

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Third Semester MA Economics Degree Examination, November 2024

MEC3C09 – International Trade

(2022 Admission onwards)

Time: 3 hours

Max. Weightage : 30

Part A: Answer all questions. Each carries $\frac{1}{5}$ weightage

1. What is known as corollary of Heckscher Ohlin theorem
A. Leontief Paradox B. Brander Krugman model
C. Factor price equalization theorem D. Stolper Samuelson theorem
2. Intra industry trade theories emphasized the role of
A. Factor endowments B. Technology C. Labour costs D. Product differentiation
3. The product cycle model of international trade was developed by
A. Michael Posner B. Reymond Vernon C. Samuelson D. J S Mill
4. What is the ratio between the price of a country's export goods and price of its import goods
A. Single factorial terms of trade B. Double factorial terms of trade
C. Net barter terms of trade D. Income terms of trade
5. The author of Principle of Political Economy
A. David Ricardo B. P A Samuelson C. J S Mill D. D Haberler
6. The scope of international trade and division of labour is limited by
A. Availability of technology B. Size of international market
C. Availability of capital D. Surplus production for exports
7. EURO became the official currency of EU on
A. 1994 B. 1995 C. 1999 D. 1991
8. free international trade necessarily lowers the real return of the scarce factor of production, according to
A. Rybczynski theorem B. Factor price equalization theorem
C. Metzler paradox D. Stolper Samuelson Theorem
9. Opportunity cost version of comparative advantage doctrine was introduced by
A. Leontief B. David Ricardo C. Haberler D. Singer

10. Factor endowment theory is also known as
 A. Neo classical theory of international trade
 B. Classical theory of international trade
 C. Reciprocal demand theory D. Factor proportion theory
11. Consider the following the statements regarding arguments for free trade
 1. Free trade leads to maximisation of output, income and employment
 2. Free trade prevents monopoly
 3. Free trade protects domestic industries
 Which of the statements are correct
 A. 1 B. 1 and 2 C. 2 and 3 D. 1, 2 and 3
12. Leontief paradox makes
 A. Critical analysis of opportunity cost theory
 B. Empirical testing of reciprocal demand
 C. Empirical test of factor price equalization theory
 D. Empirical test of Heckscher Ohlin theory
13. Which is the appropriate form of protection
 A. Export tariff B. Import tariff C. Export subsidy D. Nontariff barriers
14. Optimum tariff denotes
 A. Tariff that reduce balance of payment deficit
 B. Tariff that provides maximum revenue
 C. Tariff that improves terms of trade
 D. Tariff that maximises economic welfare
15. If an importing country ban the import from another country, it is called
 A. VERs B. Import embargo C. Exchange control D. None of the above

($15 \times \frac{1}{5} = 3$ weightage)

Part B: Answer any *five* questions. Each carries *one* weightage

16. What is imitation lag
 17. Explain trade in wastes
 18. What is meant by factor intensity reversal
 19. Explain net barter terms of trade
 20. What is meant by reciprocal demand in international trade
 21. What is the meaning of overlapping demand.
 22. Define non-traded goods
 23. What is dumping

($5 \times 1 = 5$ weightage)

Part C: Answer any *seven* questions. Each carries *two* weightage

24. Write a note on MERCOSUR
25. Elaborate Rybczynski Theorem
26. Analyse factor price equalisation theorem
27. Explain partial equilibrium effects of tariff
28. Explain Trefler's theorem
29. Examine trade diversion and customs union
30. Analyse secular deterioration hypothesis
31. How increasing returns to scale affects the pattern of trade
32. Explain reasons for intra industry trade
33. Explain effect of technical progress on international trade

(7×2 = 14 weightage)

Part D: Answer any *two* questions. Each carries *four* weightage

34. Analyse significance and effects of economic integration
35. Explain Stolper Samuelson theorem
36. Critically examine trade as an engine of growth
37. Explain factor endowment theory of international trade

(2 × 4 = 8 weightage)

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FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Third Semester MA Economics Degree Examination, November 2024

MEC3C10 - Economics for Growth and Development

(2022 Admission onwards)

Time: 3 hours

Max. Weightage : 30

Part A (Multiple Choice Questions)

