associated with nuclear power generation?

- (a) Platinum (b) Aluminium (c) Uranium (d) Radium

18. The advantage of rainwater harvesting is:

- (a) Increase in groundwater level (b) Reduction of soil erosion
(c) Control of flood (d) All of the above

19. Wildlife Institute of India is located at:

- a) Dehradun b) New Delhi c) Kolkata d) Patna

20. Jhum cultivation occurs in _____ region of India.

- a) North East India b) Deccan plateau c) Nilgiri d) None of the above

II. Answer the following:

1 × 5 = 5

1. Write the full form of WHO.
2. Write the full form of CPCB.
3. Who is called the father of green revolution in India?
4. Name two invasive species in India?
5. Mention the name of the mud house built by Rabindranath Tagore at Uttarayan?

III. Write short notes on any five of the following.

2 × 5 = 10

1. Mention four national parks in eastern India.
 2. Mention four methods to control overpopulation.
 3. Mention four methods for solid waste management.
 4. Name two waterborne diseases.
 5. What are the problems of ozone layer depletion?
 6. Draw the foodweb of a grassland ecosystem.
 7. Write any four greenhouse gases.
 8. What are food chain and food web?
 9. What are the major causes of deforestation?
 10. Mention four methods of water conservation.
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Undergraduate Examination, 2023
Semester-II / Semester-IV (For BFA Only) (CBCS)
Ability Enhancing Compulsory Course (AECC-2)
Environmental Studies
(For Regular and Back Candidates)

Time : 2 Hours

Full Marks: 25

উত্তরপত্রটি ইংরাজী, বাংলা অথবা হিন্দিতে লেখো।

দক্ষিণ প্রান্তস্থ সংখ্যা প্রশ্নের মান নির্দেশক

I. সঠিক উত্তরটি নির্বাচন করোঃ

০.৫×২০=১০

- ১। নিম্নতম কোনটি নবীকরণ অযোগ্য শক্তির উৎস?
ক) জল খ) সৌর গ) বায়োগ্যাস ঘ) কোনটিই নয়
- ২। “ব্ল্যাকফুট” রোগটির কারণ হল —
ক) পারদ খ) সীসা গ) আর্সেনিক ঘ) ক্যাডমিয়াম
- ৩। “কুমির প্রকল্প” চালু হয় —
ক) ১৯৭৫ সালে খ) ১৯৮৩ সালে গ) ১৯৯২ সালে ঘ) ১৯৭৪ সালে
- ৪। ভোপাল গ্যাস দুর্ঘটনা ঘটে —
ক) ২০ নভেম্বর ১৯৮৪ খ) ২৫-২৬ এপ্রিল ১৯৮৬ গ) ২-৩ নভেম্বর ১৯৮৪ ঘ) ৪ ডিসেম্বর ১৯৮৪
- ৫। পরিবেশ সুরক্ষা আইন প্রণীত হয় —
ক) ১৯৭২ সালে খ) ১৯৭৪ সালে গ) ১৯৮৬ সালে ঘ) ১৯৮১ সালে
- ৬। ওজোনস্তরের ক্ষয়ের হাত থেকে পৃথিবীকে বাঁচতে প্রণয়ন হয় —
ক) ক্রিয়োটো খসড়া খ) নাগোয়া খসড়া গ) মন্ট্রিল খসড়া ঘ) স্টকহোম খসড়া
- ৭। শব্দের মাত্রা মাপার একক হল —
ক) ডবসন খ) ডেসিবেল গ) রিখটার ঘ) কোনটিই নয়
- ৮। বিশ্ব পরিবেশ দিবস পালিত হয় —
ক) ৫ জুন খ) ১১ জুলাই গ) ৬ আগস্ট ঘ) ১৬ সেপ্টেম্বর
- ৯। কাশ্মীরি হরিণ বা হাঙ্গুল ----- জাতীয় উদ্যানে দেখা যায়।
ক) নন্দা দেবী খ) দাচিগাম গ) লোকতাক ঘ) সবগুলি
- ১০। জাতি সংঘের বিশ্ব ঐতিহ্য সম্মেলন অনুমোদিত জীববৈচিত্র্য সমৃদ্ধ এলাকা কোনটি/কোনগুলি?
ক) মানস খ) কাজিরাঙা গ) ভারতপুর ঘ) সবগুলি
- ১১। নদীতে উষ্ণ জল পতিত হলে সেটিকে বলা হয় —
ক) জল দূষণ খ) নদী দূষণ গ) তাপ দূষণ ঘ) সবগুলি

P.T.O.

