Addis Ababa University
College of Business And Economics
Department of Economics
Model Exit Exam: Economics

Instructions!

1. This model exam is prepared by the department of economics to **assist you** in preparing for the exit exam.

2. The Model Exam contains **100 multiple choice** questions from courses that you have taken during your undergraduate stay.

3. Write your full name on the space given below and on the answer sheet.

4. The exam booklet has **20 pages** including the cover page and answer sheet.

5. Switch off your mobile phone. **Using a mobile phone for any purpose is strictly forbidden**.

6. Sharing calculators is not allowed.

7. Do not mark any answer on the question paper. Put your answers on the *answer sheet only*.

8. There is no excuse for any attempt to cheat. It entails serious penalty.

GOOD LUCK!

Personal Details:

Name: _____

 ID. No. _____

 Section: _____

Choose the best answer from the suggested options and write the letter of your choice _ONLY_ on the answer sheet.

<u>Microeconomics</u>

1) Abebe spends all his income on goods x and y. His preferences can be represented by the utility function, $u(x, y) = x^{0.3}y^{0.6}$. Suppose a unit of x costs 40 while a unit of y costs 50. If Abebe's monthly income is 3000, what is his optimal monthly bundle (x, y)?
   A) (25,40)
   B) (50,20)
   C) (75,60)
   D) (60.755)

2) In the case of inferior goods, the substitution and income effects of a price increase will
   A) both decrease the quantity of the good demanded
   B) both increase the quantity of the good demanded
   C) The substitution effect will increase the quantity of the good demanded while the income
      effect will decrease the quantity of the good demanded
   D) the substitution effect will decrease the quantity of the good consumed while the income effect will increase the quantity of the good consumed

3) Consider two risk-averse individuals A and B. Suppose consumer A is more risk averse than B. Which of the following is true about A and B?
   A) A has a utility function concave to the origin while B has a linear utility function
   B) A has a diminishing marginal utility of wealth while B has an increasing marginal utility of wealth
   C) A and B have the same utility function
   D) A gets lower expected utility than B gets for the same gamble and wealth levels

4) If a firm finds itself operating in stage I of production,
   A) It can increase its profits by decreasing input use
   B) It can increase its profit by increasing input use to the point where marginal product of labour is zero.
   C) It can increase its profits by moving to stage II
   D) It should stay in stage I because marginal product is increasing

5) Suppose the long-run marginal cost of a firm is constant at 5. If total cost is 50 when output is 10, then its AC when output equals 15 units must be
   A) 5
   B) 75
   C) 15
   D) Not possible to determine with the information provided

6) When a perfectly competitive industry is in long-run equilibrium, all firms in the industry
   A) earn zero economic profits
   B) produce a level of output where short-run marginal cost is equal to short-run average total cost
   C) produce a level of output where long-run marginal cost is equal to long-run average cost
   D) All of the above are correct

7) Monopoly is a market structure characterized by all the following features **except**
   A) The firm is a dominant seller of a good or service having no close substitutes
   B) The existence of high barriers to entry
   C) The firm enjoys economic profit even in the long run
   D) The firm is a price taker

8) Which one of the following is **TRUE** about a monopolistically competitive market?
   A) Firms in a monopolistically competitive market are price takers
   B) Product differentiation leaves firms under monopolistic competition some monopoly power
   C) Demand curve facing a monopolistic competitive firm is inelastic compare to perfect competition
   D) The cost structure of a monopolistic competitive firm is different from perfect competition and monopoly

9) One of the following is **TRUE** about duopoly models;
   A) In Bertrand duopoly model firms are making decision simultaneously about output that maximizes their profit.
   B) The isoprofit curve found near to the price axis in case of Bertrand model represent higher level of profit like the of Cournot model.
   C) In the Cournot model, industry profit is maximized if firms decided to operate on contract curve rather deciding to produce at the intersection between the reaction curves.
   D) In the kinked demand model the high cost firm act passively.

