

B.TECH SEM – V (2007 COURSE) (COMPUTER ENGG.) :
SUMMER - 2018
SUBJECT : SYSTEM PROGRAMMING

Day : **Monday** Time : **10.00 AM TO 01.00 PM**
Date : **21/05/2018** S-2018-2659 Max. Marks : 80

N. B. :

- 1) Q.No.1 and Q.No.5 are **COMPULSORY**. Out of the remaining questions attempt **ANY TWO** questions from each section.
 - 2) Answers to both the sections should be written in **SEPARATE** answer books.
 - 3) Use of non-programmable **CALCULATOR** is allowed.
 - 4) Figures to the right indicate **FULL** marks.
 - 5) Assume suitable data if necessary.
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SECTION – I

- Q1** a) Explain the concept of 'Semantic gap'. **[05]**
b) List and explain features of Macro facility **[05]**
c) Distinguish between Absolute loader and Relocating loader. **[04]**
- Q2** a) Explain the issues that pose challenges for the language processing activities. **[07]**
b) List and explain any three Language translators. **[06]**
- Q3** a) Define Macro processor. Illustrate the process of Macro expansion with suitable example **[07]**
b) List and explain Databases required for design of Pass-I of a Two pass Assembler. **[06]**
- Q4** a) Define Loader. Explain functions of Loader in detail. **[07]**
b) Distinguish between Static binding and Dynamic binding. **[06]**

SECTION – II

- Q5** a) Describe in detail significance of Intermediate code in design of a Compiler. **[05]**
b) Explain in brief Screen editor. **[05]**
c) Explain the term System call. **[04]**
- Q6** Define Code optimization. Describe it's need. Explain different types of Code optimization techniques. **[13]**
- Q7** a) Describe in detail working of Word processor. **[07]**
b) Describe in detail the working of Debug monitors. **[06]**
- Q8** Define Process Scheduling. Explain the need of process scheduling. List and explain various types of schedulers. **[13]**

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