

NAME : _____
STUDENT : _____
NO. _____
GROUP : _____

QUESTION 1

- (a) Write a function definition for each of the following statements:
- I. A function named `mangoType()` is to determine and return price per kilogram (kg) of a mango according to their type (Harum Manis = RM30, Sala = RM10.50, Susu = RM8.50). The function receives a mango type through its parameter named `typeM`.
 - II. A function named `calcPrice()` is to calculate the total price of mangoes. The function receives price per kg and weight of mangoes in kg and then it should return total price of mangoes.
 - III. A function named `calcFinalPrice()` that will calculate and return the final price. If the buyer is UiTM staff, he or she is entitled to get a 25% discount if the mangoes' price is more than RM100. The function should receive mango price and status of a buyer.
 - IV. A function named `print()` that will receive a final price and display as output.
- (b) Write a program segment in main function that requests user inputs mango type, weight of mangoes and status. Finally, calculate and display final price of mangoes by using every function defined in (a).

QUESTION 2

Perform the following tasks:

- Write a function definition named `calcAreaCircle()` that will input a radius of a circle. The function will calculate and return the area of a circle. [Area of a circle = $3.142 * \text{radius}^2$]
- Write a function definition named `calcAreaRectangle()` that will input the length and width of a rectangle. The function will calculate and return the area of a rectangle. [Area of a rectangle = $\text{length} * \text{width}$]
- Write a function definition named `calcAreaTriangle()` that will input the height and base of a triangle. The function will calculate and return the area of a triangle. [Area of triangle = $\text{height} * \text{base} / 2$]
- Write a main program to do the following:
 - i. Display the following menu

```
SHAPE AREA CALCULATION
C - Circle
R - Rectangle
T - Triangle
Please enter your choice:
```

- ii. User needs to input his/her choice based on the display menu above. Display an error message if user enters an invalid choice.
- iii. Call the appropriate function mentioned above based on user input and displays the output.