১২। নিম্নোক্ত ক্ষেত্রে সাধারণত ভিত্তিকরণ পদ্ধতি প্রয়োগ করা হয় —

ক) তরল বর্জ্য খ) বায়বীয় বর্জ্য গ) কঠিন বর্জ্য ঘ) সবগুলি

১৩। গির জাতীয় উদ্যান কোন রাজ্যে অবস্থিত?

ক) মধ্যপ্রদেশ খ) রাজস্থান গ) গুজরাট ঘ) উড়িষ্যা

১৪। 'চিপকে আন্দোলন' শুরু করেছিলেন —

ক) আনন্দী দেবী খ) মহাত্মা গান্ধী গ) সীতা দেবী ঘ) সুন্দরলাল বহুগুণা

১৫। ম্যালেরিয়া রোগের ঔষধি যে গাছের নির্যাস থেকে পাওয়া যায় —

ক) সিন্ধোনা খ) সর্পগন্ধা গ) ধুতরা ঘ) কোনটিই নয়

১৬। নিম্নের কোনটি ভারতের তৃণভূমির প্রকার?

ক) হিমালয়ের তৃণভূমি খ) শোলা গ) তরাই ঘ) সবগুলি

১৭। কোন মৌলটি আনবিক শক্তি উৎপাদনের সঙ্গে যুক্ত?

ক) প্লাটিনাম খ) অ্যালুমিনিয়াম গ) ইউরেনিয়াম ঘ) রেডিয়াম

১৮। বৃষ্টির জল সংরক্ষণের সুবিধা হল —

ক) এটি ভূগর্ভস্থ জলতলের বৃদ্ধি ঘটায় খ) এটি ভূমিক্ষয় হ্রাস করে
গ) এটি বন্যা এড়াতে সাহায্য করে ঘ) সবগুলি

১৯। ভারতের বন্যপ্রাণী ইনস্টিটিউট অবস্থিত —

ক) দেহাদুন খ) নতুন দিল্লী গ) কোলকাতা ঘ) কোনটিই নয়

২০। বুমচাষ ভারতের ----- অঞ্চলে হয়।

ক) উত্তর-পূর্ব ভারত খ) দক্ষিণাত্যের মালভূমি গ) নীলগিরি ঘ) কোনটিই নয়

II. নিম্নলিখিত প্রশ্নের উত্তর দাও :

১×৫=৫

- ক) WHO -এর পুরো নাম লেখ।
খ) CPCB এর পুরো নাম লেখ।
গ) ভারতের সবুজ বিপ্লবের জনক কাকে বলা হয়?
ঘ) ভারতের দুটি আক্রমণকারী প্রজাতির নাম লেখ।
ঙ) উত্তরায়ণ চত্বরে রবিঠাকুরের বানানো মাটির বাড়িটির নাম লেখ।

