Total Marks : 200                                      Time : 90 minutes

Name: ..............................................................................................

Registration Number:...........................................................................

Research Proposal Title: ........................................................................
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Read the instructions carefully before answering the questions

1. This booklet contains 40 objective questions with multiple choices in answers (page 1 to 10) and two short answer questions (page 11). Answer ALL the 40 objective type questions and ANY ONE of the two short answer questions.

2. Answer the objective questions by writing the alphabet (a, b, c, or d), corresponding to your answer, on the answer line provided at right bottom of each question.

3. Each objective question carries 4 marks for correct answer; 1 mark will be deducted for each wrong answer. Non attempted questions will be given 0 mark. Short answer question carries 40 marks.

4. Answer any one of the two short answer questions. The answer not to exceed 300 words and it should be neatly written in the ruled space provided.

5. You can use last two pages of this booklet (pages 13 and 14) for doing rough works.

6. Mobile Phones and calculators are not allowed in the examination hall.
1. Suppose there are 100 identical firms in the industry and each firm is willing to sell 10 units at any price. The market supply curve will be:
   a) Vertical line where Q=10
   b) Horizontal line where Q=100
   c) Vertical line where Q=1000
   d) Horizontal line where Q=1000

   Answer Line

Consider the graph below, which shows the market for oranges, and answer questions #2 to #4:

2. No oranges will be supplied until the price is above
   a) Rs. 0
   b) Rs. 5
   c) Rs. 8
   d) Rs. 7

   Answer Line

3. At a price of Rs. 14, there will be
   a) Excess demand
   b) Excess supply
   c) Equilibriums
   d) Zero demand

   Answer Line
4. At a price of Rs. 10, the market is
   (a) Is not in equilibrium
   (b) Has excess supply
   (c) Does not have excess demand
   (d) All of the above

   Answer Line

Consider the following and answer questions #5 to #7

A firm in a perfectly competitive constant cost industry has total costs in the short run given by: \( TC = 2.5q^2 + 5q + 40 \)
where \( q \) is output per day and TC is the total cost per day in Rupees. The firm has fixed costs of Rs. 30 (already included in the TC equation above). The TC equation generates minimum average costs of Rs. 25 (per unit) at \( q = 4 \). You are also told that this size firm generates minimum long run average costs (that is, minimum LRAC occurs at \( q = 4 \), with \( \text{min LRAC} = \text{Rs. 25} \)). In the short run, there are 400 firms in this industry.

5. In the short run there are 400 firms in the industry, all with the same cost curves described above. Suppose that the demand curve facing the industry is given by the equation \( P = 165 - 0.0875Q \) where \( P \) is the price per unit and \( Q \) is the number of units demanded per day. The equilibrium price in the short run is:
   (a) Rs. 25
   (b) Rs. 35
   (c) Rs. 30
   (d) Rs. 40

   Answer Line

6. Continuing the situation described above, the profit earned by an individual firm per day in the short run is:
   (a) Rs. 0
   (b) - Rs. 50
   (c) Rs. 45
   (d) Rs. 50

   Answer Line

7. Now imagine that demand rises to \( P = 410 - 0.0875Q \). What would be the number of firms in the industry in a new long-run (rounding to the nearest integer, if necessary)?
   (a) 1200
   (b) 1100
   (c) 1135
   (d) 1235

   Answer Line

Page 2
8. The Football Association is trying out a new scoring system for penalty kicks. The points for scoring on a penalty kick depend on which direction it is kicked and which direction the goalkeeper jumps. A player (kicker) has been awarded a penalty shot on the opposing team’s goal. Only the goalkeeper is allowed to try to stop this penalty kick. The kicker has two possible strategies – kick to the goalkeeper’s left or kick to the goalkeeper’s right. The goalkeeper has two possible strategies in defense – jump left or jump right. The payoffs are shown below:

<table>
<thead>
<tr>
<th>Kicker (Player 1)</th>
<th>Jump Left</th>
<th>Jump Right</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kick Left</td>
<td>-1, 1</td>
<td>2, -2</td>
</tr>
<tr>
<td>Kick Right</td>
<td>3, -3</td>
<td>-4, 4</td>
</tr>
</tbody>
</table>

If the kicker and the goalkeeper follow mixed strategies, what are the equilibrium probabilities that the kicker will kick right and that the goalkeeper will jump right?
(a) 3/10, 2/5
(b) 3/10, 3/10
(c) 2/5, 2/5
(d) 2/5, 3/5

Answer Line ..................