Answer *all* questions. Each question carries $\frac{1}{5}$ weightage

1. As per the 2023-24 Human Development Report, India's HDI rank is
a) 130 b) 132 c) 134 d) 136
2. The Gini coefficient lies in between
a) -1 to 1 b) 0 to 1 c) 0- ∞ d) 1- ∞
3. Income index in HDI is 1 when GNI per capita is
a) \$200 b) \$70000 c) \$100 d) \$75000
4. The core values of development are
a) Subsistence, self esteem and capability b) Sustenance, self esteem and freedom
c) Sustenance, capability and freedom d) subsistence, freedom and self esteem
5. According to Marx the rate of profit is
a) $S/(C+V)$ b) $C+S/V$ c) S/V d) C/V
6. The theory of technological dualism was developed by
a) J H Boek b) Prof. Higgins
c) Prof. Myint d) Myrdal
7. "Launching a country in to self sustaining growth is little like an airplane off the ground. There is a critical ground speed which must be passed before the craft can become airborne..."
This statement is related to the theory of
a) Low Level Equilibrium Trap b) Unbalanced growth theory
c) Big Push Theory d) Critical Minimum effort Thesis
8. In the Harrod-Domar Model of growth, what is the key condition for an economy to achieve a steady growth path?
a) Savings rate equals the growth rate
b) Actual growth rate equals the warranted growth rate
c) Capital output ratio is constant
d) Labor force grows at the same rate as the economy

9. "The centrifugal forces of expansionary momentum emanating from the centres of economic expansion to other region" is an example of
 a) Beta convergence b) Backwash effect c) Spread effect d) Gama convergence.
10. "The spontaneous and discontinuous change in the channels of flow, disturbance of equilibrium, which forever alters and displaces the equilibrium state previously existing" is a definition of development by,
 a) Rosentein Rodan b) Arthur Lewis
 c) Joseph Schumpeter d) Harvey Leibenstein.
11. According to the Domar Model, when $\Delta I/I$ is greater than $\alpha\sigma$
 a) The economy would experience depression
 b) The economy would experience boom.
 c) The economy would experience stability.
 d) The economy would neither experience boom nor depression.
12. According to Paul Romer's endogenous growth theory, what is the primary driver of long-term economic growth?
 a) Capital accumulation b) Technological innovation
 c) Labor force expansion d) Government spending
13. The following index shows the deprivation in the essential aspects of human life.
 a) PQLI b) HDI c) GDI d) HPI
14. In the Solow Growth Model, which of the following factors is considered the primary driver of long-term economic growth in the steady state?
 a) Capital accumulation b) Technological progress
 c) Labor force growth d) Increase in savings rate
15. The Kyoto Protocol is an international treaty that primarily aims to:
 a) Promote nuclear energy development b) Reduce greenhouse gas emissions
 c) Protect endangered species d) Improve global trade relations

(15 × 1/5 = 3 weightage)

Part B (Very Short answer Questions)

Answer any *five* questions. Each carries *one* weightage

16. What is development gap?
17. Differentiate Growth and development
18. Explain the concept "development as freedom"
19. Explain the Backwash and Spread effects.
20. List out the tools for measuring inequality.

21. Discuss briefly the concept of unlimited supply of labour.
22. Define multi dimensional poverty index.
23. Write a note on Brundtland commission.

(5 × 1 = 5 weightage)

Part C (Short answer Questions)

Answer any *seven* questions. Each carries *two* weightage

24. Explain the process of calculating HDI.
25. Discuss Marxian theory of surplus value.
26. Explain the low level equilibrium trap.
27. Discuss the relevance of "big push" theory in the context of UDCs.
28. Write a note on Critical Minimum Effort Thesis" of development
29. Explain briefly the Schumpeterian theory of innovation and development.
30. Explain the circular causation theory of Myrdal.
31. Discuss the endogenous growth theory.
32. Discuss the centre periphery thesis of development
33. Explain the importance of the concept "climate- economy interaction".

(7 × 2 = 14 weightage)

Part D (Essay Questions)

Answer any *two* questions. Each carries *four* weightage

34. Discuss the concept of dualism in the context of Indian economy.
35. Critically examine the Harrod- Domar model of economic growth.
36. Discuss the Solow's model of economic growth
37. Differentiate balanced and unbalanced growth strategies. Discuss its importance in UDCs.

