

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

**Term-End Examination**

00433

**December, 2018**

**BAS-006 : COMPUTER FUNDAMENTALS**

*Time : 3 hours*

*Maximum Marks : 70*

---

**Note :** Attempt any *seven* questions. All questions carry equal marks. Use of scientific calculator is permitted.

---

---

1. Describe in brief the different generations of computers. 10
  
2. Write a C program that gives the user an option of converting Fahrenheit to Celsius or Celsius to Fahrenheit temperature. The program carries out the conversion depending upon the user's choice. 10
  
3. (a) What is the meaning of the term 'volatile memory' ? Distinguish between volatile and non-volatile memory.
  
- (b) What is the difference between a keyword and an identifier ? Explain each with one example. 5+5

4. (a) Describe the three levels of data abstraction.
- (b) What are the Navigation and Directory control commands in Linux ? 5+5
5. (a) What are the functions performed by the ALU ? Is it an independent unit ? If not, which unit does ALU work in coordination with ?
- (b) Write various logical operations used in MS-Excel. Explain each with an example. 5+5
6. (a) Explain 'Field', 'Record', and 'Table' with respect to DBMS.
- (b) Define 'Spreadsheet'. Explain in brief about the various components of a spreadsheet. 5+5
7. (a) Write at least five distinct features of Linux and Windows operating systems.
- (b) Differentiate between 'RAM' and 'ROM'. Write different types of ROM. 5+5
8. (a) What is the importance of a primary key in a table ? Explain with a suitable example.
- (b) Explain in brief the various types of data used in a standard database. 5+5

9. (a) Determine the octal equivalent of the decimal number  $28_{10}$ .  $5 \times 2 = 10$
- (b) Determine the decimal equivalent of  $(10110011)_2$ .
- (c) Determine the binary equivalent of  $(231)_8$ .
- (d) Compute the multiplication of  $(111)_2$  by  $(101)_2$ .
- (e) Determine the decimal equivalent of  $(B14)_{16}$ .

10. Write a C program to print the first  $n$  natural numbers and their sum. 10
- (Take  $n = 200$ )
-