2054
M.E. (Computer Science and Engineering)
Second Semester
CS-8202: Research Methodology
(Common with ME Comp. Sci Cyber Security CSN 8201)

Time allowed: 3 Hours

Max. Marks: 50

NOTE: *Attempt __five__ questions in all, including Question No. I which is compulsory and selecting two questions from each Section.*

x-x-x

1. (a) What do you understand by Research? Give an example of a study which is NOT research.

    (b) Why is Research called a systematic process? Justify your answer.

    (c) Differentiate between Parametric and Non-Parametric tests giving suitable examples.

    (d) Contrast between ArXive and BioarXive.

    (e) What is a Checklist? Explain its various types.

    (5x2)

Section A

2. Enumerate the features of a good research design. Explain the different types of Questions used while framing a questionnaire stating their merits and demerits. **(10)**

3. Discuss any five methods / approaches of research in detail. **(10)**

4. Eleven college students were given a test in Bioinformatics. They were given a month's tuition and a second test was held at the end of it. Do the marks give evidence that the students have benefited by the extra coaching? (Value of t at 5% level for 10 d.f. is 2.23). **(10)**

Students	1	2	3	4	5	6	7	8	9	10	11
Marks in 1st test	23	20	19	21	18	20	18	17	23	16	19
Marks in 2nd test	24	19	22	18	20	22	20	20	23	20	18

Section B

5. Discuss the advantages and disadvantages of Research Gate. **(10)**

6. What do you mean by "Ethics in publishing"? Discuss the different ethical issues related to publishing. **(10)**

7. How is Latex different from MS-Word software? Briefly describe the features of Mendeley. **(10)**

x-x-x