(2 × 4 = 8 weightage)

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Third Semester MA Economics Degree Examination, November 2024

MEC3C11– Econometrics : Theory and Applications

(2022 Admission onwards)

Time: 3 hours

Max. Weightage : 30

Part A**Answer All Question***All the questions carry a weightage of 1/5*

1. What is the primary objective of econometrics?
 - a. To substitute economic theories with empirical evidence.
 - b. To ensure precise economic predictions.
 - c. To comprehend and quantify economic phenomena using mathematical and statistical techniques.
 - d. To separate economic variables from mathematical models.
2. Arrange the following milestones in the history of econometrics in chronological order:
 - I. Founding of the Econometric Society.
 - II. Publication of the journal "Econometrica".
 - III. Development of least squares estimation by Legendre.
 - IV. Introduction of the term "econometrics" by Ragnar Frisch.
 - V. Cowles Commission for Research in Economics established.
 - a. III, IV, I, V and II b. III, IV, V, II and I
 - c. IV, V, I, II and III d. IV, III, I, V and II
3. Which of the following statements best describe the difference between panel data and pooled cross-sectional data?
 - a. Panel data combine observations from different entities at a single time point, while pooled cross-sectional data combine observations from the same entities at multiple time points.
 - b. Panel data follow the same cross section units for multiple time points, while pooled cross-sectional data involve a multiple entity but not the same cross section units observed at multiple time point.
 - c. Panel data and pooled cross-sectional data are two terms for the same type of data and can be used interchangeably.
 - d. Panel data and pooled cross-sectional data both involve a single entity observed at a single time point.

4. In regression analysis, what is the primary function of the error term (ϵ) in the model?
 - a. To represent the variability in the independent variable.
 - b. To capture the systematic variation in the dependent variable.
 - c. To account for unexplained or random variability in the dependent variable.
 - d. To serve as a proxy for the dependent variable in case of missing data.
5. According to the Gauss-Markov Theorem, under which conditions are OLS estimators BLUE (Best Linear Unbiased Estimators)?
 - a. OLS estimators are BLUE if the errors are heteroscedastic and not normally distributed.
 - b. OLS estimators are BLUE if the errors are normally distributed and the regression model includes an intercept.
 - c. OLS estimators are BLUE if the errors are normally distributed, the regression model is correctly specified, and the errors have zero mean and constant variance.
 - d. OLS estimators are always BLUE regardless of the underlying data distribution.
6. In a simple linear regression analysis, if the 95% confidence interval for the slope coefficient does not include zero, what does this imply about the significance of the coefficient?
 - a. The coefficient is not significant.
 - b. The coefficient is significant at the 0.05 level.
 - c. The coefficient is significant at the 0.10 level.
 - d. The coefficient is significant at the 0.01 level.
7. Which of the following statements is true regarding the choice of significance level (α) in hypothesis testing for SLRM?
 - a. A smaller α level (e.g., 0.01) makes it easier to reject the null hypothesis.
 - b. A larger α level (e.g., 0.10) reduces the likelihood of Type II errors.
 - c. The choice of α is arbitrary and does not affect the results of hypothesis tests.
 - d. α should be set equal to the p-value obtained from the test.
8. In multiple linear regression, what is the purpose of the F-test and t-test?
 - a. The F-test is used to test the overall significance of the regression model, while the t-test is used to assess the individual significance of predictor variables.
 - b. The F-test is used to assess the individual significance of predictor variables, while the t-test is used to test the overall significance of the regression model.
 - c. Both the F-test and t-test serve the same purpose of assessing the overall goodness of fit of the model.
 - d. Neither the F-test nor the t-test has any relevance in multiple linear regression.
9. For $R^2=0.60$, (k , no of regressors= 2 and sample size 10) , then the adjusted R^2 is
 - a. 0.56 b. 0.55 c. 0.54 d. 0.53

