



Computer Science

Grade 11 - Sample Exam - Term 2 - Answer Key

Where student responses may vary please use your professional judgment. **Coding style may vary.** Be reasonable and award marks **ONLY** when deserved for answers given. Marks will be awarded as indicated on the examination paper. Specific mark breakdowns for questions will be written when necessary.

SECTION 1 (10 marks)	1	Function Call: Line 3 or 5 or 8 or 9 Function Return: Line 4	2 marks.
	2	True.	2 marks.
	3	True.	2 marks.
	4	print()	2 marks.
	5	C	2 marks.

SECTION 2 (10 MARKS) Flow Chart drawings may vary. Marks will be allotted if correct symbols with relevant text is used. The flow chart figure is given below for reference.	Input symbol(s) with relevant text	3 marks.
	Calculation/processing symbol with relevant text	2 marks.
	Decision with correct branches (yes & no)	2 marks.
	Output symbol with relevant text	2 marks.
	Stop symbol	1 mark.

SECTION 3 (20 MARKS)

1	Problem description Variable and function names may vary.	Function name (1 mark)	Input (1 mark)	Return value or outputs (1 mark)
	A function to check if an integer number is positive, negative or zero	Check_num()	num(int)	result(string) (data type may vary)
2	Question	Conditional Statements		
	Is watermelonSize less than or equal to appleSize?	watermelonSize <= appleSize (2 marks)		
	Is Y greater than Z? (2 marks)	Y > Z		
	Is Fatima's height is greater than 1.5m and Ahmed's height less than 1m?	(Fatimaheight > 1.5) and (Ahmedheight < 1) (2 mark)		
3	<code>if (Balance > 5000):</code> <code> print("Can purchase a mobile phone")</code> <code>else:</code> <code> print("Cannot purchase a mobile phone")</code>			(2 mark) (1 mark) (1 mark)
4	False (1 mark)			
5	<code>if (temperature <= 10):</code>			(1 mark)
	<code> print("Freezing")</code>			(1 mark)
	<code>elif (temperature > 10) and (temperature < 25):</code>			(2 marks)
	<code> print("Warm ")</code>			(1 mark)
	<code>else:</code> <code> print("Hot")</code>			(1 mark)



SECTION 4 (10 MARKS)

```
def calculation (card1_points, card2_points):
    total_points = card1_points + card2_points (2 mark)
    return total_points (1 mark)
card1_points = input("Enter your card1 points ")
card1_points = int(card1_points)
card2_points = input("Enter your card2 points ")
card2_points = int(card2_points)
total_points = calculation(card1_points, card2_points) (2 mark)
if (total_points <= 500):
    print ("Sorry. No free rid")
elif (total_points > 500) and (total_points < 1000): (1 mark)
    print ("You get one free ride") (1 mark)
elif (total_points >= 1000): (1 mark)
    print("Congrats!!! You get three free rides") (1 mark)
else: print("Error. Wrong input")
```

SECTION 2 – Flow Chart diagram

