Session : January 2008

Programme : Diploma In Mass Communication (DMC)

Course : CSC 178 : Information Technology Principles

Date of Examination : April 17, 2008

Time : 4.00pm – 7.00pm  Reading Time: Nil

Duration : 3 Hours

Special Instructions :

Section A: Multiple Choice questions. Answer ALL the questions.

Section B: Answer any FOUR (4) questions.

IMPORTANT NOTE : THIS PAPER SHOULD NOT BE TAKEN OUT OF THE EXAMINATION HALL

Materials permitted : Nil

Materials provided : OMR Sheets

Examiner (s) : Mr. Victor Raj, Ms. Pawani and Mr. Tang Yang Tze

Moderator : Ms. Premyilla Jeremiah

This paper consists of 11 printed pages, including the cover page.
Section A

Instructions: This section consists of FORTY (40) questions carrying 40 marks. Answer ALL questions in the OMR sheet provided.

1. A(n) ____ is a computer small enough to fit in one hand.
   A. PDM
   B. uPX
   C. LPM
   D. uPC
   E. PC

2. Resembling a letter-sized slate, the ____ PC is a special type of notebook computer that allows users to write or draw on the screen.
   A. Tablet
   B. Letter
   C. Slate
   D. Matrix
   E. all of the above

3. With a(n) ____, users write on the screen or issue instructions to a Tablet PC, for example, by tapping on the screen.
   A. graphic tool
   B. stylus
   C. digital pen
   D. keypad
   E. keyboard

4. As smart phones and PDAs continue a trend of offering similar functions, it is becoming increasingly difficult to differentiate between the two devices; this trend is known as ____.
   A. indexing
   B. coalescence
   C. concatenation
   D. convergence
   E. revolution
5. Some manufacturers refer to PDAs and smartphones simply as ____.
   A. laptops
   B. pocket devices
   C. mobile Macs
   D. operating systems
   E. handhelds

6. ____ software is software that allows users to draw pictures, shapes, and other graphical images with various on-screen tools such as a pen, brush, eyedropper, and paint bucket.
   A. Photo editing
   B. CBT
   C. DTP
   D. Paint
   E. None of the above

7. Audio editing software usually includes ____, which are designed to enhance audio quality.
   A. clips
   B. filters
   C. matrices
   D. subwoofers
   E. soundtracks

8. Personal ____ software is software that helps home and small business users create newsletters, brochures, advertisements, postcards, greeting cards, letterhead, business cards, banners, calendars, logos, and Web pages.
   A. CAD
   B. CAM
   C. WBT
   D. CBT
   E. DTP

9. Personal ____ software is software that includes various simplified tools, tailored to meet the needs of the home and small business users, to draw pictures, shapes, and other images.
   A. photo editing
   B. Web authoring
   C. multimedia
   D. paint/image editing
   E. all of the above
10. Application software often includes an image ____ , which is a collection of clip art and photographs.
   A. master file
   B. column
   C. gallery
   D. clipset
   E. map

11. ____ refers to memory chips storing permanent data and instructions.
    A. ROM
    B. RAM
    C. PRAM
    D. MRAM
    E. DRAM

12. A(n) ____ chip is a blank ROM chip onto which a programmer can write permanently.
    A. EEPROM
    B. PROM
    C. CMOS
    D. CMIS
    E. none of the above

13. A variation of the PROM chip, called a(n) ____ chip, allows a programmer to erase the microcode with an electrical signal.
    A. CMOS
    B. BIOS
    C. EEPROM
    D. CPROM
    E. none of the above

14. Some RAM chips, flash memory chips, and other types of memory chips use ____ technology because it provides high speeds and consumes little power.
    A. EEPROM
    B. CPROM
    C. BIOS
    D. CMIS
    E. CMOS
15. ___ time is the amount of time it takes the processor to read data, instructions, and information from memory.

A. Access  
B. Meter  
C. Processing  
D. Connection  
E. Memory  

16. A(n) ___ scanner works in a manner similar to a copy machine except it creates a file of the document in memory instead of a paper copy.

A. drum  
B. baseline  
C. roller  
D. flatbed  
E. all of the above  

17. Many companies use OCR characters on a(n) ___ document, which is a document that is returned to the company that creates and sends it.

A. flip  
B. inverse  
C. report  
D. turnaround  
E. turnabout  

18. ___ is a technology that reads hand-drawn marks such as small circles or rectangles.

A. OMR  
B. TCR  
C. OCR  
D. MICR  
E. RFID  

19. A(n) ___ is an identification code that consists of a set of vertical lines and spaces of different widths.

A. RFID  
B. OCR  
C. bar code reader  
D. turnaround  
E. bar code
20. Instead of reading or scanning data from a source document, a(n) ____ device obtains data directly at the location where the transaction or event takes place.
   A. transmission
   B. data collection
   C. scanning
   D. recognition
   E. none of the above

21. With ____ printing, a computer or other device transmits output to printer via radio waves.
   A. RF
   B. mobile
   C. Bluetooth
   D. infrared
   E. microwave

22. A(n) ____ printer forms characters and graphics on a piece of paper without actually striking the paper.
   A. non-impact
   B. dot-matrix
   C. shuttle-matrix
   D. line
   E. impact

