

**1 SEM TDC CAP G 1**

**2016**

( November )

**COMPUTER APPLICATION**

( General )

Course : 101

( **Computer Fundamentals** )

Full Marks : 80

Pass Marks : 32 (Backlog) / 24 (2014 onwards)

Time : 3 hours

*The figures in the margin indicate full marks  
for the questions*

1. Answer the following briefly :

1×8=8

- (a) What is the full form of BCD?
- (b) What is unicode?
- (c) What is topology?
- (d) Name one search engine.
- (e) What is DBMS?
- (f) Name two storage devices.
- (g) What is system software?
- (h) What is 4GL?

( Turn Over )

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2. Answer any *three* of the following :  $4 \times 3 = 12$

- (a) Write about different types of computer.
- (b) Describe the functions of operating system.
- (c) Write about Boolean algebra.
- (d) Write briefly about Web browsers.

3. Answer any *four* of the following :  $15 \times 4 = 60$

- (a) Find 1's and 2's complements of the following binary numbers :
  - (i) 1011
  - (ii) 10011
  - (iii) 000
  - (iv) 111
  - (v) 101.1
- (b) Convert the following :
  - (i)  $(82)_{10}$  into its binary equivalent
  - (ii)  $(1011.01)_2$  into decimal equivalent
  - (iii)  $(465)_8$  into decimal equivalent
  - (iv)  $(10110101)_2$  into its hexadecimal equivalent
- (c) Explain logic gates with the help of truth table and examples.
- (d) Write about signed/unsigned numbers. Write about adder circuits and flip-flops.

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- (e) Write about input and output devices with examples.
- (f) Write about computer network topologies.
- (g) Compare machine, assembly and high-level languages.

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