

佛光人文社會學院九十二學年度碩士在職專班招生考試試題卷

系所別：資訊學系

科目：資訊實務

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一、選擇題

(每題兩分，共 30 分)

1. Which programming language promises to achieve the dream of component reusability?
① object-oriented; ② report generators; ③ query languages; ④ procedural languages; ⑤ none of the above.
2. Which one of the following is not a popular technique used in the artificial intelligence? ① Expert systems; ② Fuzzy logic; ③ Genetic algorithm; ④ abacus.
3. Which of the following enables the operating system to regain control if an application stops running? ① Multithreading; ② Preemptive multitasking; ③ Cooperative multitasking; ④ Multiprocessing; ⑤ none of the above.
4. The method that uses the computer's hard disk for additional RAM is called: ① partitioning; ② threading; ③ virtual memory; ④ multiprocessing; ⑤ none of the above.
5. Syntax is: ① Machine language; ② Set of rules; ③ Source code; ④ Object code; ⑤ all of the above ⑥ none of the above.
6. Which of the following is true in client/server systems? ① A middleware is used to replace both front-end and back-end software; ② A client may request services from multiple servers; ③ A server may request services from multiple clients; ④ Clients processes are dependent on server processes; ⑤ all of the above.
7. The primary reason data marts are created is that: ① it is too expensive to develop a large data warehouse; ② most end-users cannot analyze and query a huge data warehouse; ③ several data marts use less secondary storage than one large data warehouse; ④ it is easier to develop several small data marts than to get everyone to agree on the organizational view of one large data warehouse; ⑤ all of the above.
8. Which of the following is NOT a good Web security strategy? ① Limit the users who can load software, edit or add files; ② Remove unnecessary compilers and interpreters; ③ Add demo programs, so users can test system without accessing production data; ④ Limit the users who can load software, edit or add files; ⑤ none of the above.
9. _____ is very expensive, allows for high volume data storage, high reliability, and protection from drive failures. ① RAID 0; ② RAID 1; ③ RAID 0+1; ④ RAID 2; ⑤ RAID 3.
10. Data integrity can be ensured through which updates? ① Cascading, restricted, and select updates; ② Select, set null, and cascading updates; ③ Restricted, select, and set null updates; ④ Cascading, set null, and restricted updates; ⑤ None of the above.
11. 在系統邏輯模型的分析與建置過程中，各作業流程之間的資料流動是分析的首要重點項目嗎？ ①對； ②不對； ③不一定，要視情況而定。
12. 在國際標準組織(ISO)所提出的開放系統連結(OSI)模式中，由_____負責資料格式轉換

的工作。①傳輸層，②網路層，③資料鏈結層，④應用層，⑤展現層。

13. 下列何者為用來找尋系統模組內各種潛在原始碼設計錯誤的最有效測試技術？①功能測試(function testing); ②模組測試(function testing); ③單元測試(unit testing); ④整合測試(integration testing); ⑤以上皆非。
14. 在資訊系統完成後，應由「組態管理(Configuration Management, CM)」來接掌系統的控制與維護。在此機制中，典型的系統組態查詢可能是：①執行該系統之某版本所需的硬體及作業系統; ②該系統中某版本的維護計畫和記錄; ③倘若更改某元件會有那些系統版本受到影響; ④以上皆是; ⑤以上皆非。
15. 下列那一種資料型態，是由一群資料型態相同的變數所組成？①整數型態; ②陣列型態; ③紀錄型態; ④浮點數型; ⑤以上皆非。

二、名詞解釋

(每題四分，共 20 分)

1. Data Definition Language
2. Artificial Neural Networks
3. OLAP
4. PDM
5. UML

三、問答與程式設計題

(共 50 分)

1. What are the traditional structured system development and the object-oriented system development? Why does the object-oriented methodology become more important in the future? (15 分)
2. 在資訊時代中，資訊科技的發展日新月異，資訊科技產業的興衰更令人目不暇接，試問在這個瞬息萬變的資訊時代中，關係著資訊科技產業生存的主要因素有哪些？並請舉例說明之。(15 分)
3. 請分別寫出以下(a)、(b)、(c)和(d)等四個程式的執行結果：(20 分)

(a)

```
#include <iostream>
using namespace std;

void fillUp(int a[], int size);

int main()
{
    const int SIZE = 10;
    int number[SIZE];
    fillUp(number, SIZE);
    for (int i = 2; i < 6; ++i)
        cout << number[i] << endl;
    return 0;
}

void fillUp(int a[], int size)
{
    a[0] = 1;
    a[1] = 1;
    for (int i = 2; i < size; ++i)
        a[i] = a[i - 1] + a[i - 2];
}
```

(b)

```
#include <iostream>
using namespace std;

void figureMeOut(int &x, int y, int& z);

int main()
{
    int one = 1, two = 3, three = 5;
    figureMeOut(one, two, three);
    cout << one << " " << two << " " << three << endl;
    return 0;
}

void figureMeOut(int &x, int y, int& z)
{
    cout << x << " " << y << " " << z << endl;
    x = 10;
    y = 30;
    z = 50;
    cout << x << " " << y << " " << z << endl;
}
```

(c)

```
#include <iostream>
using namespace std;

int main()
{
    int number, sum;
    for (sum = 0, number = 2; number < 7; sum += number, number++);
    cout << "Sum = " << sum << endl;
    return 0;
}
```

(d)

```
#include <iostream>
using namespace std;

int main()
{
    char symbol[9] = {',', 'v', 'T', 'n', 'U', ' ', 'U', 'G', 'F'};
    for (int i = 8; i >= 0; --i)
        cout << symbol[i];
    cout << endl;
    return 0;
}
```