

COMPREHENSIVE EXAMINATION (REGULAR)

Note: Closed book examination. Attempt all questions. Read the question carefully and Answer all questions directly on these sheets. Try to keep your answers brief and to the point. **Write legibly. Allocate your time carefully:** some students spend too much time on the straight and short answer questions and write unnecessary material. Remember that long answers by themselves do not have any value.

This Paper consists of two Parts: **PART- A (CLOSED BOOK) and PART –B (OPEN BOOK)**. After completing PART-A please submit it and attempt PART-B (Open BOOK)

PART –A (CLOSED BOOK)

40 Marks

This paper consists of TWO SECTIONS: SECTION – A, SECTION – B & SECTION – C. For multiple choice questions please choose the correct best answer and put a tick against that letter (A/B/C/D) and also write the letter against it (32 x 0.5 = 16 Marks). For short answer questions and for full credit, show your work and be sure to explain your answers when asked to.

1. What, according to Amartya Sen, is the principal end of development?
 - A. Increased incomes
 - B. Movement to industrial forms of organization
 - C. Democracy
 - D. Freedom

2. Population structure for a given country is visually represented by an age-sex pyramid, and a population with a broad-based pyramid is most likely a population with both:
 - A. a high percentage of women and children in the population
 - B. high fertility and low mortality rates
 - C. low fertility and high mortality rates
 - D. high fertility and high mortality rates

3. Which stage of the demographic transition is characterized by falling death rates?
 - A. Stage 1
 - B. Stage 2
 - C. Stage 3
 - D. Stage 4

4. If you see an age pyramid that caves in at the younger ages, the most likely explanation is:
 - A. Declining fertility
 - B. Increasing mortality
 - C. Declining mortality
 - D. Out-migration

5. The unbalanced growth strategy is based on
 - A. External and internal economies
 - B. Spread and backward effects
 - C. Increasing and constant returns to scale
 - D. Backward and forward linkages

6. Which one of the following is true for demand side vicious circle of poverty?
 - A. Low income → Low demand → Low investment → Capital deficiency → Low productivity → Low income
 - B. Low productivity → Low income → Low savings → Low investment → Capital deficiency
 - C. Low income → Low investment → Low demand → Low Capital Deficiency
 - D. Low Demand → Low savings → Low productivity → Low investment → Capital deficiency

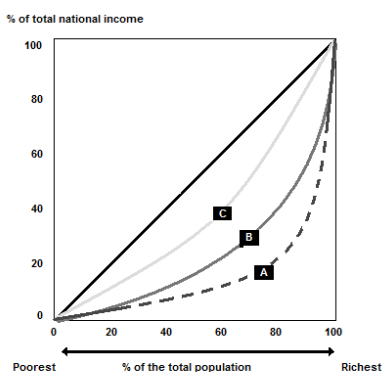
7. Leibenstein in his critical minimum effort thesis treats population as a factor that is:
- Income – generating
 - Investment – inducing
 - Income – depressing
 - Marketing-expanding
8. In his work in development economics, Albert Hirschman argued that ____.
- unbalanced growth, in which a few sectors of an economy race ahead of others is beneficial for an economy
 - unbalanced growth is detrimental to a growing economy
 - unbalanced growth is alright for growing economies in the long term, as long as the growth “evens out” within a few years
 - All of the above
9. Which one of the following is explained by Fei-Ranis Model?
- the interrelationship between the agriculture and the industrial sector
 - planning method when labour is in the short in supply
 - growth process of industrial sector
 - A neo classical frame work of growth analysis
10. According to Solow’s growth model,
- a country’s population growth rate has no permanent effect on the growth rate of GDP per capita.
 - a change in a country’s population growth rate has no effect on the growth rate of GDP, even in the short run.
 - a country’s population growth rate has no permanent effect on GDP per capita.
 - a country’s population growth rate has no effect on GDP per capita, even in the short run.
11. The Solow model predicts convergence that refers to the fact that
- countries that start with a higher per worker income grow faster.
 - countries that start with a lower per worker income grow slower.
 - countries that start with a higher per worker income do not grow further.
 - countries that start with a lower per worker income grow faster.
12. The assumption of constant returns to scale is key in the Neoclassical Solow Growth model to explain the crucial role of
- labour accumulation in explaining capital productivity.
 - capital accumulation in explaining total factor productivity
 - labour accumulation in explaining total factor productivity.
 - capital accumulation in explaining labour productivity.
13. Knowledge is crucial in the context of endogenous growth theory. It is
- rival and independent of the previous pool of knowledge.
 - rival and dependent of the previous pool of knowledge
 - non-rival and independent of the previous pool of knowledge
 - non-rival and dependent of the previous pool of knowledge
14. The Romer model predicts
- divergence based on the developed countries’ higher pool of knowledge.
 - no catching up for developing countries due to the fact that their pool of knowledge is smaller
 - convergence based on the developed countries’ higher pool of knowledge.
 - Both A. and B.
15. Fiscal deficit in the budget means:
- Revenue deficit plus the net borrowings of the government
 - Budgetary deficit plus the net borrowings of the government
 - Capital deficit plus revenue deficit
 - Primary deficit minus capital deficit

