



UNIVERSITY OF COLOMBO, SRI LANKA

UNIVERSITY OF COLOMBO SCHOOL OF COMPUTING

DEGREE OF BACHELOR OF INFORMATION TECHNOLOGY (EXTERNAL)

*Academic Year 2006/2007 – 1<sup>st</sup> Year Examination – Semester I*

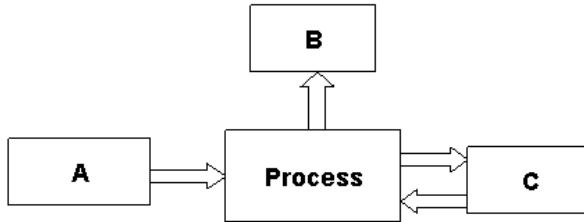
***IT1203: Computer Systems I***  
***Multiple Choice Question Paper***

**10<sup>th</sup> March, 2007**  
**(TWO HOURS)**

**Important Instructions :**

- The duration of the paper is 2 (two) hours.
- The medium of instruction and questions is English.
- The paper has **50 questions** and **8 pages**.
- All questions are of the MCQ (Multiple Choice Questions) type.
- All questions should be answered.
- Each question will have 5 (five) choices with **one or more** correct answers.
- All questions will carry equal marks.
- There will be a penalty for incorrect responses to discourage guessing.
- The mark given for a question will vary from 0 to +1 (*All the correct choices are marked & no incorrect choices are marked*).
- Answers should be marked on the special answer sheet provided.
- Note that questions appear on both sides of the paper.  
If a page is not printed, please inform the supervisor immediately.
- Mark the correct choices on the question paper first and then transfer them to the given answer sheet which will be machine marked. **Please completely read and follow the instructions given on the other side of the answer sheet before you shade your correct choices.**

- 1) The diagram below depicts the logical design of the components in a computer system.



What is the correct functionalities for A,B and C?

(a)	A- Store	B- Store	C- Output
(b)	A- Input	B- Store	C- Output
(c)	A- Input	B- Output	C- Store
(d)	A- Output	B- Store	C- Input
(e)	A- Store	B- Output	C- Input

- 2) Which of the following companies manufacture(s) microprocessors?

(a) Symantec	(b) AMD	(c) Athlon
(d) CoDuo	(e) Intel	

- 3) Which of the following is/are **not** (a) processor(s) compatible with the PC “IBM PC clone”?

(a) Ultra SPARK	(b) Power PC	(c) Intel Pentium M
(d) Intel Pentium IV	(e) AMD Thunderbird	

- 4) Which of the following is/are most commonly connected to the “mini plug” power connector?

(a) Hard Disk	(b) CD-R Drive	(c) DVD-ROM Drive
(d) Floppy Drive	(e) CPU Fan	

- 5) Which of the following devices require(s) a unique power connector that can only be connected to that device?

(a) ATA Hard Disk	(b) SATA Hard Disk	(c) ZIP Drive
(d) CD-ROM Drive	(e) DVD+RW Drive	

- 6) Which of the following is/are standard drive bay sizes in the ATX form factor?

(a) 3 ¼ inch	(b) 3 ½ inch	(c) 5 ¾ inch
(d) 5 ¼ inch	(e) 3 ¾ inch	

- 7) Which of the following is/are the main function(s) of the BIOS?

