Centre for Development Studies
Thiruvananthapuram

MA Applied Economics

ADMISSION EXAMINATION 2017

Roll Number: [ ] [ ] [ ]

Question Booklet Series: [A]

Read the instructions carefully before answering the questions

- This booklet contains 50 objective questions with multiple choices in answers. All questions are compulsory and allowed time is two hours.

- Each correct answer carries two marks and for each wrong answer one mark will be deducted. Non-attempted questions carry zero mark.

- Write your Roll Number in the space provided on the top of this booklet.

- The question booklets are in four series (A,B,C,D). The series code is displayed on the top of this page as well as on the top right corner of every page.

- Write your Roll Number and Question Booklet Series code in the Answer Sheet in the space provided.

- Answer the questions by writing the alphabet (A,B,C, or D) in capital letters, corresponding to your answer, in the Answer Sheet against the question number. If you mistakenly mark a wrong choice, you can strike it out using "multiplicative sign" (×), and then write the correct choice in the remaining space.

- Use a ballpoint pen (black or blue ink) to mark answers.

- Please do not make any stray marks on the Answer Sheet.

- Return the Answer Sheet to the invigilator at the end of the examination. Candidates can take the Question Booklet and Hall Ticket with them after the examination.

- Last page of this booklet can be used for doing rough work.
1. Consider two economies, where one of them has higher marginal propensity to consume (MPC) than the other. If the money supply is increased by the same amount in each economy, the high MPC economy will experience
   A. A larger increase in output and a smaller decrease in the interest rate.
   B. A smaller increase in output and a larger decrease in the interest rate.
   C. A larger increase in output and a smaller decrease in the interest rate.
   D. A smaller increase in output and a larger decrease in the interest rate.

2. If investment, I, in the goods market is not responsive to the interest rate, then
   A. The IS curve is a vertical line and monetary policy is very effective in raising output.
   B. The IS curve is a horizontal line and monetary policy is very effective in raising output.
   C. The IS curve is a vertical line and monetary policy does not affect output in the IS-LM model.
   D. The IS curve is a horizontal line and monetary policy does not affect output in the IS-LM model.

3. In the long run, countries with higher inflation rate will have,
   A. Appreciating currencies
   B. No change in the value of their currencies
   C. Depreciating currencies
   D. None of the above.

4. In the Solow growth model
   A. Long run growth is never possible,
   B. Long run growth is possible by factor accumulation.
   C. Technological progress can never cause growth.
   D. Long run growth is only possible through technological progress.

5. A devaluation will
   A. Never improve the balance of trade.
   B. Always worsen the balance of trade of primary exporters.
   C. Improve the balance of trade if country exports services.
   D. Improve the balance of trade if the sum of import elasticities is greater than one.

6. What will be the effect of higher supply of money in a country?
   A. Higher inflow of foreign direct investment.
   B. Increased exports of goods.
   C. Increased imports.
   D. Increased exports of services.
7. Neutrality of money means
   A. Increasing money supply will have no effect.
   B. Money is neither black or white money.
   C. Money is private money.
   D. Increasing money supply will increase prices proportionately.

8. Which of the following would cause the demand curve for automobiles to shift to the left?
   A. An increase in the price of the automobiles
   B. An increase in the interest rate on loans for buying automobiles.
   C. An increase in buyers’ incomes
   D. An increase in the cost of production of automobiles

9. Which of the following is NOT a factor of production?
   A. Land.
   B. A bank loan.
   C. Labour.
   D. Capital

10. When the market operates without interference, price increases will distribute what is available to those who are willing and able to pay the most. This process is known as:
    A. Price rationing.
    B. Price fixing.
    C. Quantity adjustment.
    D. Quantity setting

11. The cranberry market is perfectly competitive. Due to reports that eating cranberry would improve health, there is a permanent increase in the demand for cranberry and an immediate rise in its price. As time passes, the price of cranberries _______ and the initial firms’ economic ________.
    A. rises still higher; profit will not change
    B. falls; profit will not change
    C. falls; loss will be increased
    D. falls; profit will be eliminated

12. The First Fundamental Theorem of Welfare Economics requires
    A. producers and consumers to be price takers.
    B. that there be an efficient market for every commodity.
    C. that the economy operate at some point on the utility possibility curve.
    D. all of the above
13. Which of the following statements is true in the long run when there are technological progress, which reduces average cost of production.