16. Which of the following accurately describes a criticism of Rostow's stages of development model?
- A The model does not take into account technological changes.
 - B The model is not relevant in a globalized world.
 - C The model assumes that LDCs are just like DCs, except for differences in savings and investment.
 - D The model's linearity is its strongest proof of its validity.
17. Development as freedom," in the view of Nobel-prize winner Amartya Sen, refers to
- A. The capacity for choice among improved economic goods.
 - B. The freedom to use your resources in whatever way that you wish.
 - C. The maximization of economic growth.
 - D. The need to supplement luxuries for an individual
 - E. The lack of supportive social institutions to ensure ones' basic livelihood
18. The new growth theory attempts to explain
- A the rate of population growth within a country.
 - B the rate of capital accumulation within a country.
 - C the factors that determine the size of the Solow residual.
 - D why there are diminishing returns to capital.
 - E None of the above
19. Which of the following is not a tenet of the Dependency Theory School?
- A Poor nations provide natural resources to the wealthy nations and are destinations for manufactured products.
 - B Poor nations have been integrated into the world economy in such a way that it makes them dependent on the wealthy countries.
 - C As long as the poor remain producers of primary products, they can never become developed.
 - D As long as developing countries trade with the developed countries, they are bound to develop.
20. What "poverty trap" or "vicious circle of poverty" did Nurkse famously describe in 1953?
- A Women in poor countries are uneducated, which tends to result in high fertility rates, which means households do not have enough money to send girls to school.
 - B Social structures in developing countries tend to limit the options available to the poor.
 - C The poor tend to live far away from physical infrastructure, which limits their possibilities for accessing markets.
 - D Workers in poor countries are fatalistic and accept poverty as their lot, so they remain poor.
 - E People in poor countries are too poor to save, which means that they cannot invest in capital to increase their productivity, which means they remain poor.
21. Which of the following describes why income inequality is bad for economic development?
- A. income inequality may threaten political stability, because people are dissatisfied with their economic situation and place blame on political authorities.
 - B. Income inequality reduces the pool of people with resources, such as education, to improve productivity
 - C. Income inequality may increase distrust and deter commitment amongst people in the marketplace, making contracts enforcement difficult.
 - D. All of the above

22. Which two of the following are likely to represent the views of those interested in ‘Distributive Justice’?
- Each person should receive an income according to their productivity performance
 - Difference in the distribution of income and wealth are normal for any society
 - Each person should receive income according to need
 - The free market economy automatically solves the inequality problem
 - A certain amount of social control is needed in an economy to achieve a fair distribution of income
- c) and e)
 - a) and b)
 - b) and c)
 - c) and d)

23. Use the figure given below and which line on the Lorenz curve represents a country with the highest level of inequality?

FIGURE 1: WHICH LINE ON THE LORENZ CURVE REPRESENTS A COUNTRY WITH THE HIGHEST LEVEL OF INEQUALITY?