(a) Start-up	(b) CMOS
(c) Boot loader	(d) BIOS
(e) POST	

- 8) What is/are the function(s) carried out by the Boot-loader?
- |   |
|---|
| (a) It executes the operating system start-up files.<br>(b) It loads the MBR to the memory from the boot device.<br>(c) It loads the VBR from the boot device.<br>(d) It loads the VBR to the CMOS.<br>(e) It locates the MBR in the given order of the boot devices. |
|---|
- 9) What is/are the advantage(s) of CMOS memory?
- |  |
|--|
| (a) It requires no power to store data.<br>(b) It is a read only memory.<br>(c) It is extremely fast.<br>(d) It requires very little power relative to TTL (Transistor-Transistor Logic) memory types.<br>(e) It has very high capacity. |
|--|
- 10) Which of the following devices was/were developed by Charles Babbage?
- |                                    |  |           |
|------------------------------------|--|-----------|
| (a) ADA<br>(d) Differential Engine | (b) Punch card reader<br>(e) Analytical Engine | (c) ENIAC |
|------------------------------------|--|-----------|
- 11) What is the component used to categorize the Second Generation of modern day computers?
- |  |                               |         |
|--|-------------------------------|---------|
| (a) Microprocessors<br>(d) Transistors | (b) Vacuum Tubes<br>(e) VLICs | (c) ICs |
|--|-------------------------------|---------|
- 12) What is/are the difference(s) between a typical “Notebook PC” and a typical “Tablet PC”?
- |   |
|---|
| (a) A Notebook PC is lighter than a Tablet PC.<br>(b) Unlike a Notebook PC a Tablet PC is equipped with a Touch Sensitive screen and a Stylus.<br>(c) Tablet PCs have larger screens than Notebook PCs.<br>(d) Unlike a Notebook PC a Tablet PC cannot be connected to the network.<br>(e) Unlike a Notebook PC a Tablet PC can be carried in a shirt pocket. |
|---|
- 13) What does the acronym “PDA” stands for?
- |   |   |
|---|---|
| (a) Personal Diary Administrator<br>(c) Peoples Digital Assistant<br>(e) Personal Digital Assistant | (b) Peoples Daily Assistant<br>(d) Personal Digital Administrator |
|---|---|
- 14) Which of the following fall(s) into the category of Personal Computers and Microcomputers?
- |  |                                      |
|--|--------------------------------------|
| (a) Desktop Computers<br>(c) Mini Computers<br>(e) Network Servers | (b) Smart Phones<br>(d) Workstations |
|--|--------------------------------------|
- 15) Which of the following buttons is/are most likely to be on a Multimedia keyboard?
- |   |  |
|---|--|
| (a) Eject CD/DVD<br>(c) Launch Media Player<br>(e) Launch Web browser | (b) Launch Mail Client<br>(d) Fast-forward |
|---|--|

16) Which of the following statements is/are true with respect to Ergonomic keyboards?

- |   |
|---|
| (a) Ergonomic keyboard designs take user health into consideration.<br>(b) Ergonomic keyboards always have a Windows key.<br>(c) Ergonomic keyboards always have an Apple key.<br>(d) Ergonomic keyboards have illuminated keys.<br>(e) Ergonomic keyboards weigh less than standard keyboards. |
|---|

17) Which of the following is a/are pointer device(s)?

- |   |                             |
|---|-----------------------------|
| (a) Barcode readers<br>(c) Touch Pad<br>(e) Scanner | (b) Track ball<br>(d) Mouse |
|---|-----------------------------|

18) Which of the following is/are the computer device(s) equivalent to the human eye?

- |   |                                |
|---|--------------------------------|
| (a) Web Camera<br>(c) Gamepad<br>(e) Colour Printer | (b) Microphone<br>(d) Joystick |
|---|--------------------------------|

19) What is/are the method(s) most commonly used to enter text to a PDA?

- |  |  |
|--|--|
| (a) Windows Keyboard<br>(c) Ergonomic Keyboard<br>(e) Virtual Keyboard | (b) Optical Character Recognition<br>(d) Handwriting recognition |
|--|--|

20) What is the colour of the Stereo Audio Out port of a standard sound card?

- |                                    |                                   |
|------------------------------------|-----------------------------------|
| (a) Pink<br>(c) Blue<br>(e) Orange | (b) Light blue<br>(d) Light Green |
|------------------------------------|-----------------------------------|

21) What does CMYK stand for in Printer technology?

- |  |   |
|--|---|
| (a) Cyan-Magenta-Yellow-Black<br>(c) Clay-Maroon-Yellow-Blue<br>(e) Clay-Maroon-Yoke-Black | (b) Cyan-Maroon-Yoke-Blue<br>(d) Cyan-Magenta-Yellow-Blue |
|--|---|

22) What does the acronym DLP stand for with respect to multimedia projectors?