1. Perfectly competitive firms produce at a lower average cost.
2. The market price of the good falls.
3. Firms with older plants either exit the market or adopt the new technology.

A. 1 and 2.
B. 1, 2 AND 3
C. 3 only.
D. 1 and 3.

14. For a random variable $X$, if mean is greater than median then skewness of $X$ is

A. $> 0$
B. $< 0$
C. $= 0$
D. It can be any number.

15. Let $x_1, \ldots, x_n$ be $n$ observations of a random variable and $Q_d$ is the inter-quartile range (IQR) of this sample. If $x_{max}$ is replaced by $x_{max} + 10$, then the new IQR, $Q_{n'}$ is

A. $Q_n = Q_d + 10/n$
B. $Q_n = Q_d$
C. $Q_n > Q_d$
D. $Q_n < Q_d$

16. Let there are $n$ observations $x_1, x_2, \ldots, x_n$ in a random sample from a population having mean $\mu$. If the population mean, $\mu$, is estimated by $x_1$ only, then the estimator of $\mu$ is

A. biased
B. efficient
C. Unbiased
D. BLUE
17. If $X$ and $Y$ are two independent random variables, then which of the following statements is true
   A. $\text{Var}(X + Y) < \text{Var}(X - Y)$
   B. $\text{Var}(X + Y) > \text{Var}(X - Y)$
   C. $\text{Var}(X + Y) = \text{Var}(X - Y)$
   D. None of the above.

18. Name the distribution whose mean always equals to its variance
   A. Geometric distribution
   B. Poisson Distribution
   C. Normal distribution
   D. Uniform Distribution

19. If the p-value for a hypothesis test on a mean was given 0.0330, and the level of significance used was 5%, then the conclusion would be to
   A. Not to reject the null hypothesis
   B. Reject the null hypothesis
   C. Accept the null hypothesis
   D. Can’t say anything

20. Mean absolute deviation about $a$ is minimum when
   A. $a$ is median
   B. $a$ is geometric mean
   C. $a$ is arithmetic mean
   D. $a$ is mode

21. Which of the following is the most popular mode of cashless payment in India (in terms of value)?
   A. Real Time Gross Settlement
   B. Universal Payment Interface
   C. Use of Debit and Credit Cards at Points of Sale
   D. National Electronic Funds Transfer

22. Gross Value Added is a better measure of macroeconomic performance than GDP because:
   A. Easier to estimate
   B. Available on a quarterly basis
   C. GDP can record a sharp increase just on account of increased tax collections due to better compliance/coverage
   D. Avoids double counting of output
23. India is a world leader in:
   A. Corruption
   B. Exports of computer and information services
   C. Production of tobacco
   D. Having the largest number of Internet subscribers

24. The only agricultural crop in India in which Genetically Modified (GM) Organisms are allowed:
   A. Cotton
   B. Rice
   C. Wheat
   D. Brinjal

25. The following commodity is outside the purview of Goods and Services Tax (GST)
   A. Baby food
   B. Alcohol for human consumption
   C. Gold
   D. Aviation Turbine Fuel

Questions 26 to 30 are based on the following passage. Read the passage carefully to answer the questions

