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

# **INSTRUCTIONS 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. Give the difference between BALR and USING.
- 2. What are the three main data structures used by our macro processor?
- 3. What do you mean by Static Linking?
- 4. Which amongst the one pass and two pass assembler is better and why?
- 5. What is Bootstrap loader? Explain its characteristics with examples.
- 6. What are the differences between Passes and Phases of compiler?
- 7. How do we differentiate between open subroutine and closed subroutines?
- 8. What does an assembler perform when it encounters LTORG assembler directive?
- 9. What is interpreter?
- 10. What do you mean by ambiguity of grammar?

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#### **SECTION-B**

- 11. Compare linking loader and linkage editor.
- 12. Explain in detail the lexical analysis phase of a compiler.
- 13. What is LEX used for? What is the difference between LEX and YACC?
- 14. What is debugging. Explain different approaches adopted by programmers for debugging?
- 15. Write short notes on:
  - a. Overlays
  - b. Scanning and parsing

### **SECTION-C**

- 16. Explain the two-pass assembler in detail with block diagram.
- 17. State and explain the algorithm for one pass macro processor.
- 18. What do you mean by text Editor? What are its features and discuss any two text editors in detail?

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.

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