



Daffodil International University
Department of Computer Science and Engineering
Faculty of Science and Information Technology

Midterm Examination SPRING 2019

Course Code: CSE112 Course Title: Computer Fundamentals

Level : 1 Term: 1 Section: ALL

Instructor: ALL

Time: 1 hr 30 minutes [answer all questions]

Full Marks: 25

Part-A: Analytical:

Choose the right option and write the reason in the answer script

[6 X1.5=9]

- (1) The computer that processes both analog and digital data is called-
a)Analog Computer b)Digital Computer c)Hybrid Computer d)Mainframe Computer
- (2) Which unit holds data permanently-
a)Input Unit b)Secondary Storage Unit c)Output Unit d) Primary Storage Unit
- (3) Which of the following is not a programming language-
a) MS-Excel b) BASIC c) COBOL d) C++
- (4) Which of the following is not an operating system?
a) DOS b) Linux c) Windows d) Oracle
- (5) Operating System is a-
a)System Software b) Application Software c)Presentation Software d)Utility Software
- (6) Dot Matrix is a type of
a)Tape b)Printer c)Disk d)Bus

Part-B: Number System Conversion

[1 X 8 = 8]

- (a) Convert the binary number 110110111110101 to hex.
- (b) Convert the hex number ABC7 to binary.
- (c) Convert the binary number 110100110110001 to octal.
- (d) Convert 4.47 to binary.
- (e) Convert the decimal number 123 into binary.
- (f) Convert the octal number 176 to hexadecimal.
- (g) Convert the binary number 10110 to decimal.
- (h) Convert the hex number ABC to Octal.

Part-C: Number System Arithmetic

[1+1+1+2]

- (a) $1010 + 1101$
- (b) $1111 - 1010$
- (c) In hex, $2BFC + 54A7$.
- (d) Represent the following decimal in eight bit two's complement and do the addition, convert your answer back to decimal:

$$+5 + ^{-}7$$

Part-D: Imagination

[3]

*As a Computer Scientist, suddenly you came across a **social problem** which needs usage of **your computing skills** for the solution of the problem. If the problem is solved, this will bring huge opportunities to the users facing the problem. But you discovered that **you do not have that skills needed to solve the problem**. It is very important that the problem is solved.*

Think about this and write your plan on how to address this problem.