**BRAC UNIVERSITY**

Quiz 2 **Department of Computer Science and Engineering**

CSE111: Programming Language II Duration: 30 minutes Marks: 20

| Name: | ID: | Section: 27 |
| --- | --- | --- |
| (Please write in CAPITAL LETTERS) |  |  |

1. **Implement** the desired class so that the following output is generated.

[A student is eligible for scholarship only if he/she has completed at least 30 credits, cgpa>=3.80, and took a minimum of 12 credits in the current semester] [Marks 10]

[CO2, CO4]

| std1 = BracuScholarship('Mahmud', 3.45, 36)  print('----------------------------------')  std1.printInfo()  print('####################################')  print(std1.scholarshipCheck(3))  std2 = BracuScholarship('Zerin', 3.82, 40)  print('----------------------------------')  std2.printInfo()  print('####################################')  print(std2.scholarshipCheck(4))  std3 = BracuScholarship('Raisa', 3.82, 15)  print('----------------------------------') | **Output**  Mahmud has applied for scholarship  ----------------------------------  Name: Mahmud  CGPA: 3.45  Completed Credit: 36  ####################################  Mahmud took 3 course/s this semester!  Sorry! You are not eligible for scholarship  Zerin has applied for scholarship  ----------------------------------  Name: Zerin  CGPA: 3.82  Completed Credit: 40  ####################################  Zerin took 4 course/s this semester!  Congratulations! You are eligible for scholarship!!  Raisa has applied for scholarship  ---------------------------------- |
| --- | --- |

1. Trace the below table and write the outputs in the question paper. [Marks 10]

[CO2, CO4]

| **1** | **class Quiz2:** |
| --- | --- |
| **2** | **def \_\_init\_\_(self):** |
| **3** | **self.sum, self.y = 3, 11** |
| **4** | **def method1(self):** |
| **5** | **x, p = 0.0, 0** |
| **6** | **while (p < 1):** |
| **7** | **self.y = self.y + self.sum** |
| **8** | **x = x + self.y + 1** |
| **9** | **print(x, self.y, self.sum)** |
| **10** | **self.sum = self.sum + self.method2(x, self.y) + self.sum** |
| **11** | **p += 1** |
| **12** | **def method2(self, m, n):** |
| **13** | **x = 0** |
| **14** | **sum = 2.0** |
| **15** | **self.y = self.y + m** |
| **16** | **x = n - 2 + 4** |
| **17** | **self.sum = sum + self.y** |
| **18** | **print(x, sum, self.y)** |
| **19** | **return self.y** |

| **Write the output of the following code:**  **q1 = Quiz2()**  **q1.method1()**  **q2 = Quiz2()**  **print(q2.method2(4,5))** | **Outputs** | | |
| --- | --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |