# Bharat Ratna Dr. B.R. Ambedkar University, Delhi

# **School of Liberal Studies**

Entrance Test 2013-14

**MA Economics** 

Maximum Marks: 75

Time: 2 hours 30 min

Answer all sections and all questions (internal choice only in Section C).

Answer all questions on the paper itself.

Use additionally provided sheets for all rough work.

*Please enter your particulars (name and roll number) below before answering the paper.* 

## Name (as in application form)

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# Entrance Test Roll Number



To be filled in by Examiners Only

A	В	С	Total

### Section A

### Multiple Choice Questions (30)

#### (1 mark each)

### Please Tick ( $\sqrt{}$ ) the correct answer.

1. Based on the data in the table above, ice cream and cake are \_\_\_\_\_ goods.

Price	Quantity demanded			
(dollars per cake)	(gallons of ice cream per week)			
2	10			
4	6			

- a. Substitute
- b. Complement
- c. Normal
- d. Inferior
- 2. Which of the following is not a factor of production?
  - a. Land
  - b. Labour
  - c. Money
  - d. Capital
  - e. All the four above are factors of productions
- 3. In the simple Keynesian model a one rupee increase in the fiscal deficit, brought about through some combination of changes in government expenditure and taxes, leads to
  - a. An increase in the GDP
  - b. A decrease in the GDP
  - c. An increase of exactly one rupee in the GDP
  - d. Cannot be specified based on given information
- 4. 'If two countries have the same growth rate in their per capita GDP between 1999 and 2000, then the population growth rate in the two countries between 1999 and 2000 must also be the same.' The statement is
  - a. True
  - b. False

- 5. As x increases the function  $f(x) = 2^{-x}$ 
  - a. Increases at a decreasing rate
  - b. Increases at an increasing rate
  - c. Decreases at a decreasing rate
  - d. Decreases at an increasing rate
- 6. Economic growth is depicted by
  - a. a shift in the production possibilities frontier outward
  - b. a movement from inside the curve toward the curve
  - c. a shift in the production possibilities frontier inward
  - d. a movement along a production possibilities frontier toward capital goods
- 7. Diseconomies of scale exist when
  - a. prices to consumers decrease as more units are sold.
  - b. output increases when more resources are employed.
  - c. average costs increase as a firm invests and expands its productive capacity.
  - d. production imposes external costs on nearby third-party consumers and producers.
  - e. employment and the price level both rise as national output rises.
- 8. In the expectations-augmented Phillips curve with adaptive expectations
  - a. The rate of inflation is an increasing function of the rate of unemployment
  - b. The rate of change of inflation is an increasing function of the rate of unemployment
  - c. The rate of inflation is a decreasing function of the rate of unemployment
  - d. The rate of change of inflation is a decreasing function of the rate of unemployment
- 9. Suppose the quantity of pens demanded is 13,903 in June. If a price increase from Rs 20 to Rs 25 led to the quantity demanded decreasing to 11,853 in July, the own price elasticity of demand equals
  - a. -0.147
  - b. -0.173
  - c. -0.589
  - d. -1.945
  - e. -0.159

- 10. The Bretton Woods system functioned during
  - a. The second half of the twentieth century
  - b. The first half of the twentieth century
  - c. The second half of the nineteenth century
  - d. The first half of the nineteenth century
- 11. Price Competition is observed in the
  - a. Stackelberg Model
  - b. Bertrand Model
  - c. Kinked Demand Curve Model
  - d. Monopsony
- 12. The availability of imported goods at lower costs than would be incurred domestically is most directly generated by
  - a. uniqueness gains from trade
  - b. dynamic gains from trade
  - c. political spin-off gains from trade
  - d. specialization gains from trade
  - e. unilateral benefits from trade.
- 13. The "public good" rationale for government provision of a good or service least clearly covers
  - a. College education
  - b. Roads and highways
  - c. Garbage collection
  - d. Police and fire protection
- 14. A country produces only apples and bananas. Moving from point *A* to point *B* along its production possibilities frontier, 5 apples are gained and 4 bananas are forgone. What is the opportunity cost of an apple?
  - a. 4 bananas
  - b. 5/4 of a bananas
  - c. 4/5 of a banana
  - d. 1 apple

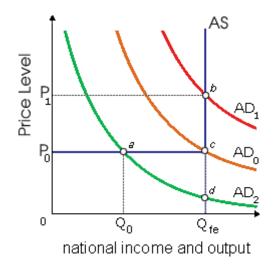
- 15. Which of the following is not an assumption of the Lewis Model?
  - a. Dual Economy
  - b. Surplus Labour in the traditional sector
  - c. Profit mark-up in manufacturing sector
  - d. Monopolistic Competition in the manufacturing sector
- 16. Let *a* and *b* be positive real numbers. When does the series

$$\sum_{i=1}^{\infty} a^{i-1} b^i$$

have a finite sum?

