CENTRAL UNIVERSITY OF HARYANA

Jant-Pali, Mahendergarh, Haryana

Name of Programme	:	**M.A Economics**
Year & Semester	:	**2018, II Semester**
Course Name	:	**Statistical Methods**
Course Code	:	**SAHS ECO 01 204 C 3104**
Maximum Time	:	**3 hours**
Maximum Marks	:	**70**

Instructions:

1. Question no. 1 has seven sub parts and students need to answer any four. Each sub part carries three and half Marks.

2. Question no. 2 to 5 have three sub parts and students need to answer any two sub parts of each question. Each sub part carries seven marks.

Question No. 1. (4X3.5=14)

a) Write a short note on geometric mean in context of measuring the growth of a variable.

b) Differentiate between point and internal estimation.

c) Explain the Lorenz curve?

d) Differentiate between parameter and statistics.

e) What are the mean and standard deviation of a sampling distribution of mean.

f) What are moments used for measuring skewness and kurtosis of a variable?

g) What is degree of freedom and why it has important consideration in calculating a test-statistics?

Question No. 2. (2X7=14)

a) The numbers 3.2, 5.8, 7.9 and 4.5 have frequencies x, (x+2), (x-3) and (x+6) respectively. If the arithmetic mean is 4.876, find the value of x.

b) If the arithmetic mean of two unequal positive real number 'a' and 'b', (a>b), be twice as great as their geometric mean, show that a: b = $(2+\sqrt{3}): (2-\sqrt{3})$.

c) The mean weight of 150 students is 60 kgs. The mean weight of boys and girls are 70 kgs. and 55 kgs respectively, and the standard deviations are 10 kgs. and 15 kgs. respectively. Find the number of boys and the combined standard deviation.

Question No. 3. (2X7=14)

a) Find the Karl Pearson's coefficient of skewness from the following data:

Size	: 1	2	3	4	5	6	7
Frequency:	10	18	30	25	12	3	2

b) State simple linear regression model. How it is estimated by using test square method?

c) From the following data, obtain the two regression equations:

Sales	: 91	97	108	121	67	124	51	73	111	57
Purchases:	71	75	69	97	70	91	39	61	80	47

Question No. 4. (2X7=14)

a) State and prove multiplicative theory of probability with an illustration.

b) Find the probability that seven of 10 persons will recover from a tropical disease if we can assume independence and probability is 0.80 that any one of them will recover from the disease.

c) If 2 percent of the books bound at a certain bindery have defective bindings, use the Poisson approximation to the binomial distribution to determine the probability that five of 400 books bound by this bindery will have defective bindings.

Question No. 5. (2X7=14)

a) In 16 one-hour test runs, the petrol consumption of an engine averaged 16.4 gallons with a standard deviation of 2.1 gallons. Test the claim that the average petrol consumption of this engine is 12.0 gallons per hour?

b) Find the probabilities that a random variable having the standard normal distribution will take on a following value with diagram.

i. Less than 1.72

ii. Less than -0.88

iii. Between 1.30 and 1.75

iv. Between -0.25 and 0.45

c) What is hypothesis testing? Explain steps involve in testing the hypothesis about the population parameter.

CENTRAL UNIVERSITY OF HARYANA
Jant-Pali, Mahendergarh, Haryana
Term End Examination

Name of Programme	:	**M.A. ECONOMICS**
Year & Semester	:	**May-June 2018, Semester-II**
Course Name	:	**Macroeconomic Theory-II**
Course Code	:	**SAHS ECO 01 202 C 3104**
Maximum Marks	:	**70**
Duration	:	**3 Hrs**

Note: Attempt five questions in all including Question No. 1 which is compulsory. Select one question from each unit. All questions carry equal marks.

1. Answer the following questions in short:
   i) What is crowding-out effect?
   ii) Define stagflation.
   iii) What do you mean by structural inflation?
   iv) What is '*Impossible Trinity*'?
   v) What is liquidity trap?
   vi) Define Fiat Money.
   vii) Differentiate between narrow money and broad money?
   viii) Differentiate between bank rate and repo rate?
2. Explain money multiplier theory of determinants of money supply in detail.

