

S.D.E.

M.C.A. SEM - V : WINTER - 2017

SUBJECT: ELECTIVE – IV: EMBEDDED SYSTEM PROGRAMMING USING HIGH
LEVEL LANGUAGES

Day: **Friday**
Date: **15/12/2017**

Time: **10.00 A.M. TO 1.00 P.M.**
Max. Marks: 80

W-2017-4446

N.B.:

- 1) Attempt any **FIVE** questions from Section –I and any **TWO** questions from Section –II.
- 2) Figures to the right indicate **FULL** marks.
- 3) Answers to both the sections should be written in **SEPARATE** answer book.

SECTION-I

- Q.1** Explain Data structures in detail in C programming. (10)
- Q.2** Explain in detail structures and unions in C programming. (10)
- Q.3** Explain different memory management techniques used in Embedded C programming. (10)
- Q.4** What is importance of code optimization? Explain in detail different code optimization techniques. (10)
- Q.5** What are the Block devices? Explain in detail. (10)
- Q.6** Explain user mode & Kernel mode programming in detail. (10)
- Q.7** Write short notes on any **TWO** of the following: (10)
- a) J2ME architecture
 - b) Memory Management Techniques
 - c) Character devices

SECTION- II

- Q.8** Write a C program to collect student information (name, age, class) using structures in C programming. (Assume suitable data) (15)
- Q.9** Explain in detail linking assembly and C object files. (15)
- Q.10** Write a program to interface C code and assembly code with suitable example. (15)

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