

END TERM EXAMINATION

THIRD SEMESTER [BA.(ECO)HONS] NOVEMBER- DECEMBER 2019

Paper Code: BAECO-201

Subject: Intermediate Micro Economics

Time : 3 Hours

Maximum Marks :75

Note: Attempt all questions as directed. Internal choice is indicated. All questions carry equal marks.

Q1. Answer **any five** from the following:-

- (a) Budget Constraint
- (b) Uncertainty
- (c) Returns to scale
- (d) Isocost curve
- (e) Shephard's lemma
- (f) Substitution effect

Q2. Given the utility function $U(x,y) = x^\alpha y^\beta$, Where $\alpha + \beta = 1$, solve for the utility maximizing values for x and y for any prices (P_x, P_y) and Income I .

OR

- Q3. (i) Utility function for Hamburgers (y) and soft drinks (x) is given by $U(x,y) = x^{0.5}y^{0.5}$. Find out the compensated demand function.
(ii) For the utility function given above, calculate the substitution and income effect.

Q4. Discuss the Revealed preference theory. How is it different from Indifference theory?

OR

- Q5. (i) Discuss the St. Petersburg Paradox.
(ii) A person with a current wealth of \$1,00,000 faces the prospect of a 25% chance of losing his or her \$20,000 automobile due to theft during the next year. Suppose also that this person's Von Neumann-Morgenstern utility index is logarithmic, that is, $U(W) = \ln(W)$. Find out the maximum premium.

Q6. Cobb Douglas production function for two inputs is given by, $q = f(k,l) = AK^\alpha L^\beta$, where $0 < \alpha < 1$ and $0 < \beta < 1$. For this production function-

- (a) Show that $f_k > 0$, $f_l > 0$, $f_{kk} < 0$, $f_{ll} < 0$ and $f_{kl} - f_{lk} > 0$.
- (b) Show that the function is quasi concave. Show that the function is concave for $\alpha + \beta < 1$ but not concave for $\alpha + \beta > 1$.

OR

Q7. A firm's production function is represented by $q = L^{1/2} + K^{1/2}$. Assume that the firm buys and sells in perfectly competitive market at prices p , w and v .

- (a) Derive the firm's short and long run cost functions.
- (b) What would be the impact on the conditional demand for capital for an increase in w ?

Q8. A mobile manufacturer's cost function is $C(x) = 4000 + 300x$. Find out the optimum quantity that will maximize the profit.

OR

- Q9. (a) Draw the short run supply curve for a profit maximizing producer.
(b) Suppose demand for labor is given by $L = -50W + 450$ and supply is given by $L = 100W$, where L represents the number of people employed and W is the real wage rate per hour.
(i) What will be the equilibrium level W and L in this market?
(ii) Suppose the government wishes to raise the equilibrium wage to \$ 4 per hour by offering a subsidy to employers for each person hired, how much will this subsidy be? What will the new equilibrium level of employment be? How much total subsidy will be paid?



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END TERM EXAMINATION

THIRD SEMESTER [B.A.(ECO) HONS.] DECEMBER 2019

Paper Code: BAECO203

Subject: Intermediate Macro Economics-I

Time: 3 Hours

Maximum Marks: 75

Note: Attempt all questions as directed. Internal choice is indicated.

Q1 Write short notes on (any three)

(5x3=15)

- (a) Monetary Policy multiplier
- (b) Sticky wages
- (c) Crowding Out
- (d) Non accelerating inflation rate of unemployment

(15)

~~15~~

~~15~~

Q2 In a 3 sector model suppose $C=400+0.8Y$, $I=1400-100i$, $T=500$, $G=500$, $L=0.20Y-50i$ and $M=1000$

- (a) Find equation of IS curve and LM curve (3)
- (b) What are the equilibrium levels of output and rate of interest? (3)
- (c) Calculate new IS curve equation when government increases expenditure from 500 to 800 (3)
- (d) Calculate new equilibrium level of output and interest rates. (3)
- (e) Is there any crowding out due to fiscal expansion? If yes, explain. (3)

(12)

OR

Q3 Discuss effectiveness of Fiscal Policy and Monetary Policy in case of (15)

- (a) Liquidity trap
- (b) Classical case

Q4 Discuss effects of expansionary Monetary Policy on output, price, interest rates and real money balances under Classical and Keynesian case? (15)

OR

Q5 Derive Aggregate Supply Curve that captures the effect of output on the price level. How supply shocks poses a difficult problem for Macroeconomic policy?

(10)

Q6 How equilibrium rate of unemployment and real wages are determined through wage setting and price setting curves? (15)

OR

Q7 What is Phillips curve? Explain how Friedman proves that short - run Phillips curve is downward sloping while long run Phillips curve is vertical?

(13)

Q8 Explain Adaptive expectation hypothesis. Explain merits, demerits and implausibility of this hypothesis?