   OR

   Explain critically Boumol-Tobin model of money demand.
3. Consider the following economy-

   Demand for Money, Md = 0.2Y – 10i
   Supply of Money, Ms = 200
   Consumption, C = 50 + 0.9Y_d
   Tax, T = 100
   Government Expenditure, G =100
   Investment, I – 150 – 5i
   Exports, X = 20
   Imports, M = 10 + 0.1 Y
   General Price Level = 2

   i) Obtain IS and LM equations of the economy.
   ii) Find out equilibrium income and rate of interest of the economy. Also find the balance of trade.

   OR

   Explain IS-LM-BOP model with suitable diagramme. Also discuss the policy implication of the model under fixed and flexible exchange rate regimes.

4. What is meant by rational expectations? What is its implication for the relationship between rate of inflation and rate of unemployment?

   OR

   Distinguish between demand pull inflation and cost push inflation. How are they often intertwined?-Discuss with suitable diagramme.
5. Write short notes on-
   i) Price Stickiness
   ii) Random walk of GDP
   iii) Objectives of monetary policy

   OR

   What are the major functions of a Central Bank? Discuss the methods of controlling credit by Central Bank.

CENTRAL UNIVERSITY OF HARYANA

Term End Examinations May /June 2018

Programme: MA (Economics) **Session: 2017-18**
Semester: II **Max. Time: 3 Hours**
Course Title: Agricultural Economics **Max. Marks: 70**
Course Code: SAHS ECO 01 201 DCEC 3104

Instructions:
1. Question no. 1 has seven sub parts and students need to answer any four. Each sub part carries three and half Marks.
2. Question no. 2 to 5 have three sub parts and students need to answer any two sub parts of each question. Each sub part carries seven marks.

Question No. 1. (4X3.5=14)

a) What is the scope of agricultural economics?
b) What do you mean by wage spillover effect?
c) Does contractual agreement improve productivity and income of farmers? Discuss Briefly.
d) What is Agricultural Diversification?
e) State the importance of food-processing in agriculture.
f) What are the important components of Green Revolution in India?
g) Agreement of Agriculture has classified all subsidies given to farmers into three colour boxes viz. amber box subsidies, blue box subsidies and green box subsidies. What are these?

Question No. 2. (2X7=14)

a) Discuss the Lewis-Fie-Ranis model of Agricultural Development
b) How do you apply production function analysis in agriculture? Discuss the important stages of the production function.
c) Discuss the Lewis versus the Harris-Todaro view of underemployment in LDCs.

Question No. 3. (2X7=14)

a) List the various types of rural unemployment. What are the measures taken by the government to eradicate rural unemployment?
b) Explain with examples the interdependence of agriculture and industries.
c) Discuss about the changes in Terms of trade between agriculture and industry during the course of economic development.

Question No. 4. (2X7=14)

a) What are the characteristics of rural credit? Explain its sources.
b) Analyze the various land reform measures? What measures will you suggest to make land reforms effective in India?
c) Assess the role of Agricultural Policy in structural changes in Indian agriculture.

Question No. 5. (2X7=14)

a) Elucidate the farm risks and uncertainties involved in Indian Agriculture.
b) Assess the impact of WTO on Indian Agriculture.
c) Green Revolution has increased the production level substantially. State the trends in the agricultural production and productivity during the green revolution period?

CENTRAL UNIVERSITY OF HARYANA

Term End Examinations May /June 2018

Programme:	MA (Economics)	Session: 2017-18
Semester:	II	Max. Time: 3 Hours
Course Title:	Microeconomic Theory-II	Max. Marks: 70
Course Code:	SAHS ECO 01 201 C 3104	

Instructions:

1. Question no. 1 has seven sub parts and students need to answer any four. Each sub part carries three and half Marks.
2. Question no. 2 to 5 have three sub parts and students need to answer any two sub parts of each question. Each sub part carries seven marks.

Question No. 1. (4X3.5=14)

a) Explain the Chamberlin's excess capacity under monopolistic competition.

b) What do you mean by interdependency in non-collusive small group model of Chamberlin?

c) What is rational of sales revenue maximization for a firm?

d) How product exhaustion concept applies in total output?

e) What is the difference between quasi rent and rent?

f) Explain an example of Nash equilibrium under non-collusive oligopoly.

g) What do you mean by Marginal Physical Productivity under factor pricing?

Question No. 2. (2X7=14)

a) What is meant by monopolistic competition? How monopolist determine the prices and output?

b) Explain the non-collusive oligopoly with Cournot's and Chamberlin's model.

c) How prices for goods will be determined under basin point price system?

