

**300885(22)**

*APR-MAY*

**B. E. (Eighth Semester) Examination, 2020**

**(Old Scheme)**

**(AEI, Bio Tech., Chem., Civil, CSE, Elect., EEE, EI,  
ET&T, IT, Mech., Mining Metallurgy, Mechatronics  
Branch)**

**SOFTWARE TECHNOLOGY**

*Time Allowed : Three hours*

*Maximum Marks : 80*

*Minimum Pass Marks : 28*

*Note : Attempt all questions. Part (a) from each question is compulsory and contains 2 marks. Attempt any two parts from (b), (c) and (d) of each question.*

**Unit-I**

1. (a) Define assembler directive. 2
- (b) What do you mean by Memory model? 7

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- (c) Write in detail about assembler design process. 7
- (d) Explain various kinds of addressing modes and also discuss 1 source link. 7

### Unit-II

2. (a) What is Library Linking? 2
- (b) What do you mean by Loader? Discuss its types. 7
- (c) What is the need of Linker? How many passes it consist? Explain. 7
- (d) Explain PIC (Process Independent Code). 7

### Unit-III

3. (a) Define Microprocessor. 2
- (b) What do you mean by Macro? Explain nesting in macro. 7
- (c) Explain macro processing technique. 7
- (d) Explain design of 1-pass macro processor along with its flowchart. 7

### Unit-IV

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4. (a) What is Compiler? 2
- (b) Explain Lexical analyzer. Also explain Lexeme in detail. 7
- (c) Differentiate between intermediate and target code of compiler. 7
- (d) What is Optimizing Transformation? Explain about code optimization of compiler. 7

### Unit-V

5. (a) What do you mean by Text Editor? 2
- (b) What is Debugger? Explain context of debugger. 7
- (c) Write short note on : 7
- (i) Check pointer
- (ii) Reverse execution
- (d) Explain design of text editor. Also discuss about data structure for text sequence. 7