Enrollment No: _____ Exam Seat No:_____

C.U.SHAH UNIVERSITY

Winter Examination-2019

Subject Name: Research Methodology and Biostatistics
Subject Code: MRM301T **Branch: M.Pharm (Pharmaceutics, QA)**
Semester : 3 **Date : 13/11/2019** **Time : 02:30 To 05:30** **Marks : 70**

Instructions:
(1) Use of Programmable calculator & any other electronic instrument is prohibited.
(2) Instructions written on main answer book are strictly to be obeyed.
(3) Draw neat diagrams and figures (if necessary) at right places.
(4) Assume suitable data if needed.

Q-1 **Attempt the following questions:** **(20)**

a) Correlation
b) Quarantine
c) P values
d) F-ratio
e) Degree of freedom
f) Sample size
g) Cross over design
h) Autonomy
i) Students "t" test
j) Fatality

Attempt the following questions:

Q-2		**Attempt any two of following :**	**(20)**
	A	Describes various research processes with the help of flow chart.	**10**
	B	Write a note on chi square test and wilcoxan rank tests	**10**
	C	Describe diagnosis, treatment and control of disease in medical research.	**10**
Q-3		**Attempt any Seven of following :**	**(35)**
	A	Describe briefly vendor relationship in medical research.	**5**
	B	Write a note on record keeping as per CPCSEA guideline.	**5**
	C	Enumerate types of sample design.	**5**
	D	Discuss the ethical principles for medical research involving human subjects	**5**
	E	Write a note on transport of lab animals as per CPCSEA guideline.	**5**
	F	Discuss the important of review of literature in Research.	**5**
	G	Describe the crossover design.	**5**
	H	Write a note on coding in content of ANOVA.	**5**
	I	Write a note on online business practices in Medical Research	**5**