III. নিম্নলিখিত প্রশ্নের সংক্ষিপ্ত উত্তর দাও (যে কোনো পাঁচটি):

২×৫=১০

- ক) ভারতের পূর্বপ্রান্তে অবস্থিত চারটি জাতীয় উদ্যানের নাম উল্লেখ কর।
খ) অতিরিক্ত জনসংখ্যা নিয়ন্ত্রণে রাখার চারটি উপায় উল্লেখ কর।
গ) কঠিন বর্জ্য ব্যবস্থাপনার চারটি উপায় উল্লেখ কর।
ঘ) দুটি জলবাহিত রোগের নাম লেখ।
ঙ) ওজোনস্তরের ক্ষয়জনিত সমস্যাগুলি কি কি?
চ) তৃণভূমি বাস্তুতন্ত্রের খাদ্যজালিকা চিত্রের মাধ্যমে প্রকাশ কর।
ছ) যে কোনো চারটি গ্রিনহাউস গ্যাসের নাম লেখ।
জ) খাদ্যশৃঙ্খল ও খাদ্যজালিকা কি?
ঝ) বননিধনের মূল কারণগুলি কি কি?
ঞ) জল সংরক্ষণের চারটি পদ্ধতির উল্লেখ কর।

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Questions are of same value
All questions are COMPULSORY.

5x12

1. Explain the phenomenon of two-part tariff in case of Monopoly. Also mention the motive behind applying this type of pricing strategy by the producer.
2. Distinguish between perceived and proportional demand curves in Monopolistic competition. Using a suitable diagram clearly elaborate the case of long-run equilibrium in such market.
3. Let the inverse demand function be $P = a - bQ$, and the cost function be $C_i = c Q_i$ where $i = 1, 2$ and $Q = Q_1 + Q_2$. Assume that $b > 0$ and $a > c$, where notations have their usual specifications.
 - (a) Determine the Cournot equilibrium output of firm 1 and 2. Also find the Cournot equilibrium price.
 - (b) Calculate the equilibrium output and price when the market is characterized by Monopoly.
4. Consider a simple model of differentiated oligopoly where firm A and B are playing Bertrand game. Goods are differentiated in terms of the location of the suppliers along a beach of length L . Consumers are uniformly located along the beach, and the location of firm A and B are denoted by a and b , respectively. Transportation cost for buying the product is d^2 where d is the distance consumer has to travel. The commodity prices are P_A and P_B respectively for A and B . If x is the indifferent location for A and B , determine the Hotelling Nash equilibrium prices for A and B .
5. Write notes on **ANY TWO**
 - (a) Dominant firm price leadership model.
 - (b) Monopolistic and Monopsonistic exploitation in the labor market.
 - (c) Backward bending labor supply curve.

B.A. (Honours) Examination, 2023
Semester - IV (CBCS)
Economics
Course: CC-09
(Intermediate Macroeconomics - II)

Time: 3 Hours

Full Marks: 60

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

1. Derive the aggregate supply curves in the Classical and Keynesian frameworks diagrammatically. What are the fundamental reasons for their difference?
5+5+5 = 15
2. Derive an expectation-augmented short-run Phillips curve analytically under information asymmetry among the agents. Given the adaptive expectation hypothesis, how does this contour shift in the long run and generate a vertical Phillips curve?
10+5 = 15
3. What is Lucas critique? Show the Policy Irrelevance result in the New Classical model. In this context, discuss the possibility of policy relevance and the Barro critique.
3+5+5+2 = 15
4. Write notes on (any two):
a. Say's law of market.
b. IS-LM framework and the aggregate demand curve.
c. Coordination failure and the effective demand problem.
d. Monetarism.
7.5+7.5 = 15
5. State the fundamental assumptions of the Harrod-Domar model of economic growth. Consider a Harrod-Domar economy where the marginal propensity to savings is 0.20, the capital-output ratio is 6, and the depreciation rate of capital stock is 3%. Find the equilibrium growth rate of that economy.
5+10 = 15
6. Explain the relationship among warranted rate, natural rate and actual rate of growth of an economy. Using a suitable model show how the positive rate of population growth can adversely affect the economic growth of a nation.
7+8 = 15
7. Derive Solow's steady-state of an economy having a homogeneous production structure with constant returns to scale, positive depreciation rate of capital stock and exponential growth of labour force. Explain the effectiveness of exogenous technological progress on that steady state.
10+5 = 15
8. Write a short note on the Marginal Efficiency of Investment. Discuss Tobin's model of money demand. Briefly explain the concept of the Quantity theory of money.
5+5+5 = 15

