

Reg. No.

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First Semester B.C.A.4 Degree Examination, Nov./Dec. 2018
COMPUTER FUNDAMENTALS
(Regular and Repeater)

Time : 3 Hours

Max. Marks : 80

- Instructions :** 1) *All the three Sections are compulsory.*
 2) *Answer the questions of a Section together.*
 3) *Draw diagrams where necessary.*

PART – A

1. Answer the following questions :

(10×2=20)

- a) State the two categories of operations performed by ALU.
- b) What are the two main types of storage ?
- c) What is 'bit' and 'byte' ?
- d) Why computers use binary numbers instead of decimal number ?
- e) What is secondary storage ? How it differs from primary storage ?
- f) Why input/output devices are necessary for computer system ?
- g) State the units adopted for expressing :
 - i) Processor speed
 - ii) Memory capacity
- h) What is WYSIWYG facility wrt word processor ?
- i) Define operating system. Give two examples.
- j) What is icon wrt windows operating system ?

PART – B

Answer any four of the following :

(4×5=20)

2. Discuss five basic functions performed by computer system.
3. What is positional number system ? Explain various number system.
4. Draw neat diagram of magnetic disk and explain. State how data is organized on disk.
5. Draw a diagram to depict logical architecture of computer system and relationship among hardware, system software, application software and users. Explain briefly.
6. Explain (any one) :
 - i) Taskbar
 - ii) Display properties.

P.T.O.



PART – C

Answer **any four full** questions :

(4×10=40)

7. a) Draw a neat block diagram of digital computer and explain the function of each unit.
b) Briefly discuss any five characteristic of computer. (5+5)
8. a) What is binary arithmetic ? State the four rules in respect of
i) Binary addition ii) Binary multiplication.
b) What is non-positional number system ?
i) Convert the given decimal number $(125.75)_{10}$ to its equivalent binary number.
ii) Convert the given binary number $(1010101.101)_2$ to its equivalent decimal number. (5+5)
9. a) Draw a neat diagram illustrating role of input/output devices in computer system and explain.
b) Write note on access time w.r.t. magnetic disk. (5+5)
10. a) What is software ? Explain briefly types of software.
b) Write a note on (any one) :
i) Multiprogramming
ii) Time sharing system. (5+5)
11. a) Write the purpose and syntax of following commands (any five) :
i) cp
ii) cd
iii) mkdir
iv) rm
v) mv
vi) cat
b) Write note on (any one).
i) Control menu
ii) Managing folders and files. (5+5)
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