10) Two firms operate in joint profit maximizing cartel and the demand they face estimated as $P = 60 - 2Q$, where $Q = Q_1 + Q_2$. Firm 1's total cost function is $C_1 = Q_1^2$ and Firm 2's total cost function is $C_2 = 4Q_2$. How much output will each frim produce to maximize industry profit.
   A) Q1 = 2 and Q2 =12
   B) Q1= 60 and Q2 = 56
   C) Q1 = 4 and Q2 = 4
   D) Q1 = 6 and Q2 = 4

11) In game theory, a strategy that is best regardless of what rival players do is called
   A) first-mover advantage
   B) a Nash equilibrium strategy
   C) tit-for-tat

     D) a dominant strategy

12) The demand for factors of production is called a derived demand because it is:
- A) derived from the marginal cost of employing those factors
- B) derived from the available supply of factors
- C) not easy to determine and must be derived by a technical (and often complicated) process.
- D) derived from the demand for the outputs that are produced by the factors of production

13) As a general rule, a profit-maximizing firm employs each factor of production up to the point at which the value of the marginal product of the _____ unit of the factor employed is _____ that factor's price.
- A) first; greater than
- B) last; equal to
- C) first; equal to
- D) last; less than
- E) next; greater than

14) In general equilibrium theory, the economy has reached Pareto Optimality when
- A. society's initial endowment is distributed equally among all individuals
- B. no one can be made better off without making someone else worse off
- C. society's initial endowment is distributed fairly among all individuals
- D. every firm is enjoying a profit

15) Asymmetric information problems are particularly severe in the market for insurance. This is true because:
- A) insurance companies will always know more about the likelihood of an event happening than will buyers of insurance
- B) buyers of insurance will always know more about the likelihood of an event happening than will insurance companies
- C) insurance companies and buyers of insurance cannot distinguish between good and bad information
- D) insurance companies are non-depository financial institutions.

Macroeconomics

16) Which one of the following is not true?
- A) According to the Classical school of thought, prices are unnecessarily flexible and possibly harm certain segments of the society
- B) Keynesians argue that markets are not always self-regulating, output fluctuations are partly caused by private sector behaviour (animal sprit).

C) Classical school argues that disequilibrium in the various markets that are likely to cause unemployment is a short run phenomenon that can be addressed through the interaction of market forces.

D) In a Classical school of thought, the economy is operating at full employment; any change in fiscal or monetary policy instruments will have nominal value changes only.

17) Which of the following is not true?

A) Comparison of countries in GDP per capita income terms is a good measure because it takes into account income distribution

B) If nominal GDP grows with 10 percent and inflation increases by 5 percent, then Real GDP grows at a rate of 5 percent

C) If nominal GDP grows at a rate of 10 percent, inflation grows at 3 percent and population grows at 3 percent, real per capita income grows at a rate of 4 percent

D) Among the various shortcomings of GDP as a measure of welfare is its inability to take into account political freedom, the degree of access to education for all

18) Which one of the following is not true?

A) Investment should be related to interest rate even if the investor uses his/her own money.

B) If Ministry of Finance increases taxes, equilibrium income will be negatively affected but National Bank can protect it from the decline by using expansionary monetary policy.

C) The amount of money kept for speculative demand is related to interest rate, and not to the level of income of households

D) In a linear consumption function with autonomous consumption, average propensity to consume tends to decline and marginal propensity to consume remains constant if income increases.

19) Which one of the following is not true about the monetary and fiscal policy measures?

A) In the vertical segment of the LM curve, the economy is in its full employment level; thus expansionary fiscal policy will lead to private investment crowd-out.

B) In the state of liquidity trap, an increase in money supply will boost the economy

C) In the upward sloping segment of the LM curve, expansionary fiscal policy causes a decline in private investment but still output increases.

D) The effect of expansionary monetary policy on the economy depends on the responsiveness of speculative demand to interest rate.

20) Consider an open economy given by the following expressions:

$C = 10 + 0.8 (Y - T), I = 10, G = 10, T = 10, IM = 0.3Y$ and $X = 0.3Y*$

Assume the real exchange rate is fixed and equal to 1. What is the government purchase multiplier in this economy, given Y*?

A) 1

B) 2

C) 3

D) 4

21) Using the information in question number 4, what is the equilibrium outputs in both the domestic and foreign economy assuming the economies are identical?