B.A. (Honours) Examination, 2023
Semester-IV (CBCS)
Economics
Course: CC-10
(International Economics)

Time: 3 Hours

Full marks: 60

Questions are of value as indicated in the margin

Answer **Question no 1** and **any three** from the rest of the following questions

1. a. Given the following home import demand function and foreign export supply function, determine the equilibrium TOT and check whether equilibrium is stable or not:

$$M = M_0 - p^W,$$

$$X^* = X_0 + 2p^W ; \text{ where notations have their usual specifications.}$$

- b. Show that if the opportunity cost of producing textiles and computers is increasing in both countries, then the equilibrium TOT will strictly lie between the pre trade price ratio.

- c. In Ricardian trade model the gains from trade accrue to labour only while the same is not true for Heckscher-Ohlin Model.

(2+5)+3+5

2. a. What is the difference between absolute advantage and comparative advantage?
b. State and explain labour theory of value in the context of Ricardian model
c. Use the above model to derive the relative world supply curve.

3+4+8

3. a. Show that the gains from trade can be decomposed into two parts, namely, gains from specialisation and gains from exchange.

- b. Is it possible that an entire gains from trade is due to specialisation only? Explain.

8+7

4. a. State and explain the working of Stolper Samuelson theorem.

- b. What is immiserizing growth? Give an example of this type of growth.

7+(2+6)

5. a. State and prove Marshall-Lerner condition.

- b. What will be impact of transfer payment on terms of trade? In this context, explain the role of non-traded good.

(2+5)+(5+3)

6. a. Why the offer curve is convex to the horizontal axis? When the offer curve will be backward bending?

- b. Show that a tariff imposed by a large country unambiguously reduces demand for imported good.

(4+4)+7

7. Derive the foreign trade multiplier of a country where consumption and import are determined by the disposable income and tax is proportional to income. Graph out the components along with their subcomponents of the Balance to Payments (BOP) of a country. Distinguish between the Devaluation and Depreciation of home currency.

6+6+3

B.A (Honours) Examination, 2023
Semester-IV
Economics
Paper GEC-IV
(Indian Economy-II)

Time: 3 Hours

Full Marks: 60

Questions are of value as indicated in the margin.

Answer any four questions.

1. Discuss the important functions of the Reserve Bank of India. In this context, explain whether inflation plays any role in RBI's control of the money supply. 10+5
 2. Briefly explain the Liberalization Policy or the New Economic Policy adopted by India in 1991. Do you think that the New Economic Policy had any impact on the growth of the Indian Economy? Justify your answer. 10+5
 3. Discuss the achievements and failures of large-scale industry in India. Do you think the privatization of large-scale industries would lead to its recovery? Argue your case. 10+5
 4. Discuss the problems and prospects of small-scale industry in India. In this context, mention some of the policies taken by the Central Government to boost the small-scale industry in the country. 10+5
 5. Explain the role of agriculture in the Indian economy. In this context, explain the major constraints affecting agricultural growth in the country. 10+5
 6. Explain the role of the service sector in fostering the growth of the Indian economy. In this context, explain the problems of the service sector in India. 10+5
 7. Briefly explain the advantages of the Goods and Services Tax (GST) compared to previous tax regime for the Indian economy. Does the new GST system give more financial autonomy to the States? Argue your case. 10+5
 8. Write short notes on the following: - 8+7
 - (a) Foreign Direct Investment (FDI) in India
 - (b) Fiscal deficit in the Indian economy
-

B.A. (Honours) Examination-2023
Semester-IV (CBCS)
Political Science
Generic Elective Course: GEC-IV
(Indian Government and Politics-II)

Time: 3 Hours

Full Marks: 60

Questions are of value as indicated in the margin

Question 1 is compulsory and choose any three from the rest (15x4=60)

