

ISLAMIC UNIVERSITY OF TECHNOLOGY (IUT)  
ORGANISATION OF ISLAMIC COOPERATION (OIC)

**Department of Computer Science and Engineering (CSE)**

SEMESTER EXAMINATION

DURATION: 1 Hour 30 Minutes

WINTER SEMESTER, 2014-2015

FULL MARKS: 50

**CSE 3171: Fundamentals of Computers**

Programmable calculators are not allowed. Do not write anything on the question paper.  
There are **4 (four)** questions. Answer any **3 (three)** of them.

Figures in the right margin indicate marks.

- What is computer? How do modern computers play a crucial role in every government agency? 5
- Draw the flow chart of information processing cycle and briefly explain how it involves one or more specific components of the computer. 6.66
- List five tasks a user may be responsible for, when working with a personal computer. 5
- What happens when you press a key on the computer's keyboard? Draw necessary figure. 5
- Briefly explain how an image is scanned. 5
- Describe the cause and effect of carpal tunnel syndrome. How can you avoid RSIs while working with your keyboard and mouse? 6.66
- What is dot Pitch? How should you use your monitor, if you want to avoid eyestrain? 6.66
- How do flat panel and CRT monitor differ? Which do you think better and why? 6
- What kind of resolution and speed can you expect from a good ink jet printer? If a printer is said to have a resolution of 600 dpi what does this mean? 4
- All modern computers come with some basic set of ports. These allow you to connect common devices to your computer. Write down the name and functionality of those standard computer ports. 6.66
- What is ASCII? Convert the following: 5
- 10000111 (Binary to Decimal)
  - 45750 (Decimal to Binary)
- Why do we need Cache Memory? How do L1, L2 and L3 Cache speed up the CPU in different way? 5