Roll No. ☐☐☐☐☐☐☐☐☐☐☐☐☐☐   Total No. of Pages : 02

Total No. of Questions : 18

B.Tech.(CSE/IT) (2012 to 2017)   (Sem.–4)
SYSTEM PROGRAMMING
Subject Code : BTCS-405
M.Code : 56608

Time : 3 Hrs.   Max. Marks : 60

INSTRUCTION TO CANDIDATES :
1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.**
3. **SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.**

SECTION-A

Answer briefly :

1. What is the function of loader? Explain.

2. "*File manager function of the operating system manages the virtual memory*". True or False. Comment.

3. Explain the process of booting a machine.

4. What is purpose of system calls?

5. What are relocating loaders?

6. What are the basic features of system programming?

7. Explain conditional macro expansion.

8. What is linker?

9. What is Debugger?

10. What are the limitations of assemblers?

SECTION-B

11. List out the phases of compiler in detail with the help of diagram.

12. Explain the design of one pass assembler and multi pass assembler.

13. Write the advantage of dynamic linking. Write the absolute loader algorithm.

14. What are the three categories of editor's devices? Differentiate full screen editor and multi window editor.

15. Discuss in detail about debugging functions and capabilities.

SECTION-C

16. Discuss in detail about the conditional and recursive macro expansion.

17. Explain all the stages of intermediate code generation and code optimization techniques.

18. Elaborate case study of MS word, DOS editor and vi editor.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.