- Line A
 - Line B
 - Line C
 - Line A and B
24. The Gini Coefficient for a country is 0.8. What can one conclude about the income distribution in this country?
- Income is equally distributed.
 - Income is nearly equally distributed
 - Income is perfectly distributed.
 - Income is close to being imperfectly distributed.
25. According to the Neo-Marxists, what dynamic reinforces underdevelopment?
- The effect of copyright laws on the ability of underdeveloped countries to develop a manufacturing sector
 - The institution of heavy trade barriers by developed countries against developing countries
 - The need for labour imports into the developed countries
 - The need to extract excess value from under-developed countries, particularly with raw materials
26. Important beliefs of the structuralist school include which of the following?
- The northern developed countries do not share the wealth generated from productivity enhancing technological improvements due to problems in the political structure.
 - A completely free market approach will always yield the most efficient and equitable outcome.
 - One way for southern countries to develop is to substitute imported industrial goods with domestically produced ones.
 - Both A and B

27. According to the earlier proponents of the big push strategy for development, a “big push” in investment is necessary in developing countries because of which of the following reasons?
- In a traditional economy, people do not have the required habits for a profitable industrial society and therefore need a push
 - The lack of modern technology requires a large investment in education.
 - Poor economies do not grow because complementary industries fail to cooperate; a “big push” is required to get these industries to develop simultaneously.
 - Poor economies must resolve pressing health and education challenges before they can industrialize.
28. Which of the following is a problem that some critics have with Sen’s capability approach?
- Sen’s capability approach relies on a mix of capitalism and good values but cannot explain how good values might be developed.
 - Sen’s capability approach focuses too narrowly on economic development, defined as income per capita
 - Sen’s capability approach does not consider the right to education, which is an important social good.
 - Sen’s capability approach does not clearly provide for individual freedoms, focusing too much on the overall social good of society.
29. Which of the following statements about income inequality is false?
- A curve which plots a cumulative percentage of income against a cumulative percentage of households is called a Lorenz curve.
 - If we compare the distribution of two incomes, the one with the lower Gini coefficient is the more unequal.
 - Gross incomes are less unequal than original incomes
 - Final incomes are less unequal than disposable incomes
30. Which of the following statements about approaches to poverty is false?
- On every approach, a doubling of the incomes of all households would reduce the number of people in poverty.
 - A problem with the absolute approach to poverty is deciding what items to put on the list.
 - A problem with the relative approach to poverty is deciding what percentage of average incomes to use.
 - A problem with hybrid approaches to poverty is deciding exactly what to include.
31. Which two of the following are most likely to reflect a move towards a more equal distribution of income?
- The share of total income going to the top 20% of income earners rises from 40% to 50%
 - The Gini coefficient falls towards zero
 - The Gini coefficient rises towards one
 - The share of income going to the bottom 20% of income earners falls from 8% to 7%
 - The share of total income going to the bottom 50% of income earners rises from 40% to 50%
- c) and e)
 - a) and b)
 - b) and e)
 - c) and d)
32. Which two of the following are most likely to be associated with an increase in the incidence of poverty?
- The Gini coefficient falls substantially
 - The real income of those in the top 20% of income earners falls by 10%
 - The number of households earning below 50% of average incomes has increased substantially
 - The number of single persons with children and of single pensioners has increased substantially
 - The number of people earning below the level of income support has decreased
- a) and e)
 - a) and b)
 - c) and d)
 - b) and d)

For each statement, state whether it is TRUE or FALSE. Just writing TRUE or FALSE carries no weightage. To get credit provide a brief correct explanation for each answer. (4 x 2 = 8 Marks)

- B1 The Harris-Todaro model of rural-urban migration predicts that government wage subsidies for the urban formal sector alone can achieve the twin goals of eliminating urban unemployment and achieving an efficient allocation of labour.
- B2 Suppose the poverty threshold is 100. A country has two types A,B of citizens in equal numbers in both years 1 and 2. Type A citizens' incomes go down from 95 to 50 from year 1 to 2, while Type B citizens' incomes go up from 95 to 120 at the same time. It is possible for the poverty gap ratio in a given country to decline from year 1 to year 2, while the poverty head count ratio increases at the same time
- B3 Both the poverty gap ratio and the income gap ratio are sensitive to the inequality among the poor.
- B4 The principal reason for the spurt in population growth rates in the first stage of demographic transition is an increase in birth rates resulting from an increase in per capita income.

C. Please provide short answers to the following questions and statements: (8 X 2 = 16 Marks)

C1). What are most important features emphasized in the neoclassical counterrevolution models of development?

C2). List the Kuznet's characteristics of modern economic growth and economic development.

C3). What are the Determinants of the need for a 'Minimum Effort' theory has given four factors that determine the need for a minimum effort?