9. There are four individuals in the market for cable channels provided by a cable television company. Tulsi is willing to pay Rs. 7 for the Sports channel and Rs. 14 for the History channel and Rs. 6 for the Movie channel. Dev is willing to pay Rs. 18 for the Sports channel, Rs. 5 for the History channel and Rs. 2 for the Movie channel. Heena is willing to pay Rs. 12 for the Sports channel, Rs. 1 for the History channel and Rs. 13 for the Movie channel. Shahrukh is willing to pay Rs. 1 for the Sports channel, Rs. 10 for the History channel and Rs. 20 for the Movie channel. The cable company has the option of pricing each channel separately or of bundling together channels in order to maximize its revenue from these four individuals. When the cable company adopts the revenue maximizing strategy, how much revenue will it be able to earn?

a) Rs. 120
b) Rs. 100
c) Rs. 150
d) Rs. 90

Answer Line ..................
10. If a consumer doubles her quantity of ice cream consumed when her income rises by 25%, then her income elasticity of demand for ice cream is
(a) 8.0
(b) 4.0
(c) 0.25
(d) 0.08

Answer Line........................

Consider the following information about an economy and answer questions #11 to #13:

Consumer price index (2012) = 132
Consumer price index (2011) = 110
Nominal GDP (2012) = Rs. 60 crores
Nominal GDP (2011) = Rs. 50 crores
Population (2012) = 7 million
Population (2011) = 6 million
Net factor income from abroad (2012) = +Rs. 3 crores
Net factor income from abroad (2011) = -Rs. 2 crores

11. By how much has real GDP grown from 2011 to 2012?
   a) -10%
   b) 12.5%
   c) 20%
   d) 0%

Answer Line.....................

12. By how much has per capita nominal GNP changed from 2011 to 2012?
   a) -10%
   b) 12.5%
   c) 20%
   d) 0%

Answer Line.....................

13. Based on the above information, we can say that:
   a) Poverty has fallen in the country
   b) Per capita real GDP is falling
   c) Income inequality has worsened
   d) Real growth in the informal sector is 0%

Answer Line.....................

14. In the circular flow of income, Keynesian equilibrium obtains when
   a) All the individual sectors are in equilibrium: S=I, T=G, M=X
   b) The aggregate injections equal aggregate withdrawals S+T+M = I+G+X
   c) There is no inflation or unemployment
   d) The interest rate and exchange rate are at their market clearing levels

Answer Line.....................
15. Assume that Equilibrium Real GDP is Rs.20,000 while Potential Real GDP is Rs.15,000. The marginal propensity to consume is 9/10. Assume that government decides to lower taxes by Rs.1,000. To pay for this, it lowers government purchases by $1,000. As a result of these two changes, what is the new Equilibrium Real GDP?
   a) Rs. 19,000
   b) Rs. 20,000
   c) Rs. 21,000
   d) Rs. 14,000

   Answer Line

16. If the income elasticity of money demand and the Keynesian multiplier, both increase in an economy (ceteris paribus), how will the relative effectiveness of monetary and fiscal policy change?
   a) Fiscal policy will become relatively more effective than monetary policy
   b) Fiscal policy will become relatively less effective than monetary policy
   c) The relative effectiveness of fiscal and monetary policy will remain unchanged
   d) Both fiscal and monetary policy will become more effective.

   Answer Line

17. If, in a fully employed, closed economy, the supply of money and the velocity of circulation of money both increase, then in the short-run.
   a) Unemployment of factors will result
   b) Real national output will expand
   c) The volume of transactions will increase
   d) The average level of prices will rise

   Answer Line

18. To measure the cropping intensity in India which of the following indicators are used?
   a) Net Irrigated Area/Yield per hectare
   b) Gross Cropped Area/ Area under cultivation
   c) yield per hectare
   d) Gross Cropped Area/ Net Sown Area

   Answer Line

19. In India the recommendations for the minimum support prices for food grains are given by
   a) Commission for Agriculture Costs and Prices
   b) Cabinet Committee on Economic Affairs
   c) State Agricultural Prices Board
   d) Department of Agriculture and Cooperation

