

國立台中教育大學 95 學年度大學日間部轉學招生考試

多媒體設計概論試題 適用學系：數位內容科技學系

一、問答題（每題 15 分，共 60 分）

1. 多媒體的編輯軟體可分為卡片式(Card-based)，圖像式(Icon-based)，時間式(Timeline-based)及語言式(Language-based)四種，請分別說明之，並舉出相對應的多媒體編輯軟體名稱？
2. 影像格式中有點陣式及向量式，請分別舉出此兩種常見的影像編輯軟體，每一種至少二個。
3. 視訊的訊號格式可分為類比式及數位式兩種，請分別說明之。
4. 請舉例說明，進行多媒體設計時，如何選擇圖片來源？如何處理圖片？

二、選擇題（每題 2 分，共 40 分）

1. 下列何者視訊格式已被取消？
(1) MPEG-1 (2) MPEG-2 (3) MPEG-3 (4) MPEG-4
2. 下列何者可以幫助電腦處理 3D 影像所需的特殊計算用電腦晶片？
(1) SD (2) DDRAM (3) VRAM (4) SRAM
3. 下列何者是網際網路通訊協定？
(1) DNS (2) PPPOE (3) TCP/IP (4) DLLs
4. Action Script 為下列何者之程式化語言？
(1) Adobe Studio
(2) Macromedia Director
(3) Flash MX
(4) MAYA
5. 下列何者是視窗最有效率的格式？
(1) .bmp (2) .jpg (3) .gif (4) .tif

6. 下列何者是從電子郵件伺服器上接收郵件的通訊協定？
(1) PPP (2) POP (3) SMTP (4) LAN
7. 下列何者是從電子郵件伺服器上發送郵件的通訊協定？
(1) PPP (2) POP (3) SMTP (4) LAN
8. 下列何者非網頁瀏覽器？
(1) Netscape (2) Explorer (3) Safari (4) NetGuide
9. 下列何者是以時間為基礎的視訊或多媒體產品的大綱或描述？
(1) Time Slider (2) Storyboard (3) Videodisc (4) RGB
10. 下列何者是連結電腦與周邊的高速序列技術？
(1) Fire Wire (2) USB (3) PCI (4) PS2
11. 燒錄機中標示的『8/8/24』規格主要意義為何？
(1) 8 倍讀取，8 倍抹寫，24 倍寫入
(2) 8 倍抹寫，8 倍讀取，24 倍寫入
(3) 8 倍寫入，8 倍抹寫，24 倍讀取
(4) 以上皆非
12. 下列敘述何者不正確？
(1) MP3 壓縮比率大約 1：10 的音樂聲音檔
(2) MIDI 的特點是容量大音質佳
(3) WAV 式一種波形音訊常用的檔案格式
(4) RM 是一種 Real player 所可播放的影音格式
13. 目前國際間對視訊的處理有哪三種標準？
(1) SECAM,IBM,DIGITAL
(2) NTSC,PAL,SECAM
(3) SECAM,MICROSOFT,INTEL
(4) SECAM,NTSC,ACER
14. 下列何者是 Quick Time 軟體播放的軟體格式？
(1) mpg (2) avi (3) mov (4) asf
15. 以 8 位元的解析度來記錄一分鐘的演說（聲音取樣 22KHz/s），需要多大的記憶體？
(1) 480000 位元

