

國立彰化師範大學 102 學年度碩士班招生考試試題

系所：資訊管理學系數位內容科技與管理碩士班

科目：計算機概論

☆☆請在答案紙上作答☆☆

共 2 頁，第 1 頁

一、單選題(40%，每題 4%)

1. _____ uses the technique developed by human eyes to find the depth of the object.
(A) Segmentation (B) Image processing (C) Stereo vision (D) Edge detection (E) Multi-touch
2. In _____, the main program sends the value of the parameter to the corresponding parameter in the subprogram.
(A) pass by reference (B) pass by value (C) pass by address (D) call by reference (E) one of the above
3. A _____ is a computer program that is used to calculate rendering effects on graphics hardware.
(A) software agent (B) shader (C) sort (D) multimedia (E) none of the above
4. Which of the following encoding techniques is a lossless data compression method?
(A) JPEG (B) MPEG (C) MP3 (D) ZIP (E) None of the above
5. _____ VM is the software that runs the apps on Android devices.
(A) Java (B) Dalvik (C) Google (D) Ada (E) None of the above
6. The _____ is the fastest memory in a computer.
(A) solid state disk (B) cache memory (C) virtual memory (D) DVD (E) register
7. A computer uses three phases of fetch, decode and execute for each instruction. Modern computers use a technique called _____ to improve the throughput of instruction execution.
(A) Paging (B) Caching (C) Pipelining (D) Segmentation (E) None of the above
8. Which physical network topology uses a hub or switch?
(A) ring (B) mesh (C) bus (D) star (E) none of the above
9. In developing a program, documentation should be done _____.
(A) as the last step (B) throughout the process (C) only during the design phase
(D) only to Explain errors (E) all of the above.
10. _____ is an object oriented property that permits an object to use its own methods to act on message.
(A) Overloading (B) Inheritance (C) Encapsulation (D) Polymorphism (E) None of the above

國立彰化師範大學 102 學年度碩士班招生考試試題

系所：資訊管理學系數位內容科技與管理碩士班

科目：計算機概論

☆☆請在答案紙上作答☆☆

共 2 頁，第 2 頁

二、填空題(30%，每題 5%)

1. GPU (In Game Technology) stands for _____ Processing Unit.
2. OpenGL (in Game Programming) stands for Open _____ Library.
3. JNI (in Android development) stands for Java _____ Interface.
4. GUI (in Operating System) stands for Graphical User _____.
5. OOP (in Programming) stands for _____ Oriented Programming
6. HDFS (in Cloud Computing) stands for Hadoop _____ File System.

三、問答題(30%)

1. Write down the running result of the following Java program (20%)

```
public class CrazyMath {  
    public static void main(String[] args) {  
        int A = 0xB5;  
        int B = 0x3D;  
        System.out.println("A+B = "+ (A + B));  
        System.out.println("A-B = "+ (A - B));  
        System.out.println("A&B = "+ (A & B));  
        System.out.println("A|B = "+ (A | B));  
    }  
}
```

2. Big data is becoming normal in current information technology. Data are often several orders of Tera or Peta bytes. (10%)
(A) One Peta bytes = 10¹⁵ bytes
(B) Write down an application or example of “Big Data” and explain it in detail.