Question No. 3. (2X7=14)

a) Why a firm needs to maximize his sales in neoclassical theory of firms? Explain the static model of Baumol.

b) What do you mean by discretionary investment? Explain the simplified model of O. Williamsons.

c) What do you mean by limit pricing? Explain the concept of Bain's competition and entry.

Question No. 4. (2X7=14)

a) How factor pricing under perfect completion and monopoly is determined for single factor?

b) What do you mean by 'Adding up' problem? Explain Product Exhaustion theory.

c) How the factor pricing influenced by factor substitution and technological progress?

Question No. 5. (2X7=14)

a) Explain General Equilibrium for existence, stability and uniqueness. How unknown can be solved in 2X2X2 model of General Equilibrium?

b) What is welfare? Explain the Pareto-Optimality criterion of social welfare.

c) Explain the zero-sum game. How minimax or maximin method can make optimal strategy for two player?

CENTRAL UNIVERSITY OF HARYANA

Term End Examinations May /June 2018

Programme: MA (Economics) **Session: 2017-18**

Semester: II **Max. Time: 3 Hours**

Course Title: Economic Growth and Development-II **Max. Marks: 70**

Course Code: SAHS ECO 01 203 C 3104

Instructions:

1. Question no. 1 has seven sub parts and students need to answer any four. Each sub part carries three and half Marks.

2. Question no. 2 to 5 have three sub parts and students need to answer any two sub parts of each question. Each sub part carries seven marks.

Question No. 1. (4X3.5=14)

a) Why trade cannot act as an engine of growth in case of developing countries?

b) Explain Myrdal's 'backwash effects'.

c) What is Gini Coefficient?

d) Define Endogenous Growth.

e) Draw and explain Environmental Kuznet's Curve.

f) What do you understand by Economics of Ideas?

g) What is meant by growth convergence?

Question No. 2. (2X7=14)

a) Do you think education is an important instrument to achieve the Economic Development on a Country? Explain.

b) Critically examine Prebisch- Singer hypothesis of secular deterioration of terms of trade.

c) Assess the role of MNCs in economic development of LDCs

Question No. 3. (2X7=14)

a) Explain the various measures of poverty.

b) How labour market reforms are integral to efficiency of growth?

c) Do you think state has important role in the Economic Development? Comment and also highlights the importance of Good Governess.

Question No. 4. (2X7=14)

a) Do you agree that economic growth causes environmental degradation? Explain.

b) What is Krutilla-Fisher approach to the estimation of environmental costs and benefits?

c) What are the major determinants of energy demand in a developing country?

Question No. 5. (2X7=14)

a) Explain critically the basic Solow model.

b) How is the Endogenous growth approach different from the neo-classical approach?

c) What development lessons can India learn from the growth process of South Korea?

CENTRAL UNIVERSITY OF HARYANA

Jant-Pali, Mahendergarh, Haryana

Name of Programme	:	**M.A Economics**
Year & Semester	:	**2018, IV Semester**
Course Name	:	**International Economics-II**
Course Code	:	**SAHS ECO 01 401 C 3104**
Duration	:	**3 hours**
Maximum Letter Grade	:	A+

Attempt any five questions. All questions carry equal marks.

Q.1 What do you mean by economic integration, a preferential trade arrangement and free trade area? Give example of each.

Q.2 What is export instability? What are the alleged causes and effects of export instability on economic development? Explain it with the help of diagram?

Q.3 What is meant by exchange rate? How is the exchange rate determined under a flexible rate system?

Q.4 What is purchasing power parity theory? What are its uses? What is the absolute purchasing power parity theory?

Q.5 Critically examine the Marshall-Lerner condition for a stable and unstable foreign exchange market?

Q.6 How is equilibrium level of national income determined in a closed economy? How is the size of the closed economy multiplier (k) determined?

Q.7 Explain the IS-LM-BP model with flexible exchange rate and imperfect capital mobility.

Q.8 What do you mean by Bretton Wood system? How it has collapsed?

