

II B. Tech I Semester Supplementary Examinations, May - 2018
STATISTICS WITH R PROGRAMMING
(Com to CSE & IT)

Time: 3 hours

Max. Marks: 70

- Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B**)
2. Answer **ALL** the question in **Part-A**
3. Answer any **FOUR** Questions from **Part-B**
-

PART -A

1. a) What is variable scope? (2M)
- b) Explain about quote() function. (2M)
- c) Distinguish between max() and pmax() functions. (2M)
- d) Explain about R graphics devices. (3M)
- e) Explain normal distribution. (3M)
- f) Define random forest. (2M)

PART -B

2. a) Explain in detail about vectors in R. (7M)
- b) Discuss about matrices in R. (7M)
3. a) Describe quick sort implementation using recursion. (7M)
- b) Justify the following: "R functions are first-class objects". (7M)
4. a) Write R code for the following: (10M)
Three committees, of sizes 3, 4 and 5, are chosen from 20 people. What is the probability that persons A and B are chosen for the same committee?
- b) What are the uses of scan() function? Explain with examples. (7M)
5. a) Discuss about plot() and abline() functions with examples. (7M)
- b) Explain about two density estimates on the same graph. (7M)
6. a) Discuss about ANOVA. (7M)
- b) Explain in detail about Poisson distribution. (7M)
7. Explain the following: (7+7M)
 - a) Survival analysis
 - b) Poisson regression