

AS/2110

10778/NH

Total No. of sheet used : 01 Total No. of Questions: 09  
 Subject : Fundamentals of Information Technology  
 Class : BA/B.Sc. Part-I (Computer Science) (Semester-I)  
 Paper : BAP-101  
 Title of Paper : Fundamentals of Information Technology  
 Maximum Marks: 45 Time Allowed : 3 Hours

**Note:** Candidates are required to attempt two questions each from sections A and B of the question paper and the entire section C.  
 Use of non-programmable scientific calculator is allowed.  
 All questions carry equal marks.

#### SECTION A

- Q1. Define a computer? What are the characteristics of a computer? Draw a block diagram of computer and explain various components. 09
- Q2. What do you mean by memory? What are different types of memories? Discuss in detail. 09
- Q3. Write short note on the following
- a) System software 03
  - b) Operating system 03
  - c) Database 03
- Q4. What do you mean by high level language? What are salient features of high level language? 09

#### SECTION B

- Q5. What are various number systems you are familiar with? Explain the process of converting the octal number to decimal number and vice-versa with the help of an example. 09
- Q6. Define computer network? What are various types of computer networks? Discuss in detail. 09
- Q7. Write short note on the following
- a) M-commerce 03
  - b) Cloud technology 03
  - c) Web search engine 03
- Q8. What do you mean by information technology? What are the advanced trends in information technology? Discuss in detail. 09

#### SECTION C

- Q9. a) Give the features of 3<sup>rd</sup> generation of computers. 1.5
- b) What are the characteristics of dot matrix printers? 1.5
- c) Differentiate between compiler and interpreter. 1.5
- d) Subtract binary number (111010) from (10110) using 2's compliment. 1.5
- e) What are the uses of firewalls? 1.5
- f) What do you mean by virtual reality? 1.5