- (2) 480000 位元組
- (3) 1320000 位元
- (4) 1320000 位元組

16. 一幅 640×480 使用 256 色圖案，需要佔用多大的記憶體？

- (1) 78643200 位元
- (2) 78643200 位元組
- (3) 2457600 位元
- (4) 2457600 位元組

17. 一條 T1 線約略可以傳輸多少資料？

- (1) 10Mb (2) 1.54Mb (3) 1024b (4) 256Kb

18. 一般所說電腦彩色螢幕的 RGB 三原色，主要彩色原理屬於哪一類？

- (1) CMYK 減色法原理
- (2) 加色法原理
- (3) 乘法應用原理
- (4) 螢幕補粧原理

19. 電腦螢幕畫面解析度 800×640，螢幕更新頻率為 75 次/秒，請問打點時脈（顯示卡每秒中產生打點訊號的次數）為何？

- (1) 38.4MHz (2) 17MHz (3) 60MHz (4) 75MHz

20. 請問一片 1.44MB 的磁碟片約略可以裝載多少中文字？

- (1) 60 萬字 (2) 70 萬字 (3) 80 萬字 (4) 90 萬字

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計算機概論 試題

適用學系：數位內容科技學系

一、問答題：（5 題，每題 6 分，共 30 分。）

1. 解釋名詞：

- (a) 低階語言
- (b) black box testing
- (c) Round Robin
- (d) DNS
- (e) MFLOPS

2. What does multitasking mean to a user? In what ways does the user benefit from the multitasking capabilities of an operating system?

3. How is a serial port different from a parallel port?

4. What are the HTML, DHTML, and XML Web Page Development Tools?

5. Briefly compare the following data access methods:

- (a) sequential storage
- (b) direct access storage
- (c) indexed-sequential access method

二、選擇題：（35 題，每題 2 分，共 70 分。）

1. ____ means the ability to separate the high-level view of an entity or an operation from the low-level details of its implementation.

(A) inheritance (B) randomness (C) encapsulation (D) abstraction

2. If the value of an argument is one that the function must know in order to do its job but should not change, then the argument is ____.

- (A) passed by reference (B) passed by value
(C) called "local" (D) called "global"
3. Logic programming languages are also called _____ languages.
(A) declarative (B) applicative
(C) descriptive (D) imperative
4. In BNF, the syntax of a language is specified as a set of _____.
(A) tokens (B) rules (C) objects (D) parse trees
5. The term _____ refers to software that allows separate, existing programs to communicate and work together seamlessly.
(A) URL (B) taxonomy (C) middleware (D) e-business
6. _____ is the process of verifying the identity of the receiver of your message.
(A) spoofing (B) SSL (C) authentication (D) encryption
7. The _____ is the number of bits used to encode each sample.
(A) digital rate (B) pixel rate (C) bit rate (D) bit depth
8. _____ was the first programmable device.
(A) Leibnitz's Wheel (B) the Analytic Engine
(C) the Pascaline (D) Jacquard's loom
9. When an I/O operation is done, the I/O controller transmits to the processor a special hardware signal called a(n) _____.
(A) control signal (B) I/O signal
(C) interrupt signal (D) switch signal
10. The _____ holds the address of the next instruction to be executed.
(A) status register (B) program counter
(C) condition register (D) instruction register
11. The ability to match the number of processors to the size of the problem is known as _____.

(A) scalability (B) flexibility (C) malleability (D) adaptability

12. The process of associating a symbolic name with a physical memory address is called

_____.

(A) synchronizing (B) validating (C) binding (D) registering

13. _____ can transmit information between networks using totally different communication techniques.

(A) repeaters (B) routers (C) bridges (D) ports

14. Which of the following layer of the TCP/IP protocol hierarchy handles framing?

(A) data link (B) physical (C) network (D) application

15. Assigning port numbers to programs and remembering which program goes with which port is a part of the _____ layer protocols.

(A) physical (B) data link (C) network (D) transport

16. It is the job of the _____ layer to create a high-quality, error free, order preserving end-to-end delivery service.

(A) transport (B) data link (C) network (D) physical

17. _____ is a software package that allows users to log on remotely to another computer and use it as though it were their own local machine.

(A) Telnet (B) DNS (C) FTP (D) TCP/IP

18. Which of the following statements is correct?

(A) scientists still think it is necessary to write a Turing machine when they talk about an algorithmic computation.

(B) a Turing machine that is executing an algorithm to solve some task must halt when begun on a tape containing input appropriate to that task.

(C) a Turing machine that is executing an algorithm to solve some task need not halt when begun on a tape containing input appropriate to that task.

(D) just running the Turing machine enables us to decide about halting.

19. If a Turing machine program consists of the following four instructions:

$(1,0,1,2,R) \rightarrow (1,1,0,2,R) \rightarrow (2,0,0,2,R) \rightarrow (2,b,b,2,L)$ then which of the following is a halting configuration?