    A) 44

    B) 44.6

    C) 110

    D) 100

22) Which of the following statements is true regarding the long-run aggregate supply curve?

    A) It is vertical because an equal change in all prices and wages leaves output unaffected

    B) It is positively sloped because price expectations and wages tend to be fixed in the long run

    C) It is horizontal because price expectations and wages tend to be fixed in the long run.

    D) It shifts left when the natural rate of unemployment falls.

23) In Irving Fisher two-period model of consumer behavior, suppose

    $Y1$ = Consumer's present time period's labor income.

    $Y2$ = Consumer's future time period's labor income which is known to the consumer.

    $C1$= Consumption in the present time period.

    $C2$ = Consumption in the future time period.

    r = Interest rate

    then, the Intertemporal Budget Constraint can be stated as:

    A) $C2 = Y2 + Y1(1+r)$

    B) $C1 = Y1 + Y2/(1-r)$

    C) $C1 + C2/(1+r) = Y1 + Y2/(1+r)$

    D) $C1 + C2/(1-r) = Y1 + Y2/(1-r)$

24) In neoclassical investment model, which on is **not correct**

    A) An increase in MPK increases investment

    B) A decrease in MPK shifts the investment curve to the left

    C) An increase in real interest rate decreases investment

    D) An increase in depreciation increases investment

25) In Tobin q:

    A) If q >1, replacement cost of capital is greater than market value

    B) If q >1, firms invest more on new capital

    C) If q < 1, firms replace capital as it wears out

    D) If q < 1, the value of the firm in the stock market is greater than its replacement capital

26) In Ethiopia, the money supply is determined:

    A)   only by the National Bank of Ethiopia.

    B) only by the behavior of individuals who hold money and of banks in which money is held.

    C) jointly by the National Bank of Ethiopia and by the behavior of individuals who hold money and of banks in which money is held.

D) according to a constant-growth-rate rule.

27) "Full employment" occurs when:
   A) the unemployment rate is zero percent
   B) the structural unemployment rate is zero percent
   C) the frictional unemployment rate is zero percent
   D) the cyclical unemployment rate is zero percent

28) Macroeconomic policy making takes time to recognize the problem, implement remedial polices and see the effect on the economy. This argument is made in favor of:
   A) Active policy making
   B) Passive policy making
   C) Policy conducted by rule
   D) Policy conducted by discretion

29) In the Solow growth model, if investment exceeds depreciation, the capital stock will _____ and output will _____ until the steady state is attained.
   A)   increase; increase
   B)   increase; decrease
   C)   decrease; decrease
   D)   decrease; increase

30) Which one of the following is **not** the macroeconomic features of least developed countries:
   A)   Openness to trade in commodities and assets
   B)   Adoption of managed exchange rates
   C)   Financial repression
   D)   None

Development Economics

31) Which one of the following best describes the relationship between supply of educational quality, educational quantity, and employment in developing countries
   A) Demand for education and employment is economically motivated while supplies of education is politically responsive
   B) Market supply of education is led by market demand for education
   C) economically motivated supply of education faces politically responsive demand for education
   D) Market demand for education is led by market supply of education

32) An effective government role in health systems is crucial mainly for the following reason
   A) Although markets internalize externalities, households invest little in infrastructure
   B) Households neglect externalities and the markets invest little in health infrastructure
   C) Government has more than sufficient funds to invest in health as compared to the markets

D) Government supply of health services is of lesser cost than market supply of health services

33) In several developing countries, observations of massive additions to the urban labor force are accompanied by failure of this labor force to show up in the formal unemployment statistics in the modern-sector. This is most likely indicative of

A) the expansion of the urban formal sector absorbing the rural migrants

B) the existence of an urban informal sector

C) the conversion of rural migrants to international migration

D) Government failure to register employed and unemployed rural migrants.