10. You are analyzing a dataset where the relationship between the variables appears to be curvilinear. Which transformation is most likely to linearize the relationship?
a. Logarithmic b. Square root c. Exponential d. Inverse
11. Suppose you have a qualitative variable named "gender" with three categories: male, female and transgender. How many dummy variables can you introduce to represent this variable in a regression analysis?
a. 2 dummies b. 3 dummies c. 2 dummies with intercept d. both b and c
12. The Durbin-Watson statistic is used to detect autocorrelation in regression residuals. If the calculated Durbin-Watson statistic is 1.2, what does this indicate about the presence of autocorrelation?
a. No autocorrelation b. Positive autocorrelation
c. Negative autocorrelation d. Strong autocorrelation
13. When assessing the inclusion of an irrelevant variable in a regression model, which test can be used?
a. Durbin-Watson test b. Lagrange Multiplier Test
c. Spearman Rank correlation test d. Gold-Quandt test
14. In a linear regression analysis for predicting housing prices based on size of the house, the number of bedrooms, and the distance to the nearest school, ignoring heteroscedasticity (varying error variances) in the model would lead to which of the following consequences for the Ordinary Least Squares (OLS) estimator?
a. The OLS estimator will be biased.
b. The OLS estimator will be inconsistent.
c. The OLS estimator will be inefficient.
d. All of the above: (a), (b), and (c) will be true.
15. Suppose you are conducting a multiple linear regression analysis to predict a person's income based on their education, years of experience, and age. You encountered the following issues and which of the following options represents a specification error?
I. You mistakenly omit the variable "years of experience" from your model.
II. You choose a quadratic functional form for your regression model
III. Some errors of measurement occurred in collecting or recording data
a. Only I b. I and II c. I and III d. I, II and III

Part B

Answer Any Five Question

All the questions carry a weightage of 1/5

16. What is the difference between deterministic and stochastic model?
17. How SRF is different from PRF?
18. What is Least square criterion?
19. Define Standard error.
20. Define Adjusted Coefficient of determination

21. What is Dummy variable trap?
22. Define Piece-wise regression.
23. What is Specification error?

Part C

Answer Any Seven Question

All the questions carry a weightage of 2

24. What is the significance of studying econometrics, given the existence of well-established fields like mathematical economics and statistics?
25. Outline the underlying assumptions associated with Ordinary Least Squares concerning the random error term?
26. Elucidate the interconnections between t-statistics, F-statistics, R-squared, and adjusted R-squared within the context of a simple linear regression model?
27. How do you go about estimating the slope coefficient in a regression model that passes through the origin? Why is R-squared not suitable for evaluating the model's goodness of fit in this case?
28. For the Cobb-Douglas production function $Q_i = AL^{\beta_1}K^{\beta_2}$, can you convert this model into a linear parameter form? Also, could you please provide an interpretation of the estimated results below? [ln () SE are given and in [] t value are given]

$$\ln Q = 48.79 + 0.468 \ln L + 0.521 \ln K$$

$$(4.97) \quad (0.098926) \quad (0.096887)$$

$$[9.811514] \quad [4.73417] \quad [5.380274]$$

$$R \text{ Square: } 0.964, \text{ Adjusted R-squared: } 0.962683$$

$$\text{Durbin-Watson (DW) Statistic: } 0.1976, \text{ F-Value: } 645.9311$$

29. The estimated results of dummy variable regression model is as follows

$$w = \beta_0 + \beta_1 D1 + \beta_2 D2 + \beta_3 E + u$$

$$W = 1348.42 + 376.646D1 + 12.45D2 + 21.42E$$

Where D1=Male and 0 otherwise and D2=1 if belongs to upper class and 0 otherwise,
w=wage rate in rupee, E= number of years of Experience

Interpret the result?

30. Explain Multicollinearity and its sources.
31. Write a note on specification errors and its consequences.
32. Explain the concept of heteroscedasticity.
33. Explain multiple regression analysis and its interpretation. Provide a real-world application example with its model.

Part D

Answer any two

Each question carries a weightage of 4

34. Explain the methodology of Econometrics using any suitable example.
35. Provide an explanation of the Gauss-Markov theorem and demonstrate how it establishes that the estimator is linear, unbiased, and has minimal variance.
36. A sample of 10 observations corresponding to a simple linear model $Y = \alpha + \beta X + u$ provided the following results

$$\sum X = 1800, \sum (X - \bar{X})^2 = 34000$$

$$\sum Y = 1250, \sum (Y - \bar{Y})^2 = 12894$$

$$\sum (X - \bar{X})(Y - \bar{Y}) = 19920$$

Given this information

- Estimate α and β and interpret the results
 - Find out the goodness of fit of the model?
 - Find out SE of the regression model
 - Find out the SE of estimates α and β
 - Find out t value of the slope coefficient and F value
37. Explain the concept of autocorrelation, including the factors that cause it, the potential consequences, different techniques to identify it, and the actions that can be taken to address it.