**Condition of farmers in India**

A National Sample Survey Office (NSSO) report of 2015 shows there are significant caste-based differences in economic status of agricultural households in India. Unsurprisingly, lower castes are the worst-off by most yardsticks. A large majority of India’s farmers are finding it difficult to make ends meet. Around 70% of agricultural households report a deficit situation, where average monthly income was less than the sum of average monthly consumption and net investment in productive assets. Agricultural households have been defined as those who received not less than Rs.3,000 of produce from farm activities in the preceding 365 days. The survey was conducted over two rounds in July-December 2012 and January-June 2013. The two survey periods broadly capture India’s two agricultural seasons. An analysis by social groups shows scheduled caste (SC) farm households have the highest share among those running a deficit, followed by other backward classes (OBC). As expected, ownership of land is an important factor of well-being in the farm economy. Deficit households have lower land holdings. The threshold of being an economically viable agricultural household among all social groups is 1 hectare. Given the dominance of upper castes in the farm economy thanks to largest relative land ownership (share of land owned divided by share in population), they have the highest share of earnings from cultivation and non-farm incomes among all social groups. SCs have the highest share of income from wage employment, which makes them more vulnerable to
unemployment. Currently, upper castes are the only social group that enjoys a more than proportionate share in total income and consumption than their share in population. Once again, SCs are the worst-off. However, other backward castes have an equal share in income and consumption, but a much higher share in total expenditure on net investment in productive assets. Interestingly, the upper castes have the lowest share in investment expenditure relative to their share in population. These shares have been calculated by multiplying average income, consumption and investment expenditure with expected number of agricultural households in each social group.

26. From the above passage, ______ seems to be a vital determinant of inequality in India’s farm economy:
   A. Ownership of land
   B. Caste status
   C. Investment in agriculture
   D. Well-being

27. In the passage, the statement that ‘a family’s investment in agriculture yields higher income from it’ is:
   A. True
   B. Not addressed at all
   C. Marginally true
   D. False

28. In the passage, high dependence on wage employment correlates with:
   A. Hard working tendency
   B. Economic viability
   C. High proportion in agricultural income
   D. High degree of economic vulnerability

29. The passage implies that farmers in India are:
   A. Thriving and prosperous
   B. Owning too little land
   C. Are under stress, but unevenly
   D. Invest too little in agriculture

30. Share of land owned divided by share in population gives:
   A. Rate of investment in land of group
   B. Relative land ownership
   C. Rate of dependence of non-wage income
   D. Net investment in productive assets
Questions 31 to 35 are based on the following passage. Read the passage carefully to answer the questions.

**Demographic Transition in Kerala**

The rate of population growth has declined steadily in Kerala since 1971 and it is presently the lowest in the country. The density of population in Kerala is 819 persons per square kilometre in 2001, less than Bangladesh (1,114) but higher than Korea (500). Gulf migration since the early 1970s has led to near-revolutionary changes in consumption, housing, educational levels and growth. The projections of population growth indicate that by 2051, there will not be more than 37 million people in Kerala. The school-age population will decrease and the proportion of the labour force will also fall, two decades after 2001. The total fertility rate has declined steeply, reaching 1.7 in 1993. Active public politics, land reforms, acceptance of family planning, universal literacy, high levels of education among women and Gulf migration are among the factors responsible for the demographic transition in Kerala. The interaction of fertility and mortality declines has become strong in the past decades and has led to the quickening of the demographic transition. But morbidity levels are high, and mental health has also become a serious concern, particularly depression. By 2051, Kerala is likely to see major policy shifts in educational planning, employment generation, and health care, given the pace of the demographic transition here.

31. The density of population in Kerala is:
   A. On the higher side
   B. On the lower side
   C. Indifferent
   D. Average

32. The statement ‘Gulf migration caused fall in rate of population growth in Kerala’ is:
   A. proved by the passage
   B. not proved by the passage
   C. indirectly proved by the passage
   D. mostly proved by the passage.

33. The population projection for 2051 indicates that:
   A. There will be greater rate of migration.
   B. Number of women will fall
   C. Population will not be a problem
   D. The number of older people will increase
34. Of the different factors mentioned as responsible for the demographic transition, which of the following can be called a ‘redistributive measure of material wealth’?
   A. family planning
   B. Gulf migration
   C. land reforms
   D. active public politics.