34) The Harris-Todaro model explains migration with _____

A) unemployment equilibrium between urban expected wages and average rural income

B) full employment equilibrium between equalized rural urban wage in free market situation

C) full employment equilibrium between urban expected wages and average rural income

D) Unemployment disequilibrium between urban rural wages reversing the direction of migration

35) Trade protectionism of developed countries heavily disadvantages developing countries because the protection is largely on _____

A) high level services

B) new technology

C) agricultural products

D) manufacturing products

36) As compared to that of developed nations (typically western Europe), the demographic transition of developing countries is characterized by:

A) faster decline in mortality rates in stage II

B) relatively lower magnitude of birth rates and death rates in stage I

C) lower replacement level of fertility

D) identical demographic characteristics across all developing countries in stage III

37) The major advantage of the Foster Greer Thorbecke index over the head count ratio and the poverty gap index is that:

A) It shows the severity of poverty among the poor

B) It shows the average number of deprivations each poor faces at the same time.

C) It is insensitive to the variation in well-being among the poor.

D) All of the above

38) Modern development economics arose _____

A) first in the 19th century to study the development problems of Eastern Europe

B) in the late 18th century as a new branch of economics

C) in the late 1940s to study the development problems of the Third World

D) None of the above

39) Which one of the following signifies a common feature of less developed countries

A) Size

B) Low level of living

C) Natural resource endowment

D) Structure of the economy

40) Which one of the following is a dual economy model?

A) The Solow growth model

B) The Lewis model

C) The Rostow model

D) The New Growth Theory

41) Which of the following names are associated with the so called new growth theory?

A) K. Arrow and R. Solow

B) North and E. Ostrom

C) R. Lucas and P. Romer

D) M. Todaro and J. Harris

42) According to the traditional approach to economic development, which one of the following is an important factor of long-term growth?

A) Population growth and labour force

B) Capital Accumulation

C) Technological Progress

D) All of the above

43) The most widely quoted example of vicious circle of poverty with respect to capital accumulation is: _____.

A) "underdeveloped countries will never develop"

B) "the source of underdevelopment is lack of human capital"

C) "Poor countries are poor because they are poor"

D) "Natural resource capital is necessary but not a sufficient condition"

44) No one/country is said to be developed if it is used as a tool by others for their own needs. This is the notion of:

A) Self-sustenance

B) Freedom from ignorance

C) Self-esteem

D) Capability to function

45) Which one of the following best describes the relationship between supply of educational quality, educational quantity, and employment in developing countries

A) Demand for education and employment is economically motivated while supplies of education is politically responsive

B) Market supply of education is led by market demand for education

C) economically motivated supply of education faces politically responsive demand for education

D) Market demand for education is led by market supply of education

International Economics

46) Among the following statement, which one is not true about international economic analysis?
   A) Descriptive international economics deals with institutional environment in which international transactions take place between countries.
   B) Explanation of international economic transactions as they take place in the institutional environment belongs theoretical international economics analysis.
   C) Monetary theory of international economics deals with the study of effects of trade on prices of goods and services and rate of economic growth
   D) The pure theory of international economics deals with trade patterns, impact of trade on production, rate of consumption, and income distribution.

47) Which one of the following is not true about physiocracy economic thought?
   A) Physiocracy was just a furthering and refinement of the mercantilist doctrine or a modification of it.
   B) Physiocracy was basically a reaction against mercantilism and was offering an alternative political and social system.
   C) Physiocracy was claiming to be a natural system, based upon a belief that there existed natural laws
   D) The physiocrats are credited for their famous decline of 'laissez-faire, laissez-passer'

48) The importance of international economics in the world economy can be demonstrated in several ways. Which one is not true about this?
   A) International trade enables all of us to consume goods and services from a variety of countries
   B) Trade enables resource-poor countries to access raw materials that are necessary for the development of their industries.
   C) Trading nations always share world trade gain equally
   D) Total global output of the goods and services can increase, and leading to increased welfare, and employment opportunities

49) Which one of the following is not true about scope and meaning of international economics?
   A) International economics studies about the economic interdependence between countries and its effects on economy.
   B) International economics describes production, trade, and investment between countries.
   C) International economics deals with the impact of various government restrictions on production, trade, consumption, and distribution of income
   D) International economics does not assess the implications of domestic trade and investment.

50) One among the following statement is wrong about the law of comparative advantage and gain from trade
   A) According to the law of comparative advantage, even if one nation is less efficient than the other nation in the production of both commodities, there is still a basis for mutually beneficial trade.