- 1) Discuss the features of the Indian party system. What is the problem of Defection in Indian politics? (12+3)
- 2) Given the context of the Emergency of 1975 in India, examine the Emergency powers as exercised by the then President of India. What are some of the prominent reasons of the Emergency of 1975? (7.5+7.5)
- 3) Discuss the salient features of the Caste system as propounded by G.S.Ghurye. Examine the role of Caste in Indian politics, specifically referring to the ideas of Rajni Kothari. (7.5+7.5)
- 4) Examine in brief the Legislative and Financial powers of the Lok Sabha. Discuss the role of the Speaker of Lok Sabha. (7.5+7.5)
- 5) State three important features of the Indian Judiciary. Write a note on the various jurisdictions of the Supreme Court of India. (3+12)
- 6) Write a note on the Head of the State Executive in India. (15)

Ref No. VB/EXAM/REG/ 02/UG/ECO/Sem-IV/31021/2023

B.A. (Honours) Examination, 2023

Semester—IV

Subject: Economics

Course-SECC-2((Statistical Methods II)

Time: 2 hours

Full Marks: 25

Questions are of value as indicated in the margin

Answer any five of the following questions.

1. (a) What do you mean by "sampling fluctuations" of a statistic?
(b) Find the standard error of sample mean when you draw a sample of given size from a finite population by the method of 'SRSWOR'. 1 + 4 = 5
2. Distinguish between simple random sample with replacement and stratified simple random sampling. 5
3. Prove that sample mean is BLUE of population mean in case of iid sample observations from a simple population. 5
4. (a) State the Neyman-Fisher factorization theorem.
(b) Define Chi-square distribution. State any two of its properties. 2 + (2+1) = 5
5. When an estimator is said to be consistent for estimating an unknown parameter? What are the necessary and sufficient conditions for an estimator to be consistent for a parameter? 3 + 2 = 5
6. Explain the maximum likelihood method of point estimation. State any two properties of maximum likelihood estimator. 5
7. When a population follows normal distribution, find the 95% confidence interval for the unknown parameter mean. 5
8. Consider the following data regarding the height(X) and weight(Y) of 8 individuals.

| Serial No. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|------------|----|----|----|----|----|----|----|----|
| X | 65 | 63 | 67 | 64 | 68 | 62 | 70 | 66 |
| Y | 68 | 66 | 68 | 65 | 69 | 66 | 68 | 65 |

- (a) Find the co-variance between X and Y.
- (b) Find the coefficient of correlation between X and Y. 2 + 3 = 5

B.A. (Honours) Examination, 2024
Semester - IV (CBCS)
Economics
Course: CC-09
(Intermediate Macroeconomics - II)

Time: 3 Hours

Full Marks: 60

Questions are of value as indicated in the margin
Answer any four (04) of the following questions

1. What are the impacts of a money wage cut in the Classical Macroeconomic model? Why and how do these impacts change in the Complete Keynesian framework under a depressionary situation? 6+9 = 15
2. Derive an expectation-augmented short-run Phillips curve using the Workers' Misperception model. How does this contour shift in the long run and generate a long-run Phillips curve? 12+3 = 15
3. What is Lucas critique? Show the Policy Irrelevance result in the New Classical model using the expectation augmented aggregate supply curve. In this context, discuss a possibility of policy relevance and the Barro critique on that. 3+5+5+2 = 15
4. Distinguish between the marginal efficiency of capital and the marginal efficiency of investment and identify the factors that govern the marginal efficiency of investment. 5+5+5 = 15
5. Analytically express the fundamental assumptions of the Harrod-Domar model of economic growth. Explain how the Actual growth rate depends on the relationship between Warranted and Natural growth rates of an economy. 6+9 = 15
6. Based on a dynamic model, show that population growth adversely affects the per-capita economic growth of a country. Using the AK model, interpret technology as a factor in the economic growth of a country. 7+8 = 15
7. Consider a Solow economy without population growth or technological change, where the savings rate is 10% and the depreciation rate of capital is 1%. Find out the steady-state and Golden rule level of k when the output function is given by $Y = K^{0.4}L^{0.6}$ (all symbols follow their usual meanings). 7+8 = 15
8. Write notes on (any two): 7.5+7.5 = 15
 - a. Accelerator Theory of Investment.
 - b. Portfolio Balance approach.
 - c. Double Crowding Out Effect in Complete Keynesian Model.
 - d. Coordination failure and policy relevance despite Rational Expectation.