CENTRAL UNIVERSITY OF HARYANA

Jant-Pali, Mahendergarh, Haryana

Name of Programme	:	**M.A. Economics**
Year & Semester	:	**2017-18 & 4th**
Course Name	:	**Econometrics-II**
Course Code	:	**SHS ECO 0 1 402 C 3104**
Duration	:	**3 Hours**
Maximum Marks	:	**70**

Note: Attempt Any Five Questions

1. Attempt any four from following questions (3.5 marks each)
   a) What do mean by interaction dummy?
   b) What is Dummy variable trap?
   c) Differentiate between distributed lag model and auto-regressive model.
   d) What is simultaneous bias?
   e) What is translog production function?
   f) What is stochastic process?
   g) State any two reasons for lag in a model.

2. Define Dummy variables and also estimate the seasonal adjustment while using dummy variable in a model. (14 Marks)

   OR

   State the following models: (7+7 Marks)

   1) Linear Probability Model 2) Probit Model

3. What is distributed lag model? Explain the estimation procedure associated with Koyck's distributed lag model. Is the OLS estimation procedure is satisfactory in case of this model? (2+8+4 marks)

   OR

   Write a short note following: (7+7 marks)

   i. Partial Adjustment model

   ii. Adaptive expectation model

4. Consider the following demand and supply model for money: (4+4+6 Marks)
   Money Demand: $M^d = b_0 + b_1 Y_t + b_2 R_t + u_{1t}$
   Money Supply: $M^s = a_0 + a_1 Y_t + u_{2t}$
   Where
   M: Money, Y: Income, R: Rate of Interest, P: Price, u's: error terms
   Assume that R and P are exogenous and M and Y are endogenous. Answer the following:
   1) Is the Demand function is identified?
   2) Is the Supply function is identified?
   3) Obtain the reduced form equations for M and Y.

   OR

   Describe the 2SLS method of estimate and discuss properties of the estimates obtained by this method (14 Marks)

5. Fit a straight line trend by the method of least square (by taking 1999 as a year of origin) from the following data and also estimate the values for the year 1996, 2004, 2005 (14 Marks)

Year	1997	1998	1999	2000	2001	2002	2003
Sales	150	154	153	160	166	164	168

OR

Write short note on following: (4+6+4 Marks)

1) Ex-post and Ex-ante forecast
2) Forecasting from time series trends
3) Conditional and Unconditional forecast

CENTRAL UNIVERSITY OF HARYANA
Jant-Pali, Mahendergarh, Haryana
Term End Examination

Name of Programme	:	**M.A. ECONOMICS**
Year & Semester	:	**June 2018, Semester-II (Reapear)**
Course Name	:	**Macroeconomic Theory-II**
Course Code	:	**SAHS ECO 01 202 C 3104**
Maximum Marks	:	**60**
Duration	:	**3 Hrs**

Note: Attempt **any five** questions. Each question carries equal marks.

1. Define money? Explain monetary aggregates and liquidity aggregates of money stock.
2. Explain critically Boumol-Tobin Model of money demand.
3. Explain Mundell-Fleming model with suitable diagramme. Also discuss the policy implication of the model under fixed and flexible exchange rate regimes.
4. Consider the following economy-

   Consumption, $C = 50 + 0.9(Y-T)$
   Tax, $T = 100$
   Government Expenditure, $G = 100$
   Investment, $I = 150 - 5i$
   Exports, $X = 20$
   Imports, $M = 10 + 0.1\ Y$
   Demand for Money, $M_d = 0.2Y - 10i$
   Supply of Money, $Ms = 100$

   i) Obtain IS and LM equations of the economy.
   ii) Find out equilibrium income and rate of interest of the economy. Also find the balance of trade.
5. What is Phillips curve? How do Keynesians explain the phenomena of Phillips curve?- Discuss with suitable diagramme.
6. What do you mean by inflation? Explain cost push and demand pull inflation using AD-AS supply framework. Which one amongst them is more dangerous for an economy and why?
7. What do you mean by monetary policy? Describe the objectives and tools of monetary policy.
8. Write short notes on (ANY TWO)
   i) Money Multiplier.
   ii) Stagflation.
   iii) Functions of a Central Bank
   iv) Random Walk of GDP

CENTRAL UNIVERSITY OF HARYANA

Jant-Pali, Mahendergarh, Haryana

Name of Programme	:	**M.A. Economics**
Year & Semester	:	**2017-18 & III**
Course Name	:	**Econometrics-I (Reappear)**
Course Code	:	**SHS ECO 01 302 C3104**
Duration	:	**3 Hours**
Maximum Marks	:	**70**

Note: Attempt five questions in all including Question No. 1 which is compulsory. Select one question from each unit. All questions carry equal marks.

