C. U. SHAH UNIVERSITY
Winter Examination-2021

Subject Name: Research Methodology and Biostatistics

Subject Code: MRM301T   **Branch: M.Pharm (Pharmaceutics, PQA)**

Semester: 3   Date: 13/12/2021   Time: 02:30 To 05:30   Marks: 75

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)	Write Criteria of Good Research.	**2**
	b)	Define: P value	**2**
	c)	Define: Degree of freedom	**2**
	d)	Define: Euthanasia	**2**
	e)	What is informed Consent? Explain in short.	**2**
	f)	What is placebo?	**2**
	g)	Explain term: Null hypothesis	**2**
	h)	Define: students "t" test	**2**
	i)	Explain in short: Conflicts of interest.	**2**
	j)	What are the goals of CPCSEA?	**2**

Attempt the following questions:

Q-2		**Attempt any two of following :**	**(20)**
	A	Write a short note on Declaration of Helsinki.	**10**
	B	Write a note on ANOVA.	**10**
	C	What is Research Methodology? Explain the step in scientific research process. Briefly explain about Review of Literature.	**10**
Q-3		**Attempt any Seven of following :**	**(35)**
	A	Briefly explain the principle involved in conducting Animal experiments.	**5**
	B	Features of Good Research Design.	**5**
	C	Write a note on Fatality.	**5**
	D	Write a note on Dropouts.	**5**
	E	Advantages and disadvantages of Non-Parametric test.	**5**
	F	What is meant by Research? Describe its objectives.	**5**
	G	What is sample size? Explain importance of sample size.	**5**
	H	What is the meaning of Referral, explain it.	**5**
	I	Explain in detail Random Sampling Method.	**5**