- |   |   |
|---|---|
| (a) Digital Light Projection<br>(c) Digital Light Processing<br>(e) Dual Layer Projection | (b) Day Light Projection<br>(d) Dual layer Processing |
|---|---|

23) Which of the following is an/are impact printer(s)?

- |                                  |   |                        |
|----------------------------------|---|------------------------|
| (a) Laser printer<br>(d) Plotter | (b) Bubble Jet printer<br>(e) Thermal Wax printer | (c) Dot-Matrix printer |
|----------------------------------|---|------------------------|

24) What is/are the difference(s) between a True-ROM and a PROM?

- (a) A True-ROM uses more battery power.
- (b) A True-ROM cannot be rewritten but a PROM can be rewritten over again.
- (c) Unlike a PROM a True-ROM is burnt during manufacture and not later.
- (d) A True-ROM is larger in size than a PROM.
- (e) Unlike a PROM a True-ROM can be erased using magnetism.

25) Which of the following ROMs is/are erased using Ultra Violet light?

- (a) EEPROM
- (b) EPROM
- (c) UVPROM
- (d) LPROM
- (e) PROM

26) Which of the following statements is/are true with respect to ROMs and RAMs?

- (a) Unlike RAMs, ROMs are not randomly accessible.
- (b) Unlike ROMs, RAMs lose their data once the power is turned off.
- (c) ROMs store data as analog signals.
- (d) ROMs need frequent refreshing.
- (e) The COMS is a type of RAM.

27) Which of the following technologies is/are used for Processor Cache memory?

- (a) EEPROM
- (b) SRAM
- (c) DRAM
- (d) RIMM
- (e) DDR SDRAM

28) Which of the following memory is/are referred to as the "Hyper Page mode" RAM?

- (a) SRAM
- (b) EDORAM
- (c) FPRAM
- (d) DDR2 SDRAM
- (e) RDRAM

29) Which of the following is a/are magnetic storage device(s)?

- (a) Zip Disk
- (b) Jaz Drive
- (c) Super Disk
- (d) Memory Stick
- (e) CF memory

30) A hard disk has the following configurations.

Number of cylinders = 10240  
Number of heads = 10  
Number of platters = 5  
Number of sectors per cylinder = 1024  
Capacity per sector = 512 bytes  
Speed = 5400 rpm

What is the capacity of this hard disk?

- (a) 49.4 GB
- (b) 27 GB
- (c) 300 GB
- (d) 9.5 GB
- (e) 50 GB

31) What is the technology that is used to store over 27GB of data on a DVD?

- (a) Blue Book
- (b) Green Book
- (c) Red-ray
- (d) Blu-ray
- (e) Green-ray

32) What does DVD stand for with respect to optical media technology?

- |                            |                       |
|----------------------------|-----------------------|
| (a) Digital Video Disc     | (b) Data Video Disc   |
| (c) Data Versatile Disk    | (d) Double Video Disc |
| (e) Digital Versatile Disc |                       |

33) Which of the following is a/are Compact Disc (CD) standard(s)?

- |           |            |          |
|-----------|------------|----------|
| (a) CD-DA | (b) CR-R   | (c) CD+R |
| (d) CD+RW | (e) CD-ROM |          |

34) Which of the following is/are read as a binary “1” by a CD Drive?

- |  |
|--|
| (a) A reflection   |
| (b) A transition from no-reflection to a reflection                      |
| (c) A transition from a reflection to no-reflection                      |
| (d) No-reflection  |
| (e) A transition from reflection to no-reflection and back to reflection |

35) Which of the following ports could a VGA card be connected to?

- |          |                 |         |
|----------|-----------------|---------|
| (a) ISA  | (b) PCI         | (c) AGP |
| (d) EISA | (e) PCI-Express |         |

36) Which of the following ports could a Sound card be connected to?

- |          |                 |         |
|----------|-----------------|---------|
| (a) ISA  | (b) PCI         | (c) AGP |
| (d) EISA | (e) PCI-Express |         |

37) What is the latest version of AGP technology?