Thus, to break away from the traditional and conventional attitudes and inculcate new attitudes, a large minimum effort should be undertaken.

C4). Write the important conditions (list the conditions) described by Nelson which are conducive to trapping. What relationship equations he used in his model of development?

C5). In the World Economic Forum's Gender Gap Report 2021, India was ranked 140 out of 156 countries. India is now one of the worst performers in South Asia while Bangladesh ranked 65, Nepal 106, Pakistan 153, Bhutan 130 and Sri Lanka 116. Therefore, explain in the light of Equal Employment Opportunities and Decision-Making and Planning can able to improve the gender gap in India.

C6). What are the two key assumptions underlying the classical theory of population, and explain the reasoning underlying its prediction that per capita income cannot grow in the long run.

C7). Explain briefly in what way the Malthusian hypothesis concerning the effect of per capita income on fertility is contradicted by the evidence on demographic transition undergone by different countries since the 19th century?

C8). Explain the different arguments embraced by the concept of dualism in the dualistic-development thesis.

Note: Attempt all questions. Open Book examination. Please read the questions carefully before answering them and don't forget to answer all parts of each question at one place.

This part has FOUR questions with sub parts. Each question carries equal marks (10.0). Remember that long answers by themselves do not have any value. Try to keep your answers relevant and to the point. Underline or highlight your final answer.

- B1 A) Compare and contrast the Big Push Theory and Kremer's O-Ring Theory of economic development in the context of developing nations only on the following:
- multiple equilibria and coordination failures.
 - List out conditions of multiple-equilibria.
 - Advocate importance of government policy.

B) The urban areas around the village of Pilani at JhunJhunu District have jobs to offer, and people are thinking of migrating out from the village. But what's nice about Pilani is that it has a tradition of reciprocity, people help each other out. Think of it as a community benefit. This problem tries to understand this situation by using a complementary map.

Suppose that migration is costless and an outside job has a value of 20.

Within Pilani, the community benefit has a value of $B = 20(1 - n)$ for each resident of the village, where n is the share of migrants leaving Pilani.

Each resident in Pilani receives a total payoff of $Y + B$, where B is the community benefit and Y is her village income.

They compare this payoff to the payoff of the outside job (which is 20), and decide whether or not to migrate.

Finally, there are three types of people in Pilani, of equal sizes in the population.

The first receive an income of $Y = 5$, the second an income of $Y = 10$ and the third an income of $Y = 15$.

- D). Explain intuitively (using examples if you like) why the community benefit per person goes down when there are less people living in Pilani. Also explain in words why this can give rise to a complementarity.
- II). Draw the complementarity map (take n on X axis and $x(n)$ on Y axis). Don't worry about drawing everything to scale, but do indicate **any relevant values on the axes**, such as points where the map might jump upwards. Are there multiple equilibria in the migration process and briefly describe all of them, including the unstable one(s) if any?

B2 Consider the following version of the *Lewis model*. There are two goods: Wheat and Shirts. In Year 0, there are no factories, while there are 100 family farms. Each farm has ten (10) adults, and a limited amount of land which produces Wheat as follows. If there are $X \leq 5$ adults in the family working in the farm, they collectively produce $2X$ units of Wheat. The land does not support gainful employment of more than five adults, so if $X > 5$, the farm produces a constant amount (10 units) of Wheat. Farm members share output, and value consumption only of Wheat (i.e., they do not have any demand for shirts).

In Year 1, 10 factories are set up in the urban area. Each factory is owned by a capitalist who hires workers to maximize his own profits. The marginal product of labor in any factory is $12 - Y$ shirts, if the factory is employing Y workers. Factories export all their output at a constant relative price of 1 shirt = 1/2 units of Wheat. Factory owners reinvest all their profits in new factories which are set up at the end of Year 1; they do not spend anything on Wheat. The setup cost of a factory equals 50 shirts. Workers incur no transport costs to travel between farms and the urban area.

- a) In Year 1, what is the industrial wage rate, employment and profit per factory (in units of shirts)? How much surplus labor is there in the rural sector? What is the GDP of the country (measured in units of shirts)?
- b) How do these change in Year 2?
- c) Now suppose that at the beginning of Year 2, the price of shirts (relative to Wheat) doubled. What would be the effect on each of the above listed variables in Year 2?
- d) Assess the impact of the change in shirt prices in Year 2 on living standards of workers and capitalists respectively.