B) The first nation should specialize in the production and export of the commodity in which its absolute advantage is greater, and the other nation should import the commodity in which its absolute advantage is smaller.

C) Consumption gains to the two trading countries depend upon the terms of trade (TOT)

D) If terms of trade (TOT) of country A is equal to internal opportunity cost ratio of country A, all the gains in consumption can be taken by country B.

51) Which one of the following is not true about Adam Smith's Theory of Absolute Advantage?

A) Adam Smith started with the simple truth that for two nations to trade with each other voluntarily, both nations must gain.

B) According to Adam Smith, trade between two nations is based on absolute advantage.

C) According to Adam Smith, both trading nations can gain by each specializing in the production of the commodity of its absolute advantage and exchanging part of its output with the other nation for the commodity of its absolute disadvantage.

D) Adam Smith's theory of Absolute Advantage assumes increase returns to scale in the production of both goods in the two countries.

52) One of the following statements is not true about mercantilist.

A) According to the mercantilists, the central question was how a nation could regulate its domestic and international affairs to promote its own interests.

B) To promote a favorable trade balance, the mercantilists advocated the principle of laissez-faire, laissez-passer'.

C) Tariffs, quotas, and other commercial policies were proposed by the mercantilists to minimize imports in order to protect a nation's trade position

D) Although the foundations of mercantilism have been disproved, mercantilism is alive today.

53) The Heckscher-Ohlin trade theory argues that

A) International differences in labor, labor skills, physical capital or land (factors of production) create productive differences that explain why trade occurs.

B) The Ricardian model show how trade affect the income distribution

C) Trade arise by the interaction between differences in factor endowments across countries and differences in factor intensities across industries

D) While trade is partly explained by differences in labor productivity, it also can be explained by differences in resources across countries.

54) Which one of the following statements is **TRUE** about a foreign exchange market?

A) A foreign exchange market is a part of the financial market for the buying and selling of long – term debt

B) A foreign exchange market is a part of the financial market for the buying and selling of short – term debt

C) A foreign exchange market is the market for the buying and selling of foreign currencies

 D) A foreign exchange market is the market for the buying and selling of foreign goods and services

55) In the context of a foreign exchange market, what does "**Over – the – Counter**" transaction mean?

 A) A decentralized market in which securities are traded between two counterparties without the supervision of an exchange regulator

 B) A decentralized market in which securities are traded between two counterparties with the supervision of an exchange regulator

 C) The buying of securities at a spot rate and the selling at forward rate

 D) The buying of securities at forward rate and the selling at a sport rate

56) In international economics, which one of the following is **TRUE** about an optimal currency area?

 A) It is a geographical area in which members of the region would maximize economic benefits by keeping the exchange rate fixed within the area

 B) It is a geographical area in which members of the region reduce trade barriers among themselves, but each maintains its commercial policies with the non- members

 C) It is a geographical area in which members of the region abolish trade barriers among themselves, but each maintains its commercial policies with the non - members

 D) It is geographical area in which members of the region abolish trade barriers among themselves and also impose a common external tariff on the non - members

57) In the context of a foreign exchange market, which one of the following is **TRUE** about the role of an arbitrager?

 A) An arbitrager buys a foreign currency where it is cheaper and sells it where it is expensive in order to make a profit

 B) An arbitrager buys a foreign commodity where it is cheaper and sells it where it is expensive in order to make a profit

 C) An arbitrager accepts a foreign exchange risk in the hope of making a profit

 D) An arbitrager avoids a foreign exchange risk through the diversification of assets

58) Let the spot rate between the United States Dollar ($) and the United Kingdom Pound Sterling (£) be $2 = £ 1, and let the forward rate be $ 2.05 = £ 1. What will be **the rate of premium on the Pound Sterling?**

 A) 0.05 percent

 B) 1.50 percent

 C) 2.00 percent

 D) 2. 50 percent

59) Other things being constant, what **does real effective exchange rate measure**?

 A) The real effective exchange rate measures the weighted average of a country's currency in relation to a basket of other major currencies

 B) The real effective exchange rate measures the weighted average of a country's export and import prices in relation to a basket of other countries' export and import prices

C) The real effective exchange rate measures the responsiveness of export prices to changes in exchange rates

D) The real effective exchange rate measures the responsiveness of import prices to changes in exchange rates

60) Assume that the United States of America (USA) and the United Kingdom (UK) are trading partners. Let the USA be the **domestic partner**, while the UK is the **foreign partner**. Other things being equal, what does an **increase in the real exchange rate** imply?

