

**BACHELOR OF COMPUTER APPLICATIONS (BCA)  
(Revised)**

**Term-End Examination**

**01856**

**June, 2016**

**BCSL-022 - Set - 2 : ASSEMBLY LANGUAGE  
PROGRAMMING LAB**

*Time : 1 hour*

*Maximum Marks : 50*

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- Note :**
- (i) *There are two compulsory questions in this paper of 20 marks each. Rest 10 marks are for viva-voce.*
  - (ii) *Use any assembler or emulator of 8086 assembly language to run the programs.*
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- 1. Write and run a program using 8086 assembly language that interchanges the lower four bits of AL register with upper four bits. For example if AL register contains (in binary) 0110 0001 then after the program is run it will be changed to 0001 0110. The result of the operation is then stored in a memory location. **20**
  
- 2. Write and run a program using 8086 assembly language that finds the difference between corresponding elements of two byte arrays, of five elements each. Assume that arrays are stored in memory. The difference is also to be stored in a separate array in memory. The following example illustrates the working of program : **20**  

Array X in memory (in hexadecimal)	(51) <sub>h</sub>	(64) <sub>h</sub>	(27) <sub>h</sub>	(37) <sub>h</sub>
Array Y (in hexadecimal)	(11) <sub>h</sub>	(12) <sub>h</sub>	(13) <sub>h</sub>	(14) <sub>h</sub>
The expected result (in hexadecimal)	(40) <sub>h</sub>	(52) <sub>h</sub>	(14) <sub>h</sub>	(23) <sub>h</sub>

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