M.B.A. (Banking & Finance) (Sem. III) (CBCS) Examination

October / November – 2018

Basics of Quantitative Techniques & Operation Research

Time : **3 Hours**]   [Total Marks : **70**

Instruction : All the questions carry equal marks.

1 What is the Importance of model building in Quantitative Techniques ? Explain Physical and Symbolic models with the help of suitable examples.

OR

1 Explain and illustrate the following principles of decision making :

(a) Laplace,   (b) Maximin,   (c) Maximax,

(d) Savage,   (e) Expectation.

2 What is a game theory ? Discuss its importance and major limitations in taking business decisions.

OR

2 Solve the following transportation problem and obtain the Total Cost :

Factory	Warehouses				Availability
	1	2	3	4	
1	8	8	5	12	7
2	6	9	11	9	7
3	10	15	6	13	10
4	6	8	7	8	6
5	11	10	11	13	5
6	8	14	5	12	6
Demand	9	10	8	14	

3   What is Operations Research (QT) ? Explain with the help of suitable examples how it will be helpful in taking business decisions.

<div align="center">OR</div>

3   Discuss the importance of networking techniques like CPM in project management.

4   Explain the various types of solutions that can be obtained for a model.

<div align="center">OR</div>

4   Draw a network diagram from the following details and calculate the earliest start (ES), earliest finish (EF), latest start (LS) and latest finish (LF) times of each activities :

Activity	$1-2$	$1-3$	$2-6$	$3-4$	$3-5$	$4-6$	$5-6$	$5-7$	$6-7$
Duration	4	6	8	7	4	6	5	19	10

5   Write short notes on : (any **two**)

    (1)   North-West Corner approach for Transportation Problem

    (2)   Decision support systems

    (3)   Decision Tree

———————