- a. If and only if a < 1.
- b. If and only if b < 1.
- c. If and only if ab < 1.
- d. If and only if b/a < 1.
- 17. Suppose there is a correlation of r = 0.9 between number of hours studied per day and GPAs. Which of the following is a reasonable conclusion?
  - a. 90% of students who study receive high grades.
  - b. 90% of the variation in GPAs can be explained by variation in number of study hours.
  - c. 10% of the variation in GPAs cannot be explained by variation in number of study hours per day.
  - d. 81% of the variation in GPAs can be explained by variation in number of study hours per day.
- 18. The case for a monetary growth rule or a laissez faire approach to macroeconomic policy is significantly weakened by:
  - a. "sticky" prices and wages.
  - b. the power of Say's law.
  - c. Adam Smith's concept of "the invisible hand."
  - d. The Laffer curve.
- 19. The assumption of the convexity of preferences is required
  - a. For neither the First nor the Second Fundamental Theorems of Welfare Economics.
  - b. For both the First and the Second Fundamental Theorems of Welfare Economics.
  - c. For only the First Fundamental Theorem of Welfare Economics.
  - d. For only the Second Fundamental Theorem of Welfare Economics.

- 20. The 'Drain of Wealth' during the British Colonial rule in India consisted of a
  - a. Drain of Indian revenues via trade settlements
  - b. Drain of British Capital via investment in railways
  - c. 'Brain drain' from India to Britain
  - d. Drain of British taxpayer's money for conquest of Indian territories



- 21. If the economy in the diagram above starts at point c and then Aggregate Demand shifts to AD<sub>2</sub>, according to:
  - a. Keynesian theory, the economy will quickly move to point *a*.
  - b. classical theory, the economy will rapidly adjust to point *b*.
  - c. Keynesian theory, the economy will immediately move to point *d*.
  - d. classical theory, the economy will instantly shift to point *a*.
- 22. If this economy starts at point c in the diagram above and then Aggregate Demand shifts to AD<sub>1</sub>, according to:
  - a. both classical and Keynesian theory, the economy will experience inflation.
  - b. classical theory, real economic growth will accelerate.
  - c. classical theory, excessive unemployment will be reduced.
  - d. Keynesian theory, the unemployment rate will increase.

- 23. Instead of studying for an additional two hours for the economics final, Rashi decides to watch a movie. Rashi is making a/an
  - a. decision that does not involve an opportunity cost.
  - b. rational decision if her marginal cost from the movie is greater than her marginal benefit.
  - c. rational decision if her marginal benefit from the movie is greater than her marginal cost.
  - d. irrational decision because studying is more important than watching a movie.
  - e. decision that is not on the margin because she will see the entire movie.
- 24. In the year 2013, the Rupee has depreciated vis-à-vis the Dollar. This implies
  - a. Unambiguous improvement of India's Balance of Trade
  - b. a fall in prices of imports from the US
  - c. higher competitiveness of Indian exporters
  - d. higher competitiveness of US exporters
- 25. At harvest time, the supply of wheat is perfectly inelastic. If the government taxes wheat at Rs 1 a kilo, then
  - a. the seller pays the entire tax.
  - b. the buyer pays the entire tax.
  - c. the seller and the buyer split the tax but the seller pays more.
  - d. no one pays the tax because the wheat must be harvested or it will go to waste.
  - e. the seller and the buyer split the tax evenly.
- 26. An urn contains 6 red marbles and 4 black marbles. Two marbles are drawn *with replacement* from the urn. The probability that both of the marbles are black is
  - a. 1/2
  - b. 1/4
  - c. 9/25
  - d. 4/25
- 27. A Keynesian Liquidity Trap is characterized by
  - a. High Output and Low Employment
  - b. High Output and High Employment
  - c. High Unemployment and Low Output
  - d. High Unemployment and High Output

- 28. If each observation of raw data whose variance is  $\sigma^{2}$ , is increased by  $\lambda$ , then the variance of the new set is
  - a)  $\sigma^2$ b)  $\lambda^2 \sigma^2$ c)  $\lambda + \sigma^2$ d)  $\lambda^2 + \sigma^2$
- 29. National Public Radio supports much of its programming with fund raisers. However, only small minorities of listeners denote to NPR. The Behaviour of non-contributing listeners is an example of
  - a. The miser effect
  - b. Free-rider problems
  - c. Excess burdens
  - d. Distribute inefficiency
- 30. A national consumer magazine reported the following correlations.
  - The correlation between car weight and car reliability is -0.30.
  - The correlation between car weight and annual maintenance cost is 0.20.

Which of the following statements are true?

