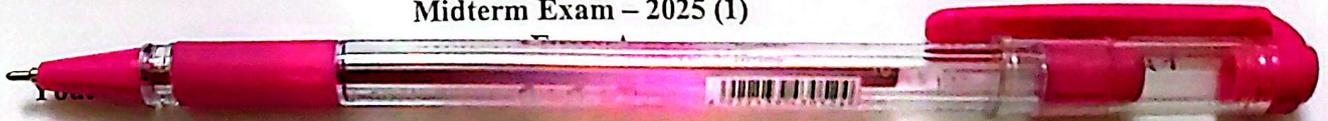


University of Petra	 جامعة البترا University of Petra	 جامعة البترا - ثلاثون عاما University of Petra
Faculty of Information Technology		كلية تكنولوجيا المعلومات
Department of Computer Science		قسم علم الحاسوب

Information Technology Fundamentals

601105

Midterm Exam – 2025 (1)



Your Instructor Name: ..Eman...Dweib..

Instructions for the Exam:

- Write your name and ID number on the exam and answer sheets.
- Write the number of the section that you enrolled in.
- Write the name of your instructor.
- Questions in the exam not allowed.
- Using any type of technology (mobiles, smart watches) not allowed
- Using extra papers or sheets not allowed
- The exam consists of four questions.

For instructor use only:

Question number	Course ILO	Program ILO	Question weight	Student mark
Q1	K2		10	10
Q2			8	8
Q3	I1		7	5
Q4	P1		10	9.75
			Total /35	32.75

10

Question1: Choose the correct answer for the following questions: (10 marks)

1. Several related fields can be used to compose _____

- a) Record
- b) File
- c) Database
- d) Field

2. A collection of programs used by a computer, such as an editor, is called:

- a) Program
- b) Result
- c) Documentation
- d) Computer software

3. Which of the following escape sequences moves the cursor to the next line:

- a) \t
- b) \f
- c) \n
- d) \b

4. Which of the following is correct about Pseudocode:

- a) It is an informal language that helps you develop algorithms without having to worry about the strict details of Java language syntax
- b) It helps you "think out" a program before attempting to write it in a programming language
- c) It does not execute on computers
- d) All options are correct

5. When using Scanner class, which of the following methods is used to obtain to a double value from the user:

- a) nextFloat()
- b) nextDouble()
- c) next()
- d) nextShort()

Question 2: Find the error in the following Java code and rewrite the corrected version. (8 marks)

8

A.

```
int num = 9;
if(num % 3 = 0) if (num / 3 == 0)
    System.out.println("Divisible by 3");
else
    System.out.println("Not divisible");
```

B.

```
char c = "G"; char c = 'G';
if(c >= 65 && c <= 90) no ; (Blank)
    System.out.println("Capital letter");
else
    System.out.println("Not capital");
```

Question 3: Find the output of the following java programs:

(7 marks)

5

A.

```
class Test{
public static void main(String[] args) {
    int num1 = 9;
    int num2 = 18;

    if (num1 <= num1 * num2) {
        System.out.println("Cybersecurity");
    } else