M.Sc DEGREE EXAMINATION,APRIL 2019
II Year IV Semester
Clinical Trials and Data Mining

Time : 3 Hours **Max.marks :75**

Section A $(10 \times 2 = 20)$ Marks

Answer any **TEN** questions

1. What is the need for clinical trials?
2. Define control group and intervention group.
3. What do you mean by non randomised concurrent control studies?
4. Define unblinded trials.
5. Give an example for dichotomous response variable.
6. Define Interim analysis.
7. Define clinical data mining.
8. What is the purpose of classification model in data mining?
9. Distinguish between support and confidence in association analysis.
10. Define cluster analysis.
11. What are double blinded trials?
12. Define root node, internal node and terminal node of a decision tree.

Section B $(5 \times 5 = 25)$ Marks

Answer any **FIVE** questions

13. Give a brief note on ethics of clinical trials.
14. Describe briefly about cross over and factorial designs.
15. Discuss the reasons for Multicenter trials.
16. Explain the measures for accuracy of classifiers.
17. Describe the important characteristics of clusters.
18. Elaborate on different phases of clinical trials.
19. Explain briefly about the importance and different tasks of clinical data mining.

Section C $(3 \times 10 = 30)$ Marks

Answer any **THREE** questions

20. Explain in detail about selection, treatment schedule and evaluation of patients response in clinical trials.
21. Discuss the various methods of randomisation.
22. Explain the procedure to find the sample size for continuous response variables and repeated measures.
23. Explain in detail about any two types of classifiers.
24. Explain partitioning and hierarchical methods of cluster analysis.

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