B.A. (Honours) in Economics Examination, 2024

Semester-IV

Economics

Paper - CC-08

(Intermediate Microeconomics-II)

Time: 3 Hours

Full marks: 60

Questions are of value as indicated in the margin

Question 1 is COMPULSORY, and attempt any FOUR questions from the rest

1. Assume that there are 'n' numbers of firms in an oligopoly market characterized by Cournot features. The marginal cost of production is identical for all the firms, and $MC_i = c_i$. The inverse market demand function is denoted by $P = a - bQ$ where $Q = \sum_{i=1}^n q_i$. Also note that $i = 1, 2, \dots, n$. Solve for Cournot equilibrium output of a firm assuming all firms as identical. 12
2. (a) Consider that a monopolist faces an inverse demand function $P = a - bQ$, and the marginal cost, c , is constant. Here the symbols have their usual meanings. Show that at equilibrium $P > MC$ if the value of the elasticity of demand is greater than unity.
(b) Now assume that a specific tax t is imposed on the monopolist. Examine the effect of such tax in terms of change in the equilibrium price and output. 6+6
3. What do you understand by price discrimination in monopoly? Explain the phenomenon of two-part tariff where the consumers' demands are non-identical. 2+10
4. It is often found in oligopolistic market that the equilibrium price once determined remains rigid there. Can you elaborate any such model of oligopoly market which is capable of explaining this fact? 12
5. Let the demand function be $q_i = a_i - P_i + \left(\frac{P_j}{2} \right)$ where $i, j = 1, 2$ denotes different firms producing differentiated products. Also note that $i \neq j$ and $TC_1 = TC_2 = 0$. Solve for P_1, P_2, π_1 and π_2 when both the firms follow Bertrand market strategy of price setting. 12
6. Diagrammatically explain why the level of equilibrium output would be less when firm's motive of profit maximization is replaced by the motive of sales revenue maximization. Do you think that such modification in firm's motive is realistic? 10+2
7. Write notes on **ANY TWO** (2X6)
 - (a) Prisoners dilemma
 - (b) Monopolistic and monopsonistic exploitation
 - (c) Contract Curve

B.A. (Honours) Examination, 2024

Semester-IV (CBCS)

Economics

Course: CC-10

(International Economics)

Time: 3 Hours

Full marks: 60

Questions are of value as indicated in the margin

Answer **Question no 1** and **any three** from the rest of the following questions

1. Consider the standard Heckscher-Ohlin model, and suppose that the production functions of both the commodities are identical. All other assumptions of Heckscher-Ohlin model remain valid.
 - a. What does the identity of production functions between two commodities imply about the shape of the production possibility frontiers of both the commodities?
 - b. What is the basis for trade between two countries?
 - c. Explain the implications of the identity of production functions between two commodities for the following theorems:
 - (i) Heckscher-Ohlin
 - (ii) Factor-Price Equalization.

4+2+(3+6)
2.
 - a. "In the absence of international trade, the relative prices of goods are equal to their relative unit requirements"-Prove this statement in the context of Ricardian Model.
 - b. Use this model to show the possibility of trade between two countries.

7+8
3.
 - a. Show that the gains from trade can be decomposed into two parts, viz; gains from specialisation and gains from exchange.
 - b. In Heckscher-Ohlin set up, will there be any gains from trade for a country where all factors of production are completely immobile across sectors?

8+7

4. State and explain the following theorems:

- a. Stolper-Samuelson.
- b. Rybczynski.

8+7

5. a. Why might a developing country that experiences a bumper crop in its export good find itself less well off than in a normal production year?

b. State and prove the Marshall Lerner condition.

