14371

B.A-B.Ed./B.Sc.-B.Ed. (4 Years) (For Batch 2011 & Onwads)/B.A./B.Sc. (First Semester) (For Batch 2021 to 2023 Only) EXAMINATION

COMPUTER FUNDAMENTALS

CS-11

Time : Three Hours   *Max. Marks :* $\begin{cases} \text{B.Sc.} : 40 \\ \text{B.A.} : 20 \end{cases}$

Note : Question No. **1** is compulsory. Attempt *Five* questions in all. Attempt the remaining *four* questions by selecting *one* question from each four Units. All questions carry equal marks.

1. (a) What is the base of octal numbers and how does it convert in binary ?

(b) What is the use of floating-point representation ?

(c) What is the full form of LAN and define LAN ?

(d) Give the difference of static RAM and dynamic RAM.

(e) What is cache memory and why is it used in computer systems ?

(f) Explain the concept of 'plug and play' in the context of peripheral drivers.

(g) Explain the difference between HDD and SSD as types of secondary memory.

Unit I

2. What do you mean by number system ?
Convert :

$$(F2C5)_{16} \rightarrow (.....)_2 \quad (.....)_8 \quad (.....)_{10}$$

$$(597.45)_{10} \rightarrow (.....)_{16} \quad (.....)_8 \quad (.....)_2$$

3. How data is represented in computer system ? Explain Binary-Coded Decimal (BCD) and its significance in digital systems.

Unit II

4. What do you mean by network topology ? Compare and contrast star, bus, and ring topologies in terms of reliability, cost and performance.

5. How does an extranet differ from an intranet and how can companies use it effectively ?

Unit III

6. What is unit of Computer Memory ? Explain the difference between PROM, EPROM and EEPROM.

7. What is Primary Memory ? Discuss the differences between cache memory, main memory (RAM) and secondary memory in terms of speed, cost and capacity.

Unit IV

8. What do you mean by peripheral devices ? Explain their role in computer systems.

9. Write short notes on the following :

   (a) Printer

   (b) Scanner

   (c) Joy Sticks

   (d) Web Camera.