7. (*a*) Explain *three* parameters use to measure the performance of a computer system. 6

(*b*) What do you understand by ports and interfaces ? Explain any *three* types of ports. 4

8. Write short notes on the following terms (any *four*) : 10

(*i*) Cloud computing

(*ii*) Monitor

(*iii*) Anti-virus

(*iv*) BIOS

(*v*) Data Mining.

19/12/17 E

This question paper contains **4** printed pages]

Roll No. | | | | | | | | | | | |

S. No. of Question Paper : **7935**

Unique Paper Code : **62341101** **HC**

Name of the Paper : **Computer Fundamentals**

Name of the Course : **B.A. (P) Computer Science**

Semester : **I**

Duration : **3 Hours** Maximum Marks : **75**

(Write your Roll No. on the top immediately on receipt of this question paper.)

Question No. **1** is compulsory.

Attempt any *five* questions from Q. No. **2** to Q. No. **8**.

Parts of a question must be answered together.

1. (*a*) Define supercomputer. Give *two* examples of supercomputer. 3

(*b*) Give full form of the following abbreviations : 3

(*i*) PDA

(*ii*) ASCII

(*iii*) CMOS.

(*c*) Define a bit and a byte. What are the *two* key factors that characterize the memory ? 4

(*d*) Find 1's complement of the following numbers : 2

$(11000011.1101)_2$.

(*e*) Explain any *two* pointing devices with examples. 5

(*f*) Describe Cache Memory. 3

(*g*) Briefly explain e-library. 2

(*h*) What is an operating system ? Name any *two*. 3

2. (*a*) Differentiate between Microcomputer and Minicomputer with examples. 4

(*b*) Explain the main components of computer hardware with diagram. 6

3. (*a*) What is ROM ? Explain different types of ROM. 4

(*b*) Explain the memory hierarchy with diagram. 6

4. (*a*) Give differences between the following : 6

(*i*) Input unit and Output unit

(*ii*) Dot matrix printers and Daisy wheel printers

(*iii*) Hand-held scanners and flat-bed scanners.

(*b*) Describe touch screen with its working. 4

5. Convert the following : 10

(*i*) $(47.25)_8$ to $(?)_{10}$

(*ii*) $(675.125)_{10}$ to $(?)_2$

(*iii*) $(473.28)_{10}$ to $(?)_{16}$

(*iv*) $(AB.28)_{16}$ to $(?)_{10}$

(*v*) $(1111.0011)_2$ to $(?)_{10}$.

6. Perform the binary operations : 10

(*i*) $(111011.1101)_2 + (111.11011)_2$

(*ii*) $(1110.1101)_2 - (1001.1111)_2$.