

Xi'an Jiaotong-Liverpool University

西交利物浦大学

MODULE CODE	EXAMINER	DEPARTMENT	TEL
CPT101		COMPUTER SCIENCE	

1st SEMESTER 2022/23 RESIT EXAMINATIONS

BACHELOR DEGREE – Year 2

COMPUTER SYSTEMS

TIME ALLOWED: 2 Hours

INSTRUCTIONS TO CANDIDATES

- 1. This is an open-book exam.**
- 2. Answer all questions.**
- 3. Answers should be written in the answer booklet(s) provided.**
- 4. No calculator is allowed during the examination.**
- 5. Only answers in English are accepted.**

THIS PAPER MUST NOT BE REMOVED FROM THE EXAM HALL.

28. (20 marks) Supply correct arguments and instructions to the missing places (i) to (x) in the following program segment that ensures the user enter a number greater than 10 otherwise the program requests the user to input again.

```
1   int number;  
2   (i) char format[] = "%d";  
3   _asm{  
4   (ii) readNumber  
5   (iii) lea eax, number ; load number's memory address  
6   push eax          ; push onto stack  
7   lea ebx, (iv) format  
8   push (v) ebx ; push onto stack  
9   call (vi) scanf ; read user input  
10  add esp, (vii) 8 ; return stack pointer  
11  mov eax, (viii) [eax] ; move user input into eax  
12  cmp eax, (ix) 10 ; compare with set condition  
13  (x) readNumber ; jump if condition not met  
14  } jle
```

END OF PAPER