

00223

**B.Tech. AEROSPACE ENGINEERING
(BTAE)**

Term-End Examination

December, 2016

BAS-006 : COMPUTER FUNDAMENTALS

Time : 3 hours

Maximum Marks : 70

Note : (i) Attempt any seven questions.

(ii) All questions carry equal marks.

1. (a) Describe a computer system with the help of block diagram. **2x5=10**
(b) What is the difference between 'sorting a database file' and 'indexing a database file' ? What are the advantages and disadvantages of these two methods ?

2. (a) What is a mail merge operation ? What are files that you have to prepare for mail merge operation ? **2x5=10**
(b) What are the features available in fifth generation computers ?

3. (a) Draw a flow chart to input six numbers and print their arithmetic mean. **2x5=10**
(b) What are the limitations of a computer ?

4. (a) Determine the decimal equivalent of $(11001)_2$ **5x2=10**
 (b) Determine the octal equivalent of $(359)_{10}$
 (c) Determine the decimal equivalent of $(127662)_8$
 (d) Determine the hexadecimal equivalent of $(11001011)_2$
 (e) Determine the octal equivalent of $(2B6)_{16}$
5. (a) What is the difference between RAM and ROM? **2x5=10**
 (b) Discuss the functions of MS word.
6. (a) Explain the difference between "SAVE" and "SAVE AS". **2x5=10**
 (b) Describe in brief the uses of DBMS.
7. (a) Enlist different Input and Output devices.
 (b) Draw a sketch showing layout of a MS Excel worksheet. Explain the 'Sort' feature in MS Excel. **2x5=10**
8. (a) Write a C programme to calculate and print the roots of a quadratic equation $ax^2 + bx + c = 0$ **2x5=10**
 (b) Write a C programme to calculate and print the sum of the series, taking input as x and N .

$$\text{Sum} = 1 - x + \frac{x^2}{2} - \frac{x^3}{3} + \frac{x^4}{4} - \frac{x^5}{5} + \dots + \frac{x^N}{N}$$
