## RAMAKRISHNA MISSION VIDYAMANDIRA

(Residential Autonomous College affiliated to University of Calcutta)

## **SECOND YEAR [2015-18]**

B.A./B.Sc. THIRD SEMESTER (July – December) 2016 Mid-Semester Examination, September 2016

Date : 10/09/2016 **ECONOMICS (Honours)** 

Time: 11 am – 1 pm Paper: III Full Marks: 50

## [Use a separate Answer Book for each group]

## $\underline{Group-A}$

1.	Ans	swer <u>any one</u> question:	$[1 \times 5]$	
	a)	Describe, with the help of an example, the following terms:		
		i) Endowment ii) Allocation and iii) Feasible allocation		
	b)	What do you mean by certainty equivalence? Show Graphically and explain intuitively. Show that this certainty equivalence, say, C <sup>CE</sup> is always less than the expected wealth of a risk averse individual.		
2.	Ans	swer <b>any one</b> question :	[1×10]	
	a)	i) Show, with the help of a diagram, how Walrasian equilibrium is attained.	[7]	
		ii) State an explain the Walras Law.	[3]	
	b)	i) Show how one can derive the PPC from the contract curves of the production sector.	[5]	
		ii) How can one attain the general equilibrium condition in both production and consumption		
		sector? Explain.	[5]	
3.	Suppose there exists a finite set of consequences, such that, $\{c_1, c_2,, c_n\}$ & $\{c_1 < c_2 < < c_n\}$ , each			
	one of the consequences may occur in different states of the world (nature). Hence the consequences			
		are defined for n states of the nature. The uncertainty is regarding the states of the nature, as if,		
		which state of the nature will occur nobody knows, but can assume probabilistically the occurrence of the states of the nature, hence the probability distribution is for the final set of consequences		
	of the states of the nature, hence the probability distribution is for the final set of consequences, such that $\{p_1, p_2,, p_n\}$ .			
	a)	In this context, define what is lottery, $\underline{L}$ ? What is a degenerate lottery, $\ell$ ?	[2]	
	b)	What is a compound lottery?	[2]	
	c)	Show that a compound lottery L can be written in terms of degenerate lotteries $\{\ell_1, \ell_2,, \ell_n\}$	[-]	
	-,	with probabilities $\{p_1, p_2,, p_n\}$ , and is a point in an n dimensional probability space.	[2]	
	d)	Draw a two dimensional probability space, where you measure $p_1$ in the horizontal axis, and	[-]	
	u)	measure $p_3$ , in the vertical axis. Show, the location of degenerate lotteries $l_n$ , f or $n = 1, 2, 3$ and		
		locate the position of Compound Lottery L. Then show that the compound lottery		
		$L(\ell_1, \ell_2, \ell_3; p_1, p_2, p_3)$ can be expressed in terms of the simple lottery $L_1(c_1, c_2, c_3; p_1, p_2, p_3)$ .	[2]	
	e)	What is V.N.M utility function?	[2]	
		Or,		
	a)	Suppose, Satadru is an expected utility maximizer. He attaches utilities $U(1) = 1$ , $U(2) = 4$ and $U(3) = 6$ , for the monetary payoffs 1, 2 & 3 respectively. Assume also that monetary pay off 2		
		is certain, but monetary pay offs 1 & 3 are uncertain, and there is $50 - 50$ chance of getting		
		either one. Which of the two alternatives Satadru will choose and why?	[3]	
	b)	In the probability triangle diagram sketch the expected utility of Satadru, and calculate the		
		slope.	[2]	
	c)	Sangeeta, sister of Satadru, is another expected utility maximizer, but she attaches different utilities for some monetary pay offs 1, 2, 8, 3 are $\frac{11}{12} = 0$ , $\frac{11}{12} = 12$ and $\frac{11}{12} = 18$ . Which of		
		utilities for same monetary pay offs 1, 2 & 3 are, $U(1) = 9$ , $U(2) = 12$ and $U(3) = 18$ . Which of the two alternatives Sangeeta will choose and why, if monetary pay off 2 is certain, but		
		monetary pay offs 1 & 3 are uncertain, and the is $50 - 50$ chance of getting either one?	[3]	

Group - BAnswer **any one** question :  $[1\times5]$ a) Explain the factors which truly reflect the economic development of a country. b) What is Gender development Index? Answer **any one** question :  $[1\times10]$ a) Justify the 'Capability approach' towards economic development in any less developed country. b) Do you think that Human Development Index is a qualitatively different measure compared to other income based measures of development? Answer **any one** question :  $[1\times10]$ Distinguish between the concepts of economic growth and economic development. [4] a) i) ii) Why is it problematic to use PCY (Per Capita Income) as a measure of development? [6] Discuss the concept of HDI (Human Development Index) in detail. [4] b) i) ii) Explain graphically the concept of 'Low Level Equilibrium Trap' (LLET) [6]

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d) In the same probability triangle diagram sketch the expected utility of Sangeeta, and calculate

[2]

the slope.