OR

Q9 What is NEW Keynesian Economics? How does it differ from the NEW Classical Economics? (15)

(12)



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THIRD SEMESTER [B.A.ECONOMICS (HONS.)] DECEMBER-2019

Paper Code: BAECO-205

Subject: History of Economic Thought

Maximum Marks :75

Time : 3 Hours

Note: Attempt all questions as directed. Internal choice is indicated. All questions carry equal marks.

Q1 Attempt **any three** of the following:

- (a) Effective Demand
- (b) Marx's theory of value
- (c) J B Say's law of market
- (d) Wicksell effect
- (e) Multiplier
- (f) Value in use and value in exchange

Q2 Describe Adam Smith's views about economic science.

OR

Critically examine the Ricardian theory of Income distribution.

Q3 What is Marxism? Describe the important features of Marxism.

OR

Discuss the labour theory of surplus value propounded by Karl Marx.

Q4 Critically examine the theory of employment of Lird Keynes.

OR

Discuss the liquidity preference theory of interest propounded by Keynes.

Q5 Discuss the contribution of Walras to the history of economic thought.

OR

Explain the Fisher's quantity theory of money.



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THIRD SEMESTER [B.A.(ECO)(HONS.)] NOV.-DEC. 2019

Paper Code: BAECO207

Time: 3 Hours

Subject: Introduction to Econometrics

Maximum Marks: 75

Note: Attempt all questions as directed. Internal choice is indicated. All questions carry equal marks.

- Q1 State T/F, Give Reasons (Do any 3):- (3x5=15)
- If a qualitative variable has 2 categories & we introduce two dummies in the regression model, the unknown parameters can still be estimated.
 - Value of \bar{R}^2 is always greater than R^2 .
 - A Durbin Watson test statistic close to 0 indicates the presence of the autocorrelation.
 - If you choose a higher level of significance, a regression coefficient is more likely to be significant.

- Q2: (a) Based on your data collection for 13 BA(H) Economics 2nd year students we want to estimate the following population regression equation:- (10)

$$y_i = \beta_1 + \beta_2 x_i + u_i$$

y_i = travel time for i^{th} student from home to college (in hours)

x_i = Distance from home to college for i^{th} student in km.

Sample gave the following values:-

$$\Sigma x_i = 195 \quad \Sigma y_i = 26, \quad \Sigma x_i^2 = 3050, \quad \Sigma y_i^2 = 53, \quad \Sigma x_i y_i = 400$$

Establish 95% confidence interval for the predicted mean travelling time when the distance between the college and student's house is 11 k.m. (5)

(b) What are the consequences of multicollinearity

OR

- a) Show that the variance of OLS estimator of slope coefficient in $y_i = \beta_1 + \beta_2 x_i + u_i$ is

$$\text{Var } b_2 = \frac{\sigma^2}{\sum (x_i - \bar{x})^2}$$

Where σ^2 is variance of population error term. (5)

- b) Consider the following formulations of 2-variable PRF:

Model I : $y_i = \beta_1 + \beta_2 x_i + u_i$

Model II : $y_i = \alpha_1 + \alpha_2(x_i - \bar{x}) + u_i$

- Find the estimators of β_1 and α_1 . Are they identical. Are their variance identical.
- Find the estimators of β_2 and α_2 . Are they identical. Are their variance identical. (10)

[P.T.O.]



Heteroskedasticity is likely to be present in the data. White's test was performed & following results were obtained:-

$$\hat{e}_i^2 = -62196 + 229.3508 \text{ GDP}_i + 0.000537 \text{ GDP}_i^2$$

$$R^2 = 0.5891$$

Use R^2 to test if model suffers from heteroskedasticity. Perform the test using 5% level of significance.

(C) Explain the steps involved in JB (Jarque Bera) test of normality. (5)

(A) In the regression model
 $\ln Y_i = \beta_1 + \beta_2 D_i + u_i$
 Prove that relative change in Y when the dummy changes from 0 to 1 can be :-

$$D_i = \text{Dummy regressor, } \ln = \log$$

$$\frac{\partial Y_i}{\partial D_i} = \beta_2 \cdot \frac{1}{Y_i}$$

Where e is the base of natural logarithm & b_2 is OLS estimator of slope coefficient. (7.5)

(B) RBI continuously monitor rate of growth of money supply in Indian Economy. In this content explain the use of semi-log growth models in estimating instantaneous & compound rate of growth of money supply. What purpose would a linear trend model serve in this context? (7.5)

Q5: (A) Means of 2 random samples of size 9 & 7 are 196.42 & 198.82 respectively. The sum of the squares of the deviations from mean are 26.94 & 18.73 respectively. Can the samples be considered to have drawn from the same normal population? (10)

(B) Frame the 90% confidence limit for ratio of population variance. (5)

(A) Hourly wages of 1000 workmen are normally distributed around a mean of Rs.70 with a standard deviation of Rs.5. Estimate the number of workers where hourly wages will be:-

- (a) between 69 & 72
- (b) More than 75
- (c) Less than 63
- (d) Also estimate the lowest hourly wages of 100 highest paid workers

(B) Explain the properties of a good estimator? (5)

[*****]

(2+2+2+4=10)

2/3

5.13

(a) Use OLS to find the estimator of β_2 . What is its variance.