- (A) ... b 1 1 b b b ... (current state = 2, symbol 1 is being read)
- (B) ... b 1 1 b b b ... (current state = 1, symbol 1 is being read)
- (C) ... b 1 0 b b b ... (current state = 1, symbol 0 is being read)
- (D) ... b 1 0 b b b ... (current state = 2, symbol 0 is being read)

20. Suppose the current state in a Turing machine is 1, and the current symbol is 0, and that $(1,0,1,2,R)$ $(1,0,0,3,L)$ both appear in the same collection of instructions. Then the machine _____.

- (A) would proceed as normal
- (B) has a conflict
- (C) would fix the problem and continue
- (D) would eliminate one of the instructions

21. $11010101 \text{ XOR } 01001110 =$

- (A) 11001101
- (B) 10011011
- (C) 11011111
- (D) 01000100

22. x, y 為布林變數, $(x+y)' = ?$

- (A) $x' + y'$
- (B) $x'y'$
- (C) $x' + y' + x'y'$
- (D) $x' + y' + x'y'$

23. 磁帶算是一種?

- (A) 隨機存取記憶體
- (B) 直接存取記憶體
- (C) 循序存取記憶體
- (D) 以上皆非

24. MIPS 是?

- (A) 每秒百萬赫茲
- (B) 每秒百萬指令
- (C) 每秒百萬浮點數
- (D) 每秒百萬位元

25. 繁體字的內碼目前一般是使用?

- (A) 王安碼
- (B) 電信碼
- (C) Big5 碼
- (D) 零壹碼

26. 試圖把全球重要的文字給一個統一編碼的是?

- (A) Unicode
- (B) EBCDIC
- (C) ASCII
- (D) Hamming

27. 編譯器把字元組成代表單一實體的 token 是在?

- (A) Lexical phase
- (B) Semantic phase

- (C) Syntax phase
- (D) Code Generation phase

28. 下列何者不是 I/O 使用的方法之一?

- (A) Polling
- (B) Paging
- (C) DMA
- (D) Interrupt

29. 機器週期(machine cycle)中的 instruction decode 是在計算機的哪個單元中完成的?

- (A)計算單元 (B)控制單元 (C)記憶單元 (D)輸入單元

30. 請問 linear search 的時間複雜度為?

- (A) $O(n)$ (B) $O(n \log n)$ (C) $O(n \log^2 n)$ (D) $O(n^2)$

31. 物件導向技術中的三大特性為何?

- (A)封裝(encapsulation)、繼承(inheritance)、類別(class)

- (B)封裝(encapsulation)、繼承(inheritance)、多元性(polymorphism)

- (C)類別(class), 繼承(inheritance), 多元性(polymorphism)

- (D)以上皆非

32. 電腦網路通信系統架構中, 依據國際標準組織(ISO)的定義, TCP 的規約是屬於那一層的協定規範?

- (A)連結層 (B)網路層 (C)傳輸層 (D)應用層

33. 網際網路上的位址反解規約(Address Resolution Protocol, ARP)代表意義為何?

- (A)動態位址連結規約 (B)網路傳送模式應用

- (C)資料傳輸協定應用 (D)網際網路地址設定

34. 電腦執行一個指令, 需完成哪些步驟(請依序列出)。

- (A)提取指令, 指令解碼, 執行運算, 提取運算元, 存放結果。

- (B)提取指令, 指令解碼, 提取運算元, 執行運算, 存放結果。

- (C)提取指令, 提取運算元, 指令解碼, 執行運算, 存放結果。

- (D)提取指令, 執行運算, 提取運算元, 指令解碼, 存放結果。

35. 電腦指令定址(addressing)方法中的間接定址(indirect addressing), 其有效位址如何

取得？

- (A)有效位址即為運算元欄之值
- (B)有效位址為運算元欄所指另一位址的內含值
- (C)有效位址為運算元欄與 PC 內含值相加所得
- (D)有效位址為運算元欄之值減去目前記數器內的值