A) The USA has become more competitive than the UK

B) The USA has become less competitive than the UK

C) USA goods and services have become more attractive to UK consumers and businesses

D) UK goods and services have become less attractive to USA consumers and businesses

Monetary Economics

61) Which of the following is TRUE?

A) Barter is the most efficient system of exchange

B) Barter system is still practiced in some parts of the world

C) Barter system never contributed to the evolution of money

D) Barter transaction is difficult to arrange even in the modern world

62) Financial institutions are

A) dealers in securities, they buy secondary securities and sell primary securities

B) dealers in securities, they buy primary securities and sell secondary securities

C) dealers in financial assets, they by financial assets and sell physical assets

D) dealers in physical assets, they by financial assets and sell physical assets

63) Liquidity trap along the liquidity preference curve refers to the region where

A) monetary policy becomes effective

B) monetary policy fails

C) money demand becomes interest sensitive

D) money demand becomes price sensitive

E) money demand becomes reserve sensitive

64) Speculative demand for money arises due to_____.

A) uncertainties about the future rate of interest

B) opinion similarities between individuals about the future rate of interest

C) opinion differences between individuals about the future rate of interest

D) the existence of bond market

E) A and D

65) Which of the following is TRUE?

A) Higher currency ratio, c, and reserve ratio, r, lead to higher money supply for a given level of monetary base.

     B) Lower currency ratio, c, and reserve ratio, r, lead to lower money supply for a given level of monetary base

     C) higher currency ratio, c, and reserve ratio, r, lead to lower money supply for a given level of monetary base

     D) higher currency ratio, c, and reserve ratio, r, does not lead to change in supply for a given level of monetary base

66) General instability in the economy may induce people to make a shift from_____.

     A) Currency to deposits

     B) Deposits to currency

     C) Money to bond

     D) Land to deposits

     E) A and D

67) Printing money by the government to finance budget deficit is equivalent to

    A) Expenditure on the part of the government

     B) Tax on the part of the government

     C) Tax on the part of the individuals

     D) A revenue on the part of the individuals

68) Which of the following the principal objective of the monetary policy of the National Bank of Ethiopia?

     A) Maintain price & exchange rate stability and support sustainable economic growth of Ethiopia.

     B) Expand education in Ethiopia

     C) Improve productivity of firms

     D) Expand supply of electricity in Ethiopia

Econometrics

69) The data collected from different parties or entities at a given point in time is

    A) Panel data

    B) Cross-sectional data

    C) Time series data

    D) Longitudinal data

70) We need normality of disturbances in linear regression model for

    A) Estimating the parameters of the model

    B) Checking the unbiasedness property

    C) Conducting hypothesis testing and making inferences

    D) Calculating coefficient of determination

71) Linearity in classical linear regression model requires all but(61)

    A) Linearity in variables.

    B) Linearity in parameters.

C) Linearity in parameter and non-linearity in variables.

D) Non-linearity in parameters.

72) The ordinary least squares estimator will be biased when there is violation of (40)

A) Independence of error terms across cross sectional units

B) Constant variance of error terms

C) No perfect and linear correlation between explanatory variables

D) Independence of error terms and one of the explanatory variables.

The following results have been obtained from a sample of 20 households on the household saving (Y), household income (X_1) and bank saving interest rate (X_2) where variables are measured in deviations from their means.