   Answer Line
20. During the period 1960 to 2010, with regard to the average size of farm holdings and percent distribution of farm holdings according to size class, which of the following statement is true

a) Average farm size in India has increased while the share of small and marginal farm holdings have declined
b) The share of Small and marginal farm holding has increased while the share of large farm holding have declined
c) Share of small and marginal farm holdings and large farm holdings have increased while the average farm size have declined
d) Average farm size has not changed, the share of small and marginal farm holdings have declined

Answer Line

21. During the period 2004-05 to 2010-11 the terms of trade for agriculture to non-agriculture in India

a) Worsened  b) improved  c) did not change  d) worsened initially and then improved

Answer Line

22. Since the 1960s the share of coarse cereals and oil seeds in the Total Gross Cropped Area had performed in which of the following manner?

a) increasing share for oil seeds and decreasing share for coarse cereals
b) increasing share for oil seeds and increasing share for coarse cereals
c) decreasing share for both oil seeds and coarse cereals
d) increasing share for both oil seeds and coarse cereals

Answer Line

From the given Table answer the questions 23 to 25

The Table below provides the Financial Statement for Government of India, 2012-13

<table>
<thead>
<tr>
<th>Expenditure Head</th>
<th>Rs.Crore</th>
<th>Revenue Head</th>
<th>Rs.Crore</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Expenditure</td>
<td>1490925</td>
<td>Total Revenue</td>
<td>1490925</td>
</tr>
<tr>
<td>A)Non-Plan Expenditure</td>
<td>969900</td>
<td>A)Capital Receipts</td>
<td>555241</td>
</tr>
<tr>
<td>of which</td>
<td></td>
<td>i)Recovery of Loans</td>
<td>11650</td>
</tr>
<tr>
<td>i)Revenue Account of</td>
<td>865596</td>
<td>ii)Other Receipts</td>
<td>30000</td>
</tr>
<tr>
<td>which</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a)Interest Payments</td>
<td>319759</td>
<td>iii)Borrowings and Other</td>
<td>513590</td>
</tr>
<tr>
<td>b) Major Subsidies</td>
<td>179554</td>
<td>Liabilities</td>
<td></td>
</tr>
<tr>
<td>c)Pensions</td>
<td>63183</td>
<td>B) Revenue Receipts</td>
<td>935685</td>
</tr>
<tr>
<td>ii) Capital Account</td>
<td>104304</td>
<td>i)Gross Tax Revenue</td>
<td>1077612</td>
</tr>
<tr>
<td>B) Plan Expenditure</td>
<td>521025</td>
<td>ii) Tax (Net to the Centre)</td>
<td>771071</td>
</tr>
<tr>
<td>of which</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i)Revenue Account</td>
<td>420513</td>
<td>iii)Non-Tax Revenue</td>
<td>164614</td>
</tr>
<tr>
<td>ii) Capital Account</td>
<td>100512</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
23. What was the Total fiscal deficit in Rupee Crore in India during this year?
   a) 319759   b) 11650   c) 63183   d) 513590
   Answer Line.....................

24. What was the Total Revenue deficit in Rupee Crore in India during this year?
   a) 350424   b) 350425   c) 935685   d) 865596
   Answer Line.....................

25. What was the Total Primary deficit in Rupee Crore in India during this year?
   a) 1326311   b) 193831   c) 0   d) not measurable from the data given
   Answer Line.....................

26. Arrange the following sources of energy in descending order according to the share of energy consumption in India: 1) Coal 2) oil 3) Natural Gas 4) Nuclear energy
   a) 2 3 1 4
   b) 2 1 3 4
   c) 1 2 3 4
   d) 1 3 2 4
   Answer Line.....................

27. To define the organized manufacturing sector in India the provisions of which of the following Acts are utilized?
   a) Factories Act, 1948
   b) Industrial Disputes Act, 1947
   c) Contract Labour (Regulation and Abolition) Central Rules, 1971
   d) Industries (Development & Regulation) Act, 1951
   Answer Line.....................

28. The share of profit in the value added in the organized manufacturing sector has increased substantially since 1980. What are the factors responsible for this?
   a) declining wage share and declining share of depreciation value of capital
   b) declining share of interest in value added and declining wage share in value added
   c) declining share of value of raw material in output and declining share of interest in output
   d) Declining share of depreciation value of capital and declining share of value of raw materials in output.
   Answer Line.....................
29. For estimation of the service sector GDP in India which of the following method is followed?
   a) Net Value Added Method
   b) Labour Input Method
   c) Gross Output Method
   d) Gross Value Added Method

Answer Line..........................