I. Heavier cars tend to be less reliable.

II. Heavier cars tend to cost more to maintain.

III. Car weight is related more strongly to reliability than to maintenance cost.

- a. I only
- b. II only
- c. III only
- d. I and II only
- e. I, II, and III

# Section B

## Short Questions (10)

## (3 marks each)

### Please limit your answer to the space provided

1. A company's production function is given by  $P=2 L^{0.6} K^{0.4}$  where P is the total output generated using L units of Labor and K units of capital. Find the MP<sub>L</sub> and MP<sub>K</sub>.

2. "A negative equilibrium nominal rate of interest is impossible". Do you agree or disagree. Why?

- 3. Distinguish between the following terms:
  - a. Productive efficiency
  - b. Allocative efficiency

4. *'The Money Supply is the economy decreases if people are holding higher stocks of cash'.* Do you agree with the statement? Give reasons.

5. A firm produces output using two factors of production and a *Constant Returns to Scale* technology. Each factor is paid the value of its marginal product. Prove from first principles that the total payments to the two factors add up to the total value of the output.

6. An opaque bag contains 10 red and 10 blue balls. The balls are picked out with replacement. What is the probability that in the first three attempts, 2 blue balls and a 1 red ball is picked out in that order?

7. What are 'forward and backward linkages' in economic development? Give suitable examples.

8. A 95% confidence interval estimate for a population mean was computed to be (44.8 to 50.2). Determine the mean of the sample, which was used to determine the interval estimate.

9. Draw the payoff matrix of a game which has no pure strategy Nash equilibria.

10. The table below shows labour productivities, i.e., the quantity of output per unit of labour that each country can produce in the two industries, X and Y. Determine which country has

Output per worker							
Good/Country	Country A	Country B					
Good X	8	6					
Good Y	4	2					

a. Absolute advantage in good X.

b. Absolute advantage in good Y.

c. Comparative advantage in good X.

d. Comparative advantage in good Y.

### Section C

Passage Based Questions (2)

(Total 15 marks)

Do <u>either</u> one of Choice I or II and limit answers to the space provided after them. Please indicate the choice exercised in the space provided and number the answers.

## **Choice I**

Read the passage carefully and answer the questions that follow:

If the international media are to be believed the world, still struggling with recession, is faced with a potential new threat emanating from China. Underlying that threat is a rapid rise in credit provided by a "shadow banking" sector to developers in an increasingly fragile property market. Efforts to address the property bubble or reduce fragility in the financial system can slow China's growth substantially, aggravating global difficulties.

The difficulty here is that the evidence is patchy and not always reliable. According to one estimate, since the post-crisis stimulus of 2008, total public and private debt in China has risen to more than 200 per cent of GDP. Figures collated by the World Bank show that credit to the private sector rose from 104 per cent of GDP in 2008 to 130 per cent in 2010, before declining marginally in 2011. The evidence suggests that 2012 has seen a further sharp increase.

The problem is not merely the rapid rise in credit as a means to spur investment and growth. More significant is the rapid growth of lending by the 'shadow banking' system, at the forefront of which are off-balance sheet vehicles of banks to which deposits mobilised by offering relatively higher interest rates, through means such as wealth management products (WMPs), are diverted. Such loans are then provided to borrowers such as real estate developers to whom lending by the banks is being restricted. As of now WMPs are placed at around 10 per cent of total deposits in Chinese banks, but the rate of growth of this relatively new phenomenon is high. Further, banks are diverting these resources even to securities brokerages for management. Overall, central bank figures indicate that conventional bank loans have fallen from 95 per cent of total financing in 2002 to as low as 58 per cent in 2012.

Diversification away from bank lending as the main source of finance may be seen as a good thing. Further, 'shadow banking' institutions are not completely unregulated. The trusts that manage the WMPs are regulated. The problem is that such regulation is light and much less than applicable to the banks, especially with regard to the areas to and rate at which lending occurs. And the original sources of funds are the WMPs issued by the banks. This does lead to a significant degree of maturity mismatch, with the deposits being mobilised of much shorter duration than the investments made. The expectation clearly is that there would be adequate inflows of these 'deposits' to more than cover any withdrawals. That may be misplaced. Moreover, the investments to which these funds are being diverted are mostly

opaque, though there are strong reasons to believe that the favoured destinations are the property or financial markets.

Recently, evidence has been emerging that customers investing in WMPs, enticed perhaps by their association with known institutions and promises of guaranteed returns have found themselves making losses. Examples quoted include products sold by leading banks and investment companies such as China Construction Bank, CITIC and Huaxia Bank. The net result is an effort on the part of the government to increase regulation of shadow banking by requiring greater disclosure. The fear is that this may reveal much and force a contraction in the activity of these institutions operating in the shadows.

- 1) Elaborate on the nature of diversification occurring in the banking sector in China. (6 marks)
- 2) In the wake of the new challenges posed by such diversification, should there be tighter regulations on banking in the Chinese economy?

(9 marks)

# **Choice II**

Read the passage carefully and answer the questions that follow:

## **Space for Section C Answers:**

**Choice:** I / II (Please tick the appropriate one or cross out the other)