SET A

PGDM

Data Envelopment Analysis

DM-441/IB-420

Trimester –IV, End-Term Examination: September 2018

Time allowed: 2 Hours and 30 minutes

Max Marks: 50

Roll No: _____

Instruction: Students are required to write models, process, results and interpretations in answer booklet. They are also advised to submit soft copy to the invigilators.

Sections	No. of Questions to attempt		Marks
A	1 out of 1		20
B	2 out of 3		2*15=30
		Total Marks	**50**

Section A

1.   What is cost efficiency? Write the model in matrix notation? Find the cost efficiency and allocative efficiency of each DMU for the data set "retail.xls".

Section B

2. Develop the output oriented CCR model for the DMU B from the following set of data. Determine weights for each inputs and outputs using excel solver. Write dual model of the above developed CCR model.

DMU	Capital employed in million	Number of employees in thousand	Value added in million
A	6.8	1.8	1.6
B	2.4	1.2	0.4
C	12.6	2.6	2.3
D	18.7	3.8	3.4
E	22.4	4.2	4.3

3.   Enumerate typical inputs and outputs with their justification for performance measurement of a) Cricket team b) Railways c) Car manufacturers

4.   Forecast for each inputs and outputs based on slacks for the data set given in number 2.

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