$\sum y^2 = 70$	$\sum x_1 y = 60$
$\sum x_1^2 = 100$	$\sum x_2 y = 50$
$\sum x_2^2 = 80$	$\sum x_1 x_2 = 60$

Then answer questions 5 through 6 based above information

73) The slope coefficients (estimates of β_1 and β_2) for the above regression function, respectively are

A) 0.409 and 4.136

B) 0.409 and 0.318

C) 0.318 and 4.136

D) 0.318 and 4.136

74) The Coefficient of the determination for the above model is

A) 47.48

B) 87.78

C) 57.78

D) 65.79

75) Variance inflation factor is the most commonly used test for testing the problem of (57)

A) Autocorrelation

B) Heteroscedasticity

C) Multicollinearity

D) Endogeneity

76) The following is potential remedial measure of heteroscedasticity in classical linear regression models except (59)

A) Transformation of variables into natural logarithm

B) Running Cochrane-Orcutt regression

C) Transforming the Ordinary Least Square into Generalized Least Square model

D) Running robust regression

77) Dummy variables are used to include _____ into a regression model. (70)

A) Count data variables

B) Categorical variables

C) Continuous variables

D) Time series variables

78) If a **Durbin Watson** statistic takes a value close to zero, what will be the value of the first order autocorrelation coefficient? (71)

A) Close to minus one

B) Close to zero

C) Less than zero

D) Close to plus one

79) One of the following statements is NOT true about the Probit model?

A) Significance of single coefficient can be tested using t-test

B) It is possible to estimate the Probit model using maximum likelihood technique

C) It is possible to estimate the Probit model using OLS

D) Coefficient of determination has no usual interpretation

80) In a system of simultaneous equations model if OLS is applied to a particular equation in the system, the resulting estimators will be:

A) Unbiased but inefficient

B) Biased and inconsistent

C) Biased but consistent

D) Unbiased and consistent

81) For a stationary autoregressive process, the effects of shocks will (77)

A) Persist indefinitely

B) Eventually die out

C) Neither persist nor die out

D) Exponentially grow

82) A spurious regression refers to a situation where: (86)

A) The relationship between dependent and independent variable is exact

B) Even if two variables with unit root are independent, regressing one variable over the other results in statistically significant relationship.

C) Both the dependent and independent variables are stationary at level

D) Only dependent or independent variable has unit root

83) If two variables, x_t and y_t are cointegrated, which of the following statements is true? (83)

A) Either x_t or y_t must be stationary at level

B) Only one linear combination of x_t and y_t will be stationary at first difference

C) The residuals from a regression of y_t on x_t must be stationary at level

D) Only x_t will be stationary at level

84) Which test a researcher should conduct to choose between a fixed effects and a random effects model? (96)

A) Chi-square

B) Hausman's test

C) LM-test

D) F-test

Development Planning and Project Analysis II

85) _____refers to costs incurred in covering expenditures before it gets its first revenue.
  A) Working capital costs
  B) Operating costs
  C) Fixed capital costs
  D) All except A
  E) None

86) In which phase of the project life cycle brief market survey and some rough projections and forecasting are undertaken
  A) Feasibility
  B) Ex-post evaluation
  C) Pre-investment
  D) Pre-feasibility
  E) None

87) All of the following are limitations of NPV appraisal criteria of a project except,
  A) For some projects the required data for computing NPV may not be available
  B) A project must have at least one negative cash flow period to use NPV criteria
  C) It does not show the exact profitability of the project
  D) It is not suitable method for a large and complex investment budget

88) Financial analysis is different from economic analysis in that
  A) Economic analysis considers intangible benefits and costs explicitly
  B) Economic analysis focuses on financial profitability of the project
  C) Financial analysis measures a project's contribution to the community's welfare.
  D) Economic analysis uses market prices to value cost and benefit of the project

89) Which one of the following statements is/are correct about the UNIDO and Little and Mirrlees (LM) approaches measure of project costs and benefits?
  A) Both approaches employ the same numeraires in terms of which net benefits are expressed
  B) In UNIDO approach goods are valued at their boarder price equivalent
  C) In LM approach goods are valued at their domestic price equivalent
  D) In UNIDO approach domestic price equivalent of traded goods is valued at Shadow Exchange Rate

90) All of the following is/ are advantages of Internal Rate of Returns (IRR) project appraisal criteria except,
  A) It is the only measure of project worth that takes account of the opportunity cost of capital
  B) The IRR is appropriate to use for mutually exclusive projects
  C) The measure is easily understood by non-economists

    D) It does not depend on predetermined discount rate

91) Project benefit includes all of the following except
    A) Receipt from sales of goods and services
    B) Market value of equivalent home consumed output
    C) Sales of by product
    D) Sales of assets that finish their economic life
    E) None