(b) Show that b_2 is a linear & unbiased estimators of β_2 . (10)

(B) The basic framework of multiple regression analysis in the CLRM (Classical Linear Regression Model) is based on a set of assumptions. What are these assumptions? Present a brief description of each of one of them. (5)

(A) Why is heteroskedasticity usually found in cross sectional data? Briefly explain the method of weighted least squares used in the presence of heteroskedasticity. OR

(B) Complete the table by filling in the missing values. (5)

Source of variation	Sum of squares	Degrees of freedom	Mean sum of squares
Due to Regression	65,965	--	--
Due to Residuals	--	--	--
Total	66042	14	--

(ii) Calculate \bar{R}^2 for the model & test the overall goodness of fit at 5% level of significance. (5)

Q4: (A) Consider the following regression results on a model of demand for competitive imports based on UK quarterly data for time period 1980 (Q1) to 1996 (Q4)

$$\ln \hat{M}_t = -5.5443 + 0.8105 \ln \text{GDP}_t - 0.01131 \ln P_t + 0.6178 \ln M_{t-1}$$

$$R^2 = 0.9897 \quad d = 1.8125$$

M_t = aggregate imports P_t = Relative price index GDP_t = Gross Domestic Product $\ln = \log$

Apply the durbin's h-test to detect the presence of first order auto correlation. Comment on the results reported above (5)

(B) Based on data on value added in manufacturing & GDP for 28 countries in 2010, the following regression results were reported. Standard errors of the coefficient are reported in parenthesis below

$$\text{Manu} = 604 + 0.194 \text{ GDP}_t$$

$$(533.93) (0.013)$$

Where Manu = manufacturing, GDP = Gross Domestic Product

[P.T.O.]

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END TERM EXAMINATION

THIRD SEMESTER [B.A.(ECONOMICS)(HONS.)] DECEMBER 2019

Paper Code: BAECO-209

Subject: Functional Hindi-I

Time : 3 Hours

Maximum Marks: 75

Note: Attempt all questions. Internal choice has been indicated.

नोट : सभी प्रश्नों के उत्तर दीजिए। आंतरिक चयन दर्शाए गए हैं।

Q1 निम्नलिखित में से किन्हीं चार पर संक्षिप्त टिप्पणियाँ लिखिए। (3.75x4=15)

- (क) भारतेन्दु हरिचंद के व्याख्यान में भारत की उन्नति के प्रमुख बिंदु
- (ख) कवि निराला की विशेषताएँ
- (ग) 'अकाल और उसके बाद' में जीवन की गतिशीलता
- (घ) ईदगाह में दादी का चरित्र
- (ङ) सिक्का बदल गया कहानी में शाहनी का व्यक्तित्व
- (च) 'जिस लाहौर नहीं देख्या ओ जन्मया नई' में शायर का चरित्र
- (छ) 'जिस लाहौर नहीं देख्या ओ जन्मया नई' की नाट्य भाषा
- (ज) हरिशंकर परसाई के लेखन का महत्व

Q2 'भारतवर्षोन्नति कैसे हो सकती है' में भारतेन्दु की भविष्य दृष्टि क्या है? पाठ के आधार पर स्पष्ट कीजिये। (15)

अथवा

'फिर उसी नर्मदा मैश की जय' धर्म के पाखण्ड और प्रकृति की विभीषिका का आख्यान है। कैसे?

Q3 'कुकुरमुत्ता' में निराला किस पर व्यंग्य कर रहे हैं और क्यों? (15)

अथवा

'अकाल और उसके बाद' में नागार्जुन की काव्य कला चरम पर है। कथन की व्याख्या कीजिये।

Q4 'ईदगाह' कहानी के आधार पर बताइये कि आप हामिक के स्थान पर होते तो क्या करते? (15)

अथवा

'सिक्का बदल गया' विभाजन की विभीषिका को प्रकट करती है। कहानी के आधार पर इस वाक्य की विवेचना कीजिये।

Q5 'जिस लाहौर नहीं देख्या वो जन्मया नई' का कौनसा पात्र आपको सर्वाधिक प्रभावशाली लगता है और क्यों? सोदाहरण बताइये। (15)

अथवा

'जिस लाहौर नहीं देख्या वो जन्मया नई' किसी भी प्रकार की कट्टरता का निषेध करता है। स्पष्ट कीजिये।