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Third Semester MA Economics Degree Examination, November 2024

MEC3E01 – Research Methodology and computer Applications

(2022 Admission onwards)

Time: 3 hours

Max. Weightage : 30

Part A. Objective type questions**All questions to be answered. Each question carries 1/5 weightage**

1. The research is always -
(A) Verifying the old knowledge (B) Exploring new knowledge
(C) Filling the gap between knowledge (D) All of these
2. Manipulation is always a part of
(A) Historical research (B) Fundamental research
(C) Descriptive research (D) Experimental research
3. What is the purpose of a pilot study?
A) To test the feasibility of the research design
B) To test the reliability and validity of the measures
C) To determine the appropriate sample size
D) To collect preliminary data
4. What is a research hypothesis?
A) A tentative explanation for a phenomenon
B) A statement that is proven to be true
C) A prediction of what the researcher expects to find
D) A statement of fact
5. What is snowball sampling in research?
(A) A method of selecting random participants from a population
(B) A technique for obtaining a diverse sample from a targeted group
(C) A method for systematically collecting data on a specific topic
(D) A non-probabilistic sampling method based on referrals or nominations

6. What is the purpose of a control group in an experimental design?
 - A) To provide a baseline against which to compare the experimental group
 - B) To ensure that the results are consistent across different populations
 - C) To eliminate the effects of extraneous variables
 - D) To manipulate the independent variable
7. Which correlation coefficient best explains the relationship between creativity and intelligence?
 - (A) 1.00 (B) 0.6 (C) 0.5 (D) 0.3
8. Which of the following is NOT a valid STATA data file format?
 - (A) .dta (B) .xls (C) .csv (D) .dat
9. Which Stata command is used to display the list of variables and their properties in the dataset?
 - (A) list (B) describe (C) summarize (D) variables
10. Which formula is used to sum a range of values in Excel?
 - (A) =SUM() (B) =COUNT() (C) =AVERAGE() (D) =MAX()
11. In Excel, which file format is used for saving a workbook that preserves all formatting and functionality, including macros?
 - (A) .CSV (B) .TXT (C) .XLSX (D) .PDF
12. Research problem is selected from the standpoint of:
 - (A) Researcher's interest (B) Financial support
 - (C) Social relevance (D) Availability of relevant literature
13. The authenticity of a research finding is its:
 - (A) Originality (B) Validity (C) Objectivity (D) All of the above
14. Which APA style edition is the most recent?
 - (A) 6th edition (B) 7th edition (C) 8th edition (D) 9th edition
15. Bibliography given in a research report:
 - (A) shows a vast knowledge of the researcher
 - (B) helps those interested in further research
 - (C) has no relevance to research
 - (D) all the above

(15x1/5= 3 weightage)

Part B. Short Answer Questions
Answer Only 5 out of 8. Each question carries one weightage

16. What is research?
17. What do you mean by operational definition in research?
18. Differentiate questionnaire and schedule.
19. Briefly explain APA style.
20. Define plagiarism.
21. How to drop a variable in STATA?
22. What is the difference between do file and log file in STATA?
23. What are the major ethical issues related to the research?

(5x1 = 5 weightage)

Part C. Short Essay
Answer Only 7 out of 10. Each question carries 2 weightage.

24. Differentiate research methods and methodology.
25. What are the criteria of good research?
26. Briefly explain the steps involved in the research process.
27. What are the methods of note-taking?
28. What is research design? Explain the need for a good research design.
29. Explain the steps to estimate simple, instantaneous and compound growth rates using MS Excel.
30. Point out different methods of non-probability sampling.
31. Describe correlation and regression. List out steps to estimate correlation and regression using STATA.
32. Explain major modification options available in STATA.
33. Elucidate plagiarism. Mention its types and various detecting methods.

(7x2 = 14 weightage)

Part D. Essay Questions
Answer Only 2 out of 4. Each question carries 4 weightage

34. List out and explain the steps involved in formulating a research problem.
35. Explain the structure and technical aspects of a research report.
36. Describe various methods of probability sampling and evaluate their merits and demerits.
37. What are the methods of collecting primary data? Discuss its major advantages and disadvantages.

(2x4 = 8 weightage)