19



Gol Wo Zhe	weishe.goh	08/019	25 \$3 /100
Name	Student login	Date	Points
No. 1 This is a short	answer, closed books quiz. Do	not collaborate or con	ov other people's work.
Notes: This is a short-o	ibly – I can give points only for	correct, clear answers l	am able to read.

1. Indicate the printout

Assume that i, j, and k are int variables. Show the output produced by each of the following program fragments. Write **NC** if the fragment cannot be compiled when included as a part in a larger, otherwise correct, program. (5 marks each; 50 marks total)

0	
i=9; j=3; 9 3	
printf("%d", k=i%j==2);	
i=3; j=2; k=1;/ / printf("%d",i>j <k);< td=""><td></td></k);<>	
3 0	
i=7; j=5;	
printf("%d", !i <j);< td=""><td></td></j);<>	
7	
i=2; j=2; k=6;	
printf("%d", i++ >= j   i + j >= k;);	
2	
i=-2; j=5; -2 5 0	
printf("%d", !!i+!j);	
- 2	
i=3; j=2; k=1; 2 1 2	
printf("%d", i <j  k<j);< td=""><td></td></j  k<j);<>	
3	
i=1; j=2; k=3; [22,	0
printf("%d", (i=j)  (k=j));	
printf("%d %d %d", i, j, k);	
2 , 2 2 2	
there did you get this tron?	
1=10; ]=10; K=10;	
printf("%d", -i  -j&&-k);	
printf("%d %d %d", i, j, k);	
9, 7, 9, 9	
i=5;	1-
k=i>5?i:-i;	5
printf("%d", k);	





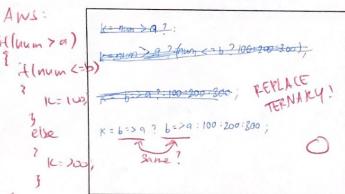
Ca	tch ase ase	(i%3 0: 1: lt:	prir prir	ntf(	"1!"	);	1-	Ea NS	thro	TVG	C (5)	- 1	01!	i i	de	1+	
0	!	1	!	d	e	F		/				T	T	T			

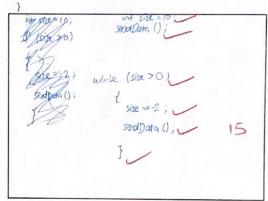
## 2. Write the statements

- Assuming the expression statement below is correct, in the box underneath rewrite it using one or more selection statements to replace expressions with the ternary operator. (15 marks)
- b) Assuming the statements below are correct, in the box underneath rewrite them without using a for iteration statement. (15 marks)

```
k = num > a ? (num <= b ? 100
: 200) : 300;
```

```
sendData();
for (size=10; size>0; size=-2) {
    sendData();
```





c) Translate the following business requirements to a fragment of the C code. Assume that all needed <u>functions</u> and <u>variables</u> have already been <u>defined</u>; you need to organize them into appropriate statements and expressions. (20 marks)

"Retrieve the temperature as unsigned int from a sensor by calling the getTemperature() function. Then, for temperatures above 38 print out "Too hot!", for temperatures from above 35 to 38 (inclusive) print out "OK!", for temperatures 35 and below print out "Too cold!".

```
getTemperature (usigned int t)

{

getTemperature (usigned int t)

{

printf ("Too hot!");

etse f Lt > 35 // (* Too hot!");

}

etse f usigned temp = getTemporature();

printf ("Too hot!");

AND uponin

etse if (temp > 35)

if printf ("Too cold!");

etse

{

printf ("Too cold!");

}

End of quiz.

return t;
```