1. **Attempt any four questions (3.5 marks each):**
   - i. What do you mean by stochastic and non stochastic function?
   - ii. What do you mean by cubic and quadratic function?
   - iii. "Heteroscedasticity has never been a reason to throw out an otherwise good model". Comment on the statement.
   - iv. What is Gauss- Markov theorem?
   - v. Differentiate between standard deviation and standard error.
   - vi. State the properties of an estimator.

2. What is Econometrics? Discuss the nature and functions of econometrics. (2+6+6 marks)

   OR

   Write a short note on: (7+7 marks)
   a) Econometrics versus mathematical economics
   b) Econometrics versus statistics

3. What is ordinary least square? State the assumptions of OLS and also prove that an ordinary least square is BLUE. (2+2+10 marks)

   OR

   Consider the following regression output: (14 marks)

   $\hat{y}_t = 0.2033 + 0.6560X_t$

   Se = (0.0976) (0.1961); $R^2 = 0.76$, RSS = 0.0544, ESS = 0.0358

   Where Y is labour force participation rate (LFPR) of women in 1972 and X is LFPR of women in 1968. The regression results were obtained from a sample of 19 cities.

   a) How would you interpret this regression output?
   b) Test the hypothesis that Ho : $\beta 2 = 1$ against H1 : $\beta 2 > 1$. Which test do you use? And why?
   c) Suppose that the LFPR in 1968 was 0.58 (58 %). On the basis of the regression results given above, what is the mean LFPR in 1972? Establish a 95 % confidence interval for the mean prediction.

4. What is multiple linear regression model? State its properties. (4+10 marks)

OR

Consider the following models: (4+4+3+3 Marks)

Model A: $Y_t = \alpha_1 + \alpha_2 X_{2t} + \alpha_3 X_{3t} + u_{1t}$

Model B: $(Y_t - X_{2t}) = \beta_1 + \beta_2 X_{2t} + \beta_3 X_{3t} + u_{2t}$

a. Will OLS estimates of α_1 and β_1 be the same? Why?
b. Will OLS estimates of α_3 and β_3 be the same? Why?
c. What is the relationship between α_2 and β_2?
d. Can you compare the R^2 terms of the two models? Why or why not?

5. What is Autocorrelation? What are its implications? State remedial measures to solve the problem of Autocorrelation. (2+4+8 marks)

OR

What is Heteroscedasticity? What are the consequences of using ordinary least square (OLS) in the presence of Heteroscedasticity? Discuss the remedial measure of it. (2+6+6 marks)

CENTRAL UNIVERSITY OF HARYANA
Jant-Pali, Mahendergarh, Haryana
Term End Examination MAY/JUNE -2018

Name of Programme	:	**M.A. ECONOMICS**
Year & Semester	:	**May-2018, Second Semester (Reapper)**
Course Name	:	**Public Economics-I**
Course Code	:	**SAHS ECO 01 205 C 3104**
Maximum Marks	:	**60**
Duration	:	**3Hrs**

Note: Attempt any five questions. All questions carry equal marks.

1. "The study of Public Finance has assumed increasing significance in the field of economic analysis in recent years." Explain the statement.
2. Briefly explain Wagner's hypothesis and Peacock Wiseman hypothesis of public expenditure.
3. What are externalities? Explain how negative and positive externalities can lead to market failure.
4. Explain the various criteria of public investment with its criticism.
5. What is shifting of taxation? How elasticity of demand and supply will affect the incidences of taxation?
6. Explain the concept of zero based budgeting in detail.
7. What would be the effects of public expenditure on production, distribution, economic stability and economic growth?
8. What do you mean by budget? Write the main features of budget 2018.

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CENTRAL UNIVERSITY OF HARYANA
Jant-Pali, Mahendergarh, Haryana
Term End Examination May-2018

Name of Programme	:	**M.A. ECONOMICS**
Year & Semester	:	**May-2018, Third Semester (Reapper)**
Course Name	:	**Public Economics-II**
Course Code	:	**SAHS ECO 01 303 C 3104**
Maximum Marks	:	**70**
Duration	:	**3Hrs**

Attempt any five questions. All questions carry equal marks.

