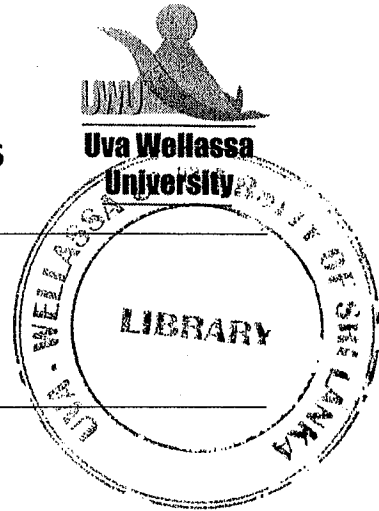


Uva Wellassa University of Sri Lanka
Faculty of Science and Technology
Department of Computer Science and Technology
100 level 2nd Semester Examination – Sept. / Oct. 2015
IIT 181-2 Computer Hardware Technology



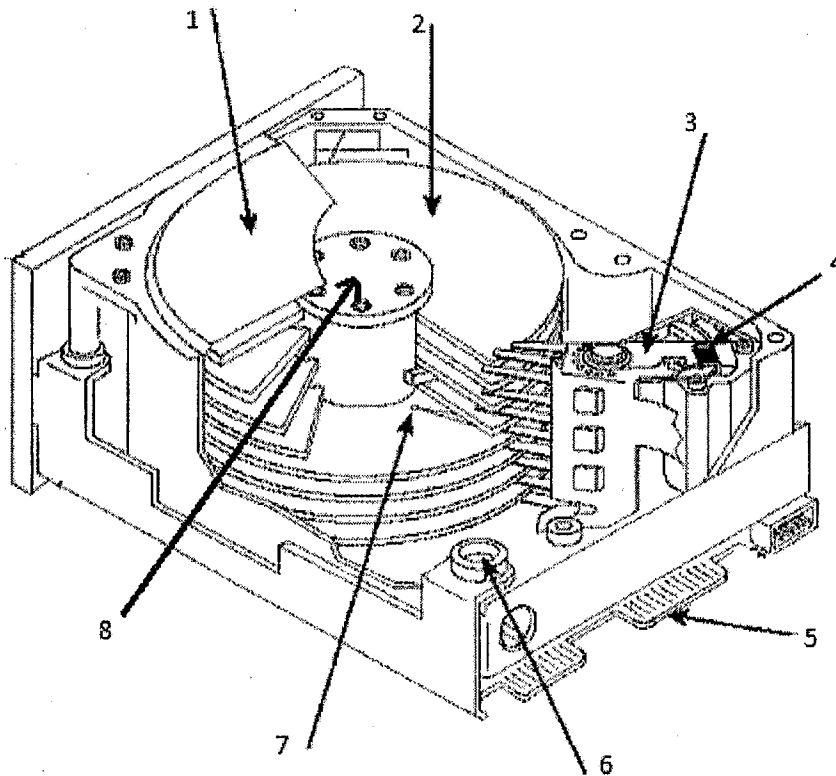
Instructions to candidates

Duration: Two (02) hours

Number of questions: Four (04)

Mark allocation: 100

1.
 - a. What is the difference between Super and personal computer?
 - b. What is Central Processing Unit and explain main parts of Central Processing unit.
 - c. How can you identify a hard disk drive failure?
 - d. What is known as disk partitioning?
 - e. Explain why the Static Electricity harmful for computer hardware equipment using examples.
 - f. Name the (1-8) parts of the hard disk drive given below,



2.
 - a. Describe important functions of the microprocessor.
 - b. Differentiate Static RAM and Dynamic RAM.
 - c. Describe the relationship between the CPU and the main memory.
 - d. Explain how the Arithmetic and Logic Unit (ALU) works using a suitable diagram.

(30 mark)

e. Briefly describe the following

- i. Control Unit
- ii. Registers

f. What is a cache memory and list three (03) ways of organizing a cache memory?

(20 mark)

3.

- a. What is a malware?
- b. List five (5) symptoms of virus attack.
- c. What is S.M.A.R.T technology?
- d. List five (5) S.M.A.R.T attributes
- e. List five (5) types of networking devices. Briefly explain each type.
- f. What is a Graphic Processing Unit (GPU)?

(20 mark)

4.

- a. Describe the functionality of AT and ATX power supplies.
- b. Describe the importance of having North Bridge and South Bridge in a mother board.
- c. Describe the steps of resetting the CMOS.
- d. What are post errors and describe how to identify post errors?
- e. When you turn on the computer you will get "one long beep, one short beep" in your computer. What would be the error? Describe briefly how do you resolve the above error?

(30 mark)