## Ph.D. Programme in Economics

Model Question Paper

## RESEARCH APTITUDE ASSESSMENT TEST

Time : 2 Hours
I. Part A: Multiple Choice Questions
$30 \times 1$ mark = $\mathbf{3 0}$ marks
Choose the correct Response viz., A, B, C, D or E for the Questions from 1-30 which carry ONE mark each. Please NOTE that an incorrect response will attract negative marking. (For Multiple Choice question with 5 options, $1 / 4$ th mark shall be deducted for an incorrect answer.)

1. The "compensated" demand curve shows
A) Only the income effect
B) Only the substitution effect
C) Both the income and substitution effects
D) The Giffen good demand curve
E) Inferior good demand curve
2. The line joining the points of consumer equilibrium resulting when only the consumer's income is varied is called the
A) Demand curve
B) Engel curve
C) Income-consumption curve
D) Price consumption curve
E) Supply Curve
3. When a monopolist charges different prices for every unit consumed, the type of price discrimination is
A) First degree
B) Second degree
C) Third degree
D) Fourth Degree
E) Fifth degree
4. The economist who explained the sequence of development from SOC to DPA as a selfpropelling, continuous and smooth path is
A) Nurkse
B) Domar
C) Hirschman
D) Schumpeter
E) Solow
5. The theory of 'technological dualism' discusses the problem of
A) Structural unemployment
B) Disguised unemployment
C) Under employment
D) Frictional unemployment
E) Cyclical unemployment
6. The GST rates which are currently proposed are
A) $5,12,18,28$
B) $4,8,16,24$
C) $5,14,18,26$
D) $4,10,15,20$
E) None of the above
7. For efficient provision of Private goods
A) $\mathrm{MRS}_{\mathrm{Ab}}=\mathrm{P}_{\mathrm{A}} / \mathrm{PB}_{\mathrm{B}}$
B) $\mathrm{MRS}_{\mathrm{A}}=\mathrm{MRS}_{\mathrm{B}}$
C) $\mathrm{MRS}=\mathrm{MRTS}$
D) $\mathrm{MRS}=\mathrm{MRT}$
E) None of the above
8. Systematic risk is
A) Diversifiable risk
B) Un-diversifiable risk
C) Macroeconomic risk
D) Both A and B
E) None of the above
9. An expansion of the financial system inducing economic progress is designated as
A) Demand following development
B) Supply leading development
C) Feedback development
D) Balanced growth
E) Stable economy
10. At what level of quantity output ( q ) the given profit function $\pi=1000 q-5 q^{2}$ is maximized?
A) $q=100$
B) $q=10$
C) $q=20$
D) $q=25$
E) $q=0$
11. If $\mathrm{E}(\mathrm{X})=4$ and $\mathrm{E}(\mathrm{Y})=2$ find $\mathrm{E}(2 \mathrm{X}-3 \mathrm{Y})$
A) 4
B) -2
C) 2
D) 16
E) 14
12. Which is the current base year for calculating CPI in India?
A) 2010
B) 2004
C) 2014
D) 2012
E) 2011
13. The most important source of domestic capital formation in India has been?
A) NRI deposits
B) Household savings
C) Public sector savings
D) Government revenue surpluses
E) Corporate savings
14. India's rank in 2016 Human Development Index is
A) 131
B) 136
C) 138
D) 140
E) 129
15. Fiscal deficit for 2017-18 pegged at $\qquad$ of GDP as per Union Budget 2017-18
A) $4.6 \%$
B) $4.2 \%$
C) $3.2 \%$
D) $3.8 \%$
E) $3.6 \%$
16. to $30 \ldots$

## Part - B

## II. Answer any NINE questions from the following in the sheets provided with the question paper:

1. Two firms have marginal costs of 10 .They face a market demand curve of $P=100-4 \mathrm{Q}$. The government imposes a tax of 10 rupees per unit sold. Determine the Cournot equilibrium quantity. Assume the tax will be paid by the consumer.
2. Differentiate between Absolute Convergence and Conditional Convergence
3. Explain the concept of impact, shifting and incidence of taxation
4. How is risk measured in the world of finance?
5. If the marginal propensity to save is $0.3-0.1 Y^{-\frac{1}{2}}$, and if the aggregate savings S is nil when income Y is 81 , find the saving function.
6. In a random sample of 400 adults and 600 teenagers who watched a certain television program, 100 adults and 300 teenagers indicated that they liked it. Test whether there is any significant difference between adults and teenagers regarding this program.
7. to $12 . . . .$.
