

Name:	
Enrolment No:	

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, December 2018

Course: Marketing analytics	Semester: III
Programme: MBA BA	CC: MBBA866
Time: 03 hrs.	Max. Marks: 100

Instructions: The paper comprises two sections namely Section A & B. Both are compulsory.

SECTION A

The students are required to read carefully the HBS case ---“Deans’ Dilemma: Selection of students for the MBA program”. Also, students should note that some analysis work will be needed (Using R programming) for solving the case, therefore , the data sheet will be made available to them in the examination hall itself. As a part of your answer, you need to solve for the following questions:-

S. No.	Question	Marks	CO
Q 1	Write a brief synopsis of the case in not more than fifteen lines.	10	3
Q 2	Identify the variables that should be used for predicting whether or not a student will be placed or not.	5	1
Q 3	Develop a logistics regression model that can be used for predicting the probability of placing a student using only SSC percentage. Report important results and comment on the statistics obtained	10	1
Q 4	Using the model developed in response to question three above, calculate the probability that a student with 60 % will be placed. Also, what will be the probability if SSC percentage is 80% ?	10	1
Q 5	For the model developed in response to question three above, what would be the best cut-off probability that should be used for classification?	5	2,3
Q 6	Develop a logistics model by including all the appropriate parameters at 10% of significance. Comment on the important statistics obtained.	10	1
Q 7	For the model developed in response to question six above, what would the sensitivity and specificity be when the cut-off probability be 0.70 ? Discuss, whether Easwaran Iyer should use the cut-off probability of 0.7 in deciding whether a student should be admitted.	10	2
Q 8	What are your final recommendation to Easwaran Iyer for admitting students to MBA program?	10	2,3

SECTION B

Q 9	Discriminant analysis is in a way MANOVA reversed. Substantiate? Also mention the underlying hypotheses that must be met before applying a discriminant model.	15	1,2
Q 10	Give a detailed note on resource allocation perspective of marketing analytics. Provide suitable examples and models to implement such a perspective	15	1,3