



**International Islamic University Chittagong**  
**Department of Pharmacy**

B. Pharm (Hon's) Program

Final Examination

Spring Semester 2019

Course Code: **COMP-1101**

Course Title: **Computer Fundamentals**

Time: 2 hours 30 minutes

Full Marks: 50

*(Answer of separate groups should be given in separate scripts. Figures on right margin indicate marks)*

**Group A** *(Answer any two questions from the followings)* **Marks: 20**

1. a) What is computer memory? What are the differences between RAM and ROM. 1+3
- b) Write short notes on floppy disk and magnetic tape. 6
  
2. a) How does a LASER printer work? Explain the mechanism briefly. 4
- b) Write down the difference between HARDCOPY and SOFTCOPY. 2
- c) What is OMR? How does it work? 2
- d) What is Light pen? Why is it used? 2
  
3. a) Assume you are buying a PEPSI from a super shop. The seller of the shop uses a barcode reader. How does it work? Explain. 4
- b) Write down the TRUTH table of AND, OR, XOR gate with the symbols. 6

**Group B** *(Answer any three questions from the followings)* **Marks: 30**

4. a) What is an algorithm? What are the characteristics necessary for a sequence of instructions to qualify as an algorithm? 1+2
- b) What is software? Describe the application software. 3
- c) Suppose you have given three numbers A, B, C as input. Draw a flowchart to find the largest number among them also show the output. 4
  
5. a) Assume the scenario that you have to give 5 input numbers in a program and find out the largest one. Draw a flowchart in order to do so. 4
- b) Differentiate between: COMPILER, INTERPRETER, and ASSEMBLER. 6
  
6. a) What is computer network? What are the differences between LAN, MAN, WAN? 1+4
- b) What is network topology? Describe the Star and mesh topology with diagram. 1+4
  
7. a) How is DRUG discovered and developed in Pharmaceutical companies? How does Computer Science play a role for the discovery? 6
- b) Do you think hospital management system should be automated? Show reasons for your answer. 4