

B.Tech I Year (R09) Supplementary Examinations May/June 2015

PROGRAMMING IN C & DATA STRUCTURES

(Common to all branches)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions

All questions carry equal marks

- 1 (a) Explain the three categories of programming languages.
(b) What is syntax error?
- 2 (a) Explain different basic data types in C with examples
(b) What is an identifier? What are the naming conventions used for identifiers in C?
- 3 (a) What are the different ways of passing arrays to functions?
(b) What is row major order? Explain with an example.
- 4 (a) What is the difference between malloc () and calloc ()?
(b) Write a program to compute the factorial of a given number using pointers.
- 5 (a) Define and show with an example self-referential structure.
(b) Explain the limitations of bit fields.
- 6 (a) List any four high level I/O operation functions with syntax.
(b) List the additional mode of operations on a file.
- 7 (a) Explain the advantages of linked list.
(b) Write a program implementing search in linked list.
- 8 (a) What are the alternative ways to improve the bubble sort?
(b) Distinguish between selection and exchange sort in detail.