30. Arrange the commodity groups in descending order according to their share in India’s Imports in value

1. Gold & Silver
2. Pearls, precious & Semi-precious stones
3. Petroleum, Crude and Petroleum Products;
4. Medical. & Pharmaceutical products

   a) 1,3,2,4            b) 3,1,2,4            c) 1,4,3,2            d) 2,3,1,4

Answer Line..........................

31. Which of the following statement is true about the Balance of Trade in India for the last five years?

   a) India’s Balance of Trade in Merchandise is deficit while her Balance of Trade in Services is Surplus and the total Goods and Services Balance is deficit.
   b) India’s Balance of Trade in Merchandise and Services is deficit and the the total Goods and Services Balance is deficit.
   c) India’s Balance of Trade in Merchandise is Surplus while her Balance of Trade in Services is Deficit the total Goods and Services Balance is deficit.
   d) India’s Balance of Trade in Merchandise and Services is surplus the total Goods and Services Balance is surplus.

Answer Line..........................

32. Which of the following is true

1) The calorie consumption per capita had been declining and the poverty rate had been declining in India
2) The calorie consumption per capita had been increasing and poverty rate had been declining in India
3) Fat consumption per capita had been increasing.

   a) all            b) 1&3            c) 2&3            d) only 2

Answer Line..........................

Page 8
33. Expert group to review the methodology for estimation of poverty submitted its report to the planning commission in 2009 recommended that henceforth the following changes be made in the estimation of poverty in India

1. the reference period shifted from Uniform Reference Period to Mixed Reference Period
2. The calorific norms for identifying poverty to be replaced with indicators that includes food consumption, spending on health and education.

   a) only A  b) only B  c) Both A&B  d) None

   Answer Line........................

34. Brown Field Investment is

   a) Foreign investment in the form of cross border mergers and acquisitions
   b) Short term portfolio investment
   c) Foreign investment aimed at starting entirely new production facilities
   d) Tariff jumping investments

   Answer Line........................

35. Inter-state disparity in India in income per capita can be measured using

   a) coefficient of variation
   b) standard deviation
   c) location quotient
   d) Moran’s I

   Answer Line........................

36. The Census definition of a urban area in India is

   a.) A minimum population of 5,000; At least 75% of the male main working population engaged in non-agricultural pursuits; and a density of population of at least 400 persons per sq. km.
   b.) A minimum population of 10,000; At least 75% of the working population engaged in non-agricultural pursuits; and a density of population of at least 500 persons per sq. km.
   c.) A minimum population of 10,000; At least 75% of the male population engaged in non-agricultural pursuits; and a density of population of at least 400 persons per sq. km.
   d.) A minimum population of 5,000; At least 75% of the male main working population engaged in non-agricultural pursuits; and a density of population of at least 500 persons per sq. km.

   Answer Line........................
37. Labour Force Participation Rate is estimated as following

a) (Total persons employed) / (Total Population)

b) (Total persons employed + Total persons unemployed) / (Total Population)

c) (Total persons unemployed) / (Total Population)

d) (Total persons employed - Total persons unemployed) / (Total Population)

Answer Line

38. If you want to calculate the real wages of Indian rural workers what deflator would you use

a) CPIW

b) IIP

c) CPIAL

d) CPI-UNME

Answer Line

39. The Science Technology and Innovation Policy of India 2013 have which of the following as its goals? Choose from the options given below

1) Enhancing skill for application of science among the young from all social strata

2) Positioning India among the top 5 global scientific powers by 2020

3) Creating an environment for enhanced private sector participation in R&D

a) only 3

b) only 2&3

c) all

d) none

Answer Line

40. The participation rate of women in India during 2004-05 to 2009-10 experienced which of the following

a) The Labour Force Participation Rate of Women increased while their Participation Rate in education decreased

b) The Labour Force Participation Rate of Women declined while their Participation Rate in Education increased

c) Both Labour Force Participation Rate of Women and their Participation Rate in education decreased

d) Both Labour Force Participation Rate of Women and their Participation Rate in education increased

Answer Line
Answer any one

41. What are the basic differences between the National Rural Employment Guarantee Act and traditional Keynesian Public Works Programs? Assess whether these differences in design have made the Indian NREGA more effective in terms of its objectives?

42. Analyze the structural transformation and the rapid growth of service sector in India. What factors led to this change in the economy? In the light of structural transformation theories do you think India's structural transformation is sustainable?