- |                     |                     |                     |
|---------------------|---------------------|---------------------|
| (a) AGP Version 3.0 | (b) AGP Version 4.0 | (c) AGP Version 8.0 |
| (d) AGP Version 8x  | (e) AGP Version 16x |                     |

38) Consider the following device.



Which of the following interfaces can the device be connected to?

- |             |             |              |
|-------------|-------------|--------------|
| (a) USB 1.1 | (b) USB 2.0 | (c) FireWire |
| (d) EIDE    | (e) SATA    |              |

39) Consider the following symbol.



What port is identified by the above symbol?

- |             |             |              |
|-------------|-------------|--------------|
| (a) USB 1.1 | (b) USB 2.0 | (c) FireWire |
| (d) EIDE    | (e) SATA    |              |

40) What is the maximum number of devices that can be generally connected to a single USB hub at one instance?

- |         |         |       |
|---------|---------|-------|
| (a) 2   | (b) 4   | (c) 8 |
| (d) 127 | (e) 512 |       |

41) Which of the following is a/are type(s) of Operating System(s)?

- |                                   |
|-----------------------------------|
| (a) Single User/Single Tasking OS |
| (b) Single User/Multi Tasking OS  |
| (c) Multi User/Single Tasking OS  |
| (d) Multi User/Multi Tasking OS   |
| (e) Real-Time OS                  |

42) Which of the following is an/are Embedded Operating System(s)?

- |                |                         |                |
|----------------|-------------------------|----------------|
| (a) Windows CE | (b) Fedora Linux for PC | (c) Symbian OS |
| (d) Windows Me | (e) Windows XP Embedded |                |

43) Which of the following is/are utility Software?

- |  |                                 |
|--|---------------------------------|
| (a) Spreadsheet software               | (b) Desktop Publishing software |
| (c) Compression software               | (d) Virus Guard software        |
| (e) Human Resource Management software |                                 |

44) Which of the following devices broadcast(s) the data received from one node to all other nodes connected it?

- |            |             |            |
|------------|-------------|------------|
| (a) Server | (b) Gateway | (c) Router |
| (d) Switch | (e) Hub     |            |

45) Which of the following statements accurately describe(s) a “Wi-Fi Hot Spot”?

- |  |
|--|
| (a) The area covered by a Wi-Fi access point                 |
| (b) The passenger terminal of an airport                     |
| (c) An area of 100 meters radius from any Wi-Fi device       |
| (d) An area of 100 meters radius from the Wi-Fi access point |
| (e) An area covered by any Wi-Fi device                      |

46) What does the acronym ADSL stand for with respect to Networking?

- |  |
|--|
| (a) Asynchronous Data Service Link<br>(b) Asymmetric Digital Service Line<br>(c) Asynchronous Digital Subscriber Line<br>(d) Asymmetric Digital Subscriber Line<br>(e) Analog Digital Service Line |
|--|

47) Consider the following image.



What is the tool most suited to fix the screws with a head shape displayed in the above image?

- |                     |                            |                      |
|---------------------|----------------------------|----------------------|
| (a) Hex Screwdriver | (b) Needle Nose Pliers     | (c) Torx Screwdriver |
| (d) Tweezers        | (e) Flat Blade Screwdriver |                      |

48) Consider the following tool.



What is the above tool?

- |                        |                              |                |
|------------------------|------------------------------|----------------|
| (a) IC Extraction tool | (b) Tweezers                 | (c) Multimeter |
| (d) Needle Nose pliers | (e) Electro Static Discharge |                |

49) Which of the following can a Multimeter test?

- |                 |              |                |
|-----------------|--------------|----------------|
| (a) Temperature | (b) Pressure | (c) Continuity |
| (d) Resistance  | (e) Voltage  |                |

50) Which of the following components need(s) to be taken into consideration when upgrading a processor?

- |                 |                  |                 |
|-----------------|------------------|-----------------|
| (a) Motherboard | (b) Sound card   | (c) Main memory |
| (d) Hard disk   | (e) CD-ROM drive |                 |

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