Total N	No. of Questions : 5]
P803	SEAT No.:
	[5860]-317 [Total No. of Pages : 2
	S.Y.M.B.A.
SC-	-BA-03: ADVANCED STATISTICAL METHODS USING R
	(2019 Pattern) (Semester-III) (304 BA)
	2½ Hours] [Max. Marks: 50
1)	tions to the candidates: All questions are compulsory.
2)	Make appropriate assumptions wherever required.
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	49.
<i>Q1)</i> A ₁	nswer the following questions (Any Five) $[5\times2=10]$
a)	Define NULL and Alternate hypothesis.
b)	Define statistical modeling
c)	What is adjusted R ² in regression analysis?
d)	Explain Unlist () function.
e)	Explain aov () function.
f)	What is logistic regression.
g)	Define Predictive analytics.
h)	How many predictor variables must be used in multiple regression?
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(2) Ans	swer the following questions. (Any two). $[2\times5=10]$
a)	Compare Poisson distribution and binomial distribution.
b)	Describe test procedure for testing significance of Correlation coefficient.
c)	Explain Z test of hypothesis testing. Write the syntax and explain in detail.

Q3) Solve any one of the following.

 $[1 \times 10 = 10]$

- a) Consider the employee salary database and perform all types of descriptive analysis the data with the help of R programming code.
- b) Explain multiple regression with its two application.

Q4) Solve any one of the following.

[1×10=10]

- a) Explain dimension reduction techniques with example.
- b) Discuss techniques of performance evaluation of logistic regression model.

Q5) Solve any one of the following.

 $[1 \times 10 = 10]$

- a) Explain the concept of Time Series Discuss how time series is used in business forecasting.
- b) Describe linear Discriminant analysis (LDA). Write a brief outline of R code for the same.

