

**Total No. of Pages : 02**

**Total No. of Questions : 18**

**B.Tech.(CSE/IT) (2011 onwards) (Sem.-4)**

# SYSTEM PROGRAMMING

**Subject Code : BTCS-405**

**Paper ID : [A1187]**

**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. Define the term system programs. List any four system programs.
2. Explain in brief about OPTAB.
3. Write the advantages of two pass assembler over one pass assembler.
4. Explain the term macros in brief.
5. Explain in brief about code generation phase of compiler.
6. Explain the concept of linking in brief.
7. Explain in brief about DOS Editor.
8. What is code optimization?
9. Explain the role of Loaders.
10. What is the need of Debuggers? Explain.

### SECTION-B

11. Explain in brief about following :
  - a) Linkers
  - b) Assemblers
12. Explain the concept of recursive macro expansion with an example.
13. Write a detailed note on the lexical Phase of compiler.
14. Explain in detail about Line editor.
15. Describe in brief about various debugging techniques.

### SECTION-C

16. Write a detailed note on Single Pass assembler.
17. Explain in detail about various loading schemes.
18. Write a detailed note on full screen editor.