23. A(n) ____ printer is a type of non-impact printer that forms characters and graphics by spraying tiny drops of liquid ink onto a piece of paper.
   A. shuttle-matrix
   B. line
   C. ink-jet
   D. laser
   E. all of the above

24. A(n) ____ printer generates images by pushing electrically heated pins against heat-sensitive paper.
   A. plotter
   B. label
   C. large-format
   D. stylus
   E. thermal
25. A(n) _____ printer generates rich, non-smearing images by using heat to melt colored wax onto heat-sensitive paper.
   A. shuttle-matrix
   B. plotter
   C. thermal wax-transfer printer
   D. line
   E. mobile

26. The process of writing on an optical disc is called _____.
   A. ripping
   B. loading
   C. lasering
   D. saving
   E. none of the above

27. The process of copying audio and/or video data from a purchased disc and saving it on digital media is called _____.
   A. ripping
   B. loading
   C. lasering
   D. burning
   E. saving

28. A mini-DVD that has grown in popularity is the _____, which has a diameter of about 2.4 inches and can store up to 1.8 GB of games, movies, or music.
   A. UMB
   B. UMD
   C. UMX
   D. UMC
   E. UMU

29. BD-R and ____ are competing high-capacity DVD-recordable formats.
   A. DD DVD-R
   B. HD DVD-R
   C. CD DVD-R
   D. UMD DVD-R
   E. all of the above
30. ___ access means that a device can locate a particular data item or file immediately, without having to move consecutively through items stored in front of the desired item or file.
   A. Master
   B. Sequential
   C. Direct
   D. Tape
   E. Quick

31. A disk ___ is a utility that reorganizes the files and unused space on a computer’s hard disk so the operating system accesses data more quickly and programs run faster.
   A. manager
   B. defragmenter
   C. organizer
   D. OS
   E. cleanup

32. A(n) ___ utility is a utility that compiles technical information about a computer’s hardware and certain system software programs and then prepares a report outlining any identified problems.
   A. symbian
   B. operational
   C. diagnostic
   D. analytic
   E. performance

33. The term ___ refers to several single user operating systems developed by Microsoft in the early 1980s for personal computers.
   A. UNIX
   B. Mac OS X
   C. LINUX
   D. DOS
   E. Windows

34. ___ is a fast, reliable Windows operating system, providing quicker startup, better performance, and a simpler visual look than previous Windows versions.
   A. Windows XP
   B. Windows ME
   C. Windows Mobile
   D. Windows CE
   E. Windows Vista
35. _____ is an open source multitasking operating system designed for smart phones.
   A. Mac OS X
   B. Solaris
   C. Netware
   D. Google OS
   E. Symbian OS

![SQL query](image)

**Figure 1**

36. As shown in Figure 1, _____ is a popular 4GL query language that allows users to manage, update, and retrieve data in a relational DBMS.
   A. SQL
   B. BASIC
   C. RPG
   D. COBOL
   E. none of the above

37. _____ is a simple, interactive problem-solving language developed by John Kemeny and Thomas Kurtz.
   A. FORTRAN
   B. BASIC
   C. COBOL
   D. RPG
   E. PASCAL

38. A(n) _____ is a series of statements that instructs an application how to complete a task.
   A. applet
   B. script
   C. micro
   D. control
   E. macro
39. Similar to an applet, an ActiveX ____ is a small program that runs on the client computer instead of the server.

A. script  
B. snippet  
C. macro  
D. control  
E. none of the above

40. ____ is a set of object-oriented technologies by Microsoft that allows components on a network to communicate with one another.

A. ActiveX  
B. Tcl  
C. Rexx  
D. Perl  
E. All of the above

**Section B**

**Instructions:** This paper consists of SIX (6) questions. Answer any FOUR (4) questions in the answer booklet provided. All questions carry equal marks.

**Question 1**

(a) Explain in detail each of the following computer categories:

(i) Server

(ii) Mainframe

(iii) Supercomputer

(9 marks)

(b) Define each of the following categories of software:

(i) Packaged

(ii) Custom

(iii) Web-based

(6 marks)

**Question 2**

(a) Explain what personal finance software is, and state how it differs from accounting software.

(6 marks)

(b) List any FIVE (5) different Excel Mathematical functions along with their arguments and purpose.

(5 marks)
(c) Briefly discuss what a note taking software is and how it is used. (4 marks)

Question 3

(a) List and describe the THREE (3) types of RAM. (9 marks)

(b) Differentiate between mechanical mouse and optical mouse. (6 marks)

Question 4

(a) Identify and discuss the FOUR (4) basic categories of output. (12 marks)

(b) What is a multifunction peripheral? State ONE (1) advantage and ONE (1) disadvantage of the multifunction peripheral. (3 marks)

Question 5

(a) Explain the difference between perpendicular and longitudinal recording. (4 marks)

(b) Explain the functions of utility programs in a computer system. (1 mark)

(c) Identify and describe any FIVE (5) common utility programs. (10 marks)

Question 6

(a) Define the following terms:

(i) Booting
(ii) Warm boot
(iii) Cold boot (3 marks)

(b) Explain the SEVEN (7) steps that take place during a cold boot on a PC running Windows Vista. (8 marks)

(c) Discuss any TWO (2) examples of multimedia authoring software. (4 marks)

~The End~

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