35. The major policy shift in health care in Kerala of 2051 is likely to be:
   A. Towards private hospitals
   B. Towards greater health care for elderly population
   C. Towards globalization
   D. Towards immunization

Questions 36 to 40 are based on the following passage. Read the passage carefully to answer the questions

A Passage on child marriage

Much as I wish that I had not to write this chapter, I know that I shall have to swallow many such bitter draughts in the course of this narrative. And I cannot do otherwise, if I claim to be a worshipper of Truth. It is my painful duty to have to record here my marriage at the age of thirteen. As I see the youngsters of the same age about me who are under my care, and think of my own marriage, I am inclined to pity myself and to congratulate them on having escaped my lot. I can see no moral argument in support of such a preposterously early marriage. Let the reader make no mistake. I was married, not betrothed. For in Kathiawad there are two distinct rites, betrothal and marriage. Betrothal is a preliminary promise on the part of the parents of the boy and the girl to join them in marriage, and it is not inviolable. The death of the boy entails no widowhood on the girl. It is an agreement purely between the parents, and the children have no concern with it. Often they are not even informed of it. It appears that I was betrothed thrice, though without my knowledge. I was told that two girls chosen for me had died in turn, and therefore I infer that I was betrothed three times. I have a faint recollection, however, that the third betrothal took place in my seventh year. But I do not recollect having been informed about it. In the present chapter I am talking about my marriage, of which I have the clearest recollection.

It will be remembered that we were three brothers. The first was already married. The elders decided to marry my second brother, who was two or three years my senior, a cousin, possibly a year older, and me, all at the same time. In doing so there was no thought of our welfare, much less our wishes. It was purely a question of their own convenience and economy. Marriage among Hindus is no simple matter. The parents of the bride and the bridegroom often bring themselves to ruin over it. They waste their substance, they waste their time. Months are taken up over the preparations in making clothes and ornaments and in preparing budgets for dinners. Each tries to outdo the other in the number and variety of
courses to be prepared. Women, whether they have a voice or no, sing themselves hoarse, even get ill, and disturb the peace of their neighbours. These in their turn quietly put up with all the turmoil and bustle all the dirt and filth, representing the remains of the feasts, because they know that a time will come when they also will be behaving in the same manner.

36. Why do parents get their children married at an early age?
   A. Because parents lack any concern for the well being of their children
   B. Because Hindu traditions mandate child marriage
   C. Because it is easier to control children at a young age
   D. None of the above

37. What is the author’s objection to child marriage?
   A. That child marriage is harmful to girls.
   B. That child marriage harms the welfare of children
   C. That child marriage does not require the consent of children
   D. All of the above

38. Which of the following is implied in the discussion of early marriage and early betrothal?
   A. Early betrothal has less severe implications for children than early marriage
   B. Early marriage and early betrothal have similar implications for children
   C. Early betrothal is more acceptable than early marriage because it does not lead to widowhood
   D. Early betrothal creates less disturbance to society and brings less ruin to families than early marriage

39. Which of the following statements from the passage above indicates the level of human development of the society concerned?
   A. Households conduct marriages of cousins together
   B. Two of the girls chosen to marry the author had died before the marriage
   C. Children have no say in the selection of their spouses
   D. Marriage among the Hindus was not a simple matter

40. The passage suggests that parents may act against the interests of their children as when they get their children married without the latter’s knowledge and consent. But parents are the legal guardians of their children. Which of the following statements would follow from this?
   A. Parents should not be the legal guardians of their children
   B. Children should have full rights of adults
   C. There should be restrictions on guardianship rights
   D. None of the above
Questions 41 to 45 are based on the following passage. Read the passage carefully to answer the questions.

**Effect of Economic Integration on Income Distribution**

Compared to the neo-classical trade theory, the literature on economic geography has an altogether different approach to the effects of economic integration on income distribution. This branch of literature analyses the distribution of income on the basis of the spatial distribution of economic activities. There are two forces that guide spatial distribution of economic activities within and across nations - agglomeration and dispersion forces. Two most important agglomeration forces are demand and cost linkages. The demand linkage arises in the following way. A firm prefers a location in a large market where it can sell large quantities of its produce. As it relocates its production unit, workers also migrate and the process makes the large market larger. The theory of cost linkage, on the other hand, suggests that a firm chooses a location with a high concentration of other firms because of cheaper and easy access to intermediate goods and services required in the production process. Such a choice of location by a firm boosts spatial concentration of economic activities. In contrast to this agglomeration force, dispersion forces arise from local competition, high built-up costs and congestion. However, deeper economic integration results in the weakening of the dispersion forces and strengthening of agglomeration forces. This is caused by lower trade costs, which reduce the benefits from less local competition, on the one hand, and enhances the benefits accruing from economies of scale, on the other hand. More spatial concentration would thus be the result of economic integration.