1. Write short notes on the followings:
   a) Write the functions of Federal Finance.
   b) What do you mean by vertical and horizontal imbalances?
   c) What are the sources of public debt?
   d) Write the functions of Zila Parishad.
   e) What do you mean by crowding out of private investment?
   f) Write the purpose of public sector.
   g) What is Gadgil formula?

2. State the necessity of public debt in a developing country like India.

   OR

   What do you mean by public debt? Classify the public debt in different categories.

3. What type of role is played by different tools of fiscal policy in developing countries?

   OR

   Explain the concept of budgetary deficit and its implications for developing countries in detail.

4. Write short notes on:
   a) Built –in- stabilizer (BIS).
   b) Principles of debt management.

   OR

   Examine the role of multiplier in determination of fiscal policy.

5. What are the principles of multi unit finance? Explain the role and importance of multi unit finance.

   OR

   Explain the criteria of fund transfer from Ist to Xth finance commission adopted by government.

CENTRAL UNIVERSITY OF HARYANA
Jant-Pali, Mahendergarh, Haryana
Term End Examination

Name of Programme	:	**M.A. ECONOMICS**
Year & Semester	:	**June 2018, Semester-IV (REJOINED)**
Course Name	:	**Research Methodology**
Course Code	:	**SAHS ECO 01 405 DCEC 3104**
Maximum Marks	:	**60**
Duration	:	**3 Hrs**

Note: Attempt **any five** questions. Each question carries equal marks.

1. What do you mean by research? Explain the process of research in social sciences.
2. What is research design? Explain the various kinds of research design. Also discuss the features of a good research design.
3. What do you mean by hypothesis? Explain the process of hypothesis testing?
4. A manpower development expert is asked to test if the hourly wages of construction workers are the same in the two cities. The results of the survey are presented in the table below-

City	Mean Hourly Earnings from Sample	Standard Deviations of Sample	Size of the Sample
Narnaul	₹ 18.95/-	₹ 0.40/-	200
Bhiwani	₹ 19.10/-	₹ 0.60/-	175

Test the hypothesis at 5% level of significance.

5. What do you mean by sampling? Discuss various methos of sampling with suitable example.

6. Write short notes on **(Any Two)**-

   i) Primary versus Secondary Data

   ii) Pie Chart versus Bar Diagram

   iii) Normal Distribution

7. What is research report? Explain various components of a research report. Discuss the feature of a good research report.

8. The data for the money spent on sales promotion and annual profit of a biscuit firm is given below-

Year	Money Spent (USD Million)	Annual Profit (USD Million)
2010	10	131
2011	22	140
2012	8	130
2013	10	134
2014	6	125
2015	4	120

   i) Determine appropriate regression equation for relationship between the money spent on sales promotion and annual profit.

   ii) If the firm spends USD 16 million of sales promotion in 2016, predict the expected profit.

CENTRAL UNIVERSITY OF HARYANA
Jant-Pali, Mahendergarh, Haryana
Term End Examination

Name of Programme	:	**M.A. ECONOMICS**
Year & Semester	:	**May 2018, Semester-I (REAPPEAR)**
Course Name	:	**MATHEMATICS FOR ECONOMIC ANALYSIS**
Course Code	:	**SAHS ECO 01 104 C 3104**
Maximum Marks	:	**70**
Duration	:	**3 Hrs**

Note: Attempt any five questions. All questions carry equal marks.

1. Answer the following questions in short:
   i) Differentiate between relation and function with examples.
   ii) Write the chain rule of derivative of a function.
   iii) Find the derivative of $1-2x^2$.
   iv) What do you mean by null matrix?
   v) If $A=\begin{bmatrix} 1 & 2 \\ 3 & 4 \end{bmatrix}$, $B=\begin{bmatrix} -1 & 2 \\ 2 & -1 \end{bmatrix}$; find AB.
   vi) What is homogeneous function?
   vii) Show equation Y= a + b X graphically, if 'a' and 'b' are constant.
2. The demand and supply functions for sugar in New Delhi are given below-

   $Q^d = 5000-10P^2$

   $Q^S = 1000+30P^2$

   Find equilibrium price and quantity of sugar in New Delhi. Also give the sketches of the functions.

   OR

   Write associative laws and distributive laws of set operations and prove them.
3. Prove that $MR = AR\,[1 + (1/e)]$.