B3 A) The following income distribution data are for Nigeria.

Quintile	Percent Share
Lowest 20%	1.5%
Second quintile	2.7%
Third quintile	7.8%
Fourth quintile	19.5%
Highest 20%	68.5%

Nigeria's total national income: \$ 500 million per day

Nigeria's population: 100 million people

- a. Graph the Lorenz curve from the Nigerian data given above, carefully labeling the axes. On the axes, label all values that correspond to the five points that make up the Lorenz curve.
- b. Suppose that each household makes the average income for its quintile (that is, assume that there is no inequality within quintiles). Using a poverty line of \$1 per day per capita, what is the headcount (i.e. the measured number of poor people)? What is the average income shortfall (AIS)?
- c. Suppose 5% of total national income were transferred from the highest-income quintile of households to the lowest-income quintile of households. Assume no other changes in the economy. What quantitative effect does this have on the headcount?

B) Consider the following two different distributions of income schedules of Country X and Country Y:

	% share of population	% share of income
I	20	2
II	20	12
III	20	15
IV	20	30
V	20	41

Country X

	% share of population	% share of income
I	25	5
II	25	15
III	25	25
IV	25	55

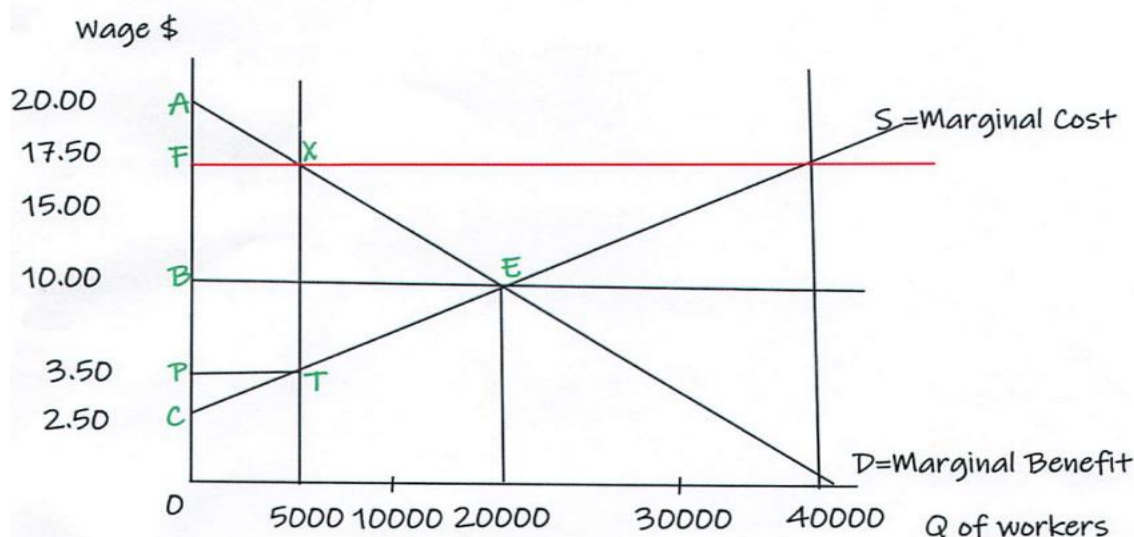
Country Y

What is the Gini Coefficient for these countries? In which of the two countries the income distribution exhibits greater inequality? Comment on the results.

B4 Attempt all parts of the question carefully and provide the solution as per the concepts discussed in the lecture session

a. Identify and name the Indian domestic market being analyzed in figure 1 given below in the graphical model?

Figure-1



- Name the three key features of an efficient market you can identify in the graph.
- Compute the Consumer Surplus and Producer Surplus when this market is efficient?
- What is the efficient wage rate and the efficient number of workers in this market?
- The government intervened in this market setting the new wage rate Rs. 17.50 per hour. What do economists call this intervention?
- Identify the rupee value of new consumer and producer surplus after the government intervention.
- Explain the economic effects of government intervention in this market.
- What policy solutions could improve the outcomes in this market to the consumer, the producer and society as an alternative or complement to a government intervention?