The core-periphery (CP) model, which is a cornerstone of economic geography, formalizes the agglomeration and dispersion forces in terms of the market access effect, the cost-of-living effect and the market crowding effect. The market access effect postulates that firms try to locate in a big market. The cost-of-living effect arises from the fact that that concentration of firms in a particular location makes goods cheaper in the local market. Finally, the market crowding effect argues that competition drives away firms to a location with lower concentration of economic activities. The first two forces combine to form the agglomeration force while the third accounts for the dispersion force. With deeper integration, trade costs decline and after a “break point” freer trade results in stronger agglomeration forces over dispersion forces, leading to spatial concentration of economic activities. Moreover, such agglomeration processes may take place at an accelerating speed after passing the break point. Thus, under the CP framework, the agglomeration force is self-enforcing.

41. What are the two opposite forces that literature on economic geography postulates while analyzing the effect of economic integration on income distribution?
    A. Income distribution and spatial distribution
    B. Agglomeration and dispersion
    C. Demand linkage and cost linkage
    D. Market access effect and cost-of-living effect
42. What are the two major ideas that the CP framework incorporates in its "market access effect"?
   A. Income distribution and spatial distribution
   B. Agglomeration and dispersion
   C. Demand linkage and cost linkage
   D. Market access effect and cost-of-living effect

43. Deeper integration leads to agglomeration over dispersion due to-
   A. Spatial distribution of economic activities
   B. Market crowding effect
   C. Migration of workers
   D. Lower trade costs and higher economies of scale

44. Neo-classical trade theory does not analyse -
   A. Spatial distribution of economic activities
   B. Market crowding effect
   C. Demand and cost linkages
   D. Economies of scale

45. After a "break point" deeper integration results in -
   A. Dispersion forces dominating agglomeration forces
   B. Market crowding effect
   C. Agglomeration forces dominating dispersion forces
   D. Less local competition

Questions 46 to 50 are based on Table 1. Read the table carefully to answer the questions

<table>
<thead>
<tr>
<th>Year</th>
<th>Darjeeling Tea</th>
<th>Green Tea</th>
<th>Dust Tea</th>
<th>Total Profit</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009-2010</td>
<td>50</td>
<td>72</td>
<td>1</td>
<td>123</td>
</tr>
<tr>
<td>2010-2011</td>
<td>56</td>
<td>75</td>
<td>2</td>
<td>133</td>
</tr>
<tr>
<td>2011-2012</td>
<td>58</td>
<td>78</td>
<td>4</td>
<td>140</td>
</tr>
<tr>
<td>2012-2013</td>
<td>61</td>
<td>79</td>
<td>6</td>
<td>146</td>
</tr>
<tr>
<td>2013-2014</td>
<td>63</td>
<td>79</td>
<td>10</td>
<td>152</td>
</tr>
</tbody>
</table>

46. Which year has recorded the highest rate of increase in total profit?
   A. 2009-10
   B. 2010-11
   C. 2012-13
   D. 2013-14
47. Which category of tea has recorded the highest rate of increase in profit during this entire period?
   A. Darjeeling Tea
   B. Green Tea
   C. Dust Tea
   D. Both dust tea and green tea

48. What have been the shares of profit of Darjeeling, Green and Dust tea in total profit in 2011-2012?
   A. 41.43%, 55.71% and 2.86% respectively
   B. 42.43%, 54.71% and 4.86% respectively
   C. 40.43%, 56.71% and 2.86% respectively
   D. 41.43%, 54.71% and 3.86% respectively

49. In which year, profit from Darjeeling Tea has recorded the highest rate of increase?
   A. 2009-10
   B. 2010-11
   C. 2012-13
   D. 2013-14

50. In which year, profit from Dust Tea has recorded the lowest rate of increase?
   A. 2009-10
   B. 2010-11
   C. 2012-13
   D. 2013-14
Place for rough work