   OR

   If demand curve and supply curve are P = f (Q) = 200 – 0.2Q and P = g (Q) = 20 + .01Q. Find consumer and producer surplus.

4 Use Cramer's rule to solve the following equation system-

$$-x + y + z = a$$

$$x - y + z = b$$

$$x + y - z = c$$

OR

Find equilibrium income 'Y' using matrix algebra, if system of equations for an economy is given as -

$Y = C + I + G$

$C = a\,(Y-T) + b$

$T = tY$

where I and G are extraneous variables.

5. The production function for a perfectly competitive firm is $Q = K^{0.2} L^{0.6}$. If the market price is Rs. 20, find the profit maximizing output and profit of the firm using Lagrange multiplier method. The price of capital is Rs. 8 per unit and price of labour is Rs. 2 per unit.

OR

A firm finds its production function is of Cobb Douglas form

$Q = AK^{0.25} L^{0.75}$ where α and β are positive parameter

(a) Show that the equation of the isoquant for $Q = 100$ is given by $K = 1/L^3$

(b) Find the marginal products of labour (L) and capital(K).

CENTRAL UNIVERSITY OF HARYANA
Jant-Pali, Mahendergarh, Haryana
Term End Examination May-2018

Name of Programme	:	**M.A. ECONOMICS**
Year & Semester	:	**May-2018, Second Semester (Re-appear)**
Course Name	:	**Economic Growth & Development-I**
Course Code	:	**SAHS ECO 103 C 3104**
Maximum Marks	:	**70**
Duration	:	**3Hrs**

Note: Attempt five questions in all including Question No. 1 which is compulsory. Select one question from each unit. All questions carry equal marks.

1. Write short note on the followings :
   a) Differentiate between economic growth and economic development.
   b) What do you mean by sustainable development?
   c) Differentiate between positive checks and negative checks.
   d) What do you mean by HDI?
   e) Differentiate between long run and short run in case of neo-classical economics.
   f) Write important factors of economic development.
   g) Differentiate between balance and unbalanced growth.

2. Explain the social, economic and political characteristics of developing countries.

   OR

   Explain the 'Vicious Circle of Poverty" with its criticism.

3. What are the five stages of growth in Rostow's theory? Explain the general characteristics of these stages?

   OR

   Give a critical appraisal of balanced growth theory.

4. Explain the condition of steady state growth in detail.

   OR

   Explain the mechanism of Lewis model in detail.

5. Make a critical appraisal of Harrod-Domar model.

   OR

   What do you mean by economic planning? Discuss the need for economic planning for developing economies.

CENTRAL UNIVERSITY OF HARYANA
Jant-Pali, Mahendergarh, Haryana
Term End Examination May-2018

Name of Programme	:	**M.A. Economics**
Year & Semester	:	**May 2018 & I (Re-appear)**
Course Name	:	**Microconomic Theory-I**
Course Code	:	**SAHS ECO 01 101 C 3104**
Maximum Marks	:	**70**
Duration	:	**3Hrs**

Note: Attempt following questions.

1. Attempt any four questions from following: (3.5 marks each)
   i. What is risk aversion?
   ii. What do you mean by discriminating monopoly?
   iii. What is trans-log production function?
   iv. State any two properties of an indifference curve.
   v. Two goods have a cross elasticity of demand of 1.2. Would you describe the goods as substitute or compliments?
   vi. What is Friedman-Savage Hypothesis?

2. Using Hicksian model, illustrate how a change in price decomposes into substitution and income effects? (14 marks)

   OR

   Write short note on: (7+7 Marks)
   i. Revealed preference theory.
   ii. Indirect Utility Function.

3. What do you mean by consumer behaviour under risk and uncertainty? How consumers avoid the risk? (14 Marks)

   OR

   Write a short note: (7+7 Marks)
   i. Insurance and Gambling
   ii. Risk Neutrality

4. State and explain the law of variable proportions with the suitable diagram. (14 Marks)

   OR

   Write a short note on following: (7+7 Marks)
   i. Properties and significance of Cobb-Douglas function.
   ii. Modern theory of cost,

5. Diagrammatically explain the short run and long run determination of price and output of a firm under perfect completion. (14 Marks)

OR

Write short note on following: (7+7 Marks)

i. Regulation and control of monopoly
ii. Price discrimination and its degrees