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**University Examinations 2014/2015**

STAGE THREE SPECIAL/SUPPLEMENTARY EXAMINATION FOR DIPLOMA IN INFORMATION TECHNOLOGY

**CIT 2225: PRINCIPLES OF COMPUTER SUPPORT AND MAINTENANCE**

**DATE: OCTOBER 2015 TIME: 11/2 HOURS**

**INSTRUCTIONS:** *Answer question* ***one*** *and any other* ***two*** *questions*

**QUESTION ONE (30 MARKS)**

1. Explain the identifiable methods when selecting a quality motherboard. (5 Marks)
2. List the general rules for memory installation. (5 Marks)
3. Explain the following considerations in selecting in an optical drive:
4. Interface.
5. Speed.
6. CD-RW Speed**.**
7. DVD Speed. (5 Marks)
8. What are some common and important items found in the BIOS? Give and explain any four. (4 Marks)
9. Your printer has refused to print. What are some of the things that you would check if you are having such problems? (4 Marks)
10. Give and explain the functions of any four tools you will require whenever doing computer repair. (4 Marks)
11. Describe a remedy for the following symptoms:
12. There is no power light and you cannot hear the cooling fan running. (1 Mark)
13. There is no power light but you hear the cooling fan running. (1 Mark)
14. The power light is on but there is no apparent system activity. (1 Mark)

**QUESTION TWO (20 MARKS)**

1. Briefly describe the POST process and indicate what performs this event. (5 Marks)
2. Explain three main reasons to consider when updating the BIOS. (5 Marks)
3. Describe the following CPU terminology:
4. Front side bus. (1 Mark)
5. Cache. (1 Mark)
6. Sockets and slots. (1 Mark)
7. Pins. (1 Mark)
8. Fans and heat sinks. (1 Mark)

**QUESTION THREE (20 MARKS)**

1. Describe the following memory types giving their relevant applications:
2. SDRAM. (1 Mark)
3. DDR SDRAM (1 Mark)
4. Rambus. (1 Mark)
5. EDO RAM. (1 Mark)
6. Burst-EDO RAM. (1 Mark)
7. Explain the following factors that will ensure a hard disk will work in a given system:
8. Form factor . (2 Marks)
9. Ultra Direct Memory Access (UDMA) speed rating. (1 Mark)
10. EIDA or SATA (2 Marks)
11. List and describe any five factors to consider when attempting to purchase the highest quality hard drive with respect to cost. (5 Marks)

**QUESTION FOUR (20 MARKS)**

1. Describe the different file systems used by Windows. (5 Marks)
2. Define the following terms:
3. Active partition. (1 Mark)
4. Basic disk. (1 Mark)
5. Dynamic disk. (1 Mark)
6. Extended partition. (1 Mark)
7. Logical drive. (1 Mark)
8. Describe RAID, particularly RAID 0 and RAID 1 levels. (5 Marks)