7+(2+6)

6. a. Define Trade Indifference curve.

b. Write a short note on Metzler Paradox.

c. Show that under a situation of tariff war, free trade is not the best policy for both the countries.

(4+5)+6

7. Write down the relationship between Balance of Payments (BoP) and Balance of Trade (BoT) through their components. Derive and compare the investment multipliers in an open and a closed economy. How do you relate net-export with the floating foreign exchange rate of a country?

4+8+3

B.A (Honours) Examination, 2024
Semester-IV
Economics
Paper GEC- 4
(Indian Economy-II)

Time: 3 Hours

Full Marks: 60

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

1. Explain through a suitable diagram or otherwise the structure of the Indian budget. In this context, explain the different kinds of special budgeting that can be done by India.
10+5
 2. Discuss the role of large-scale industries in India's economic development. In this context, identify the problems of large-scale industries in the present scenario. 10+5
 3. Briefly explain the structure of the Goods and Services Tax (GST) in the Indian economy. Does the GST system give more financial autonomy to the States? Argue your case. 10+5
 4. Explain the role of agriculture in the Indian economy. In this context, explain the major constraints presently impeding the agricultural growth in the country. 10+5
 5. Explain the role of the major service sectors in the Indian economy. In this context, explain the various problems faced by the service sector. 10+5
 6. Explain the main functions of the Reserve Bank of India (RBI). In this context, explain how RBI controls inflation in the economy. 10+5
 7. Explain the importance of the small-scale industry in the Indian economy. In this context, explain the various policies implemented by the Central Government to help the small-scale industries. 10+5
 8. Write short notes on the following: - 8+7
 - (a) Food Processing Industry (FPI) in India
 - (b) Centre-State Financial Relations in India
-

B.A. (Honours) Examination-2024
Semester-IV (CBCS)
Political Science
Generic Elective Course: GEC-4
(Indian Government and Politics-II)

Time: 3 Hours

Full Marks: 60

Questions are of value as indicated in the margin

Question 1 is compulsory and choose any three from the rest (15x4=60)

- 1) State any five features of the Indian judiciary. Write a note on the Supreme Court of India. (5+10)
- 2) Mention any five major functions of Rajya Sabha. Discuss the powers and functions of Lok Sabha. (5+10)
- 3) Broadly illustrate the themes of "Annihilation of Caste". (15)
- 4) Write a note on the origin of Caste as enunciated by B.R.Ambedkar. State the main characteristics of Caste system as explained by G.S.Ghurye. (7.5+7.5)
- 5) Write a note on the powers and functions of the President of India. (15)
- 6) How is the Governor of a state in India appointed? Discuss the powers and functions of a Governor (3+12)

B.A. (Economics) Examination, 2024
SEMESTER-IV
Subject: Economics
Course: Statistical Methods-II (SECC-II)

Time: 2 hours

Full Marks: 25

Question No. 1 is compulsory and attempt any two from the remaining questions

Attempt any two from question No.1

1. (a) What are degrees of freedom in statistics? (2.5)
(b) What is level of significance? (2.5)
(c) What are type-I and type-II errors? (2.5)
(d) What is p-value? (2.5)
2. Define the following terms without illustration.
Sample, Population, Sampling Distribution, Estimator, Simple Random Sampling with Replacement (SRSWR). (5X2 = 10)
3. (a) State and explain the criteria of a good estimator.
(b) What is an interval estimation of a parameter? (8+2=10)

- 4 3. (a) Distinguish between probability mass function (pmf) and probability density function (pdf).
(b) What are marginal probabilities in joint distribution?
(c) How are marginal probabilities different from conditional probabilities? (3+3+4=10)

- 5 4. Consider the following table of joint distribution of two random variable X & Y.

| X↓\Y→ | 0 | 1 | 2 |
|-------|-----|-----|-----|
| 1 | 0.3 | 0.2 | 0.1 |
| 2 | 0.1 | 0.0 | 0.3 |

- (a) Are X and Y independent?
- (b) Determine the correlation coefficient between X and Y. (4+6=10).