92) The greater is the distribution of the input and output prices and quantities around their expected values,
    A) the more reliable estimate of the cost and benefit data
    B) the less risky the project is
    C) the higher the variation of NPV around its mean value
    D) the more the confident of the decision maker to appraise the project
    E) All of the above
    F) None of the above

Mathematical Economics

93) If $y = x^x$, then its derivative $y' =$?
    A) $x^x lnx$
    B) $x^x(1 + lnx)$
    C) $\dfrac{x^x}{lnx}$
    D) $\dfrac{x^x}{1+lnx}$

94) Suppose the equation of an isoquant is $Q(K, L) = K^{0.5}L^{0.5} = C$. The marginal rate of technical substitution of labour for capital ($MRTS_{L,K}$) when $L = 3$ and $K = 4$ is
    A) 0.75
    B) 1.3
    C) 12
    D) 1

95) Suppose a consumer who consumes two goods x and y has the utility function $U(x, y) = xy$. The consumer has a budget of \$400. The price of good x is $P_x = \$10$ and the price of good y is $P_y = \$20$. His optimal consumption bundle when the price of x falls to \$5, other factors remaining constant is:
    A) (40,10)
    B) (400, 10)
    C) (20,10)
    D) (10, 20)

96) Suppose that a firm's production function $Q = f(K, L) = 50K^{0.5}L^{0.5}$. Suppose, also that the price of labour w $= 5$ and the price of capital r=20. The cost minimizing input bundle if the firm wants to produce 1000 units per year is:

    A) (10,40)
    B) (20,40)
    C) (40,10)
    D) (5,4)

97) Given the following national income model,

$Y = C + I_0 + G_0$ where $C = 100 + 0.75(Y - T)$; $T = 240 + 0.2Y$; $I_0 = 90$; $G_0 = 330$

What happens to equilibrium national income when government expenditure increases by 50 units?

    A) It increases by 2.5
    B) It increases by 125
    C) It decreases by 125
    D) It does not change

98) For the differential equation given in question 10 if $y = 100$ at time $t = 0$, the solution to the complete differential equation, i.e., the solution to the homogenous form plus the particular solution is

    A) $y(t) = Ce^{5t} + 2$ where C is arbitrary constant of integration
    B) $y(t) = Ce^{-5t} + 2$ where C is arbitrary constant of integration
    C) $y(t) = 98e^{5t} + 2$
    D) $y(t) = 98e^{-5t} + 2$

99) The solution of the difference equation $y_{t+1} - 2y_t = 0$ is:

    A) $y_t = 2^t \, y_0$
    B) $y_t = 2t + y_0$
    C) $y_t = 2^t$
    D) $y_t = 2t$

A dynamic optimization problem is given by:

$$Max \quad \int_0^1 (x - y^2)\, dt$$
$$\text{Subject to} \quad \dot{x} = y$$
$$x(0) = 2$$

100) The solution path for the control variable y is

    A) $y(t) = \frac{1-t}{2}$
    B) $y(t) = \frac{2}{1-t}$
    C) $y(t) = 1 - t$
    D) $y(t) = \frac{t}{2} - \frac{t^2}{4} + 2$

<u>Answer Sheet</u>

Name: _____ **ID. No.** _____ **Section:**_____

No.	Answer	No.	Answer	No.	Answer	No.	
1)		26)		51)		76)	
2)		27)		52)		77)	
3)		28)		53)		78)	
4)		29)		54)		79)	
5)		30)		55)		80)	
6)		31)		56)		81)	
7)		32)		57)		82)	
8)		33)		58)		83)	
9)		34)		59)		84)	
10)		35)		60)		85)	
11)		36)		61)		86)	
12)		37)		62)		87)	
13)		38)		63)		88)	
14)		39)		64)		89)	
15)		40)		65)		90)	
16)		41)		66)		91)	
17)		42)		67)		92)	
18)		43)		68)		93)	
19)		44)		69)		94)	
20)		45)		70)		95)	
21)		46)		71)		96)	
22)		47)		72)		97)	
23)		48)		73)		98)	
24)		49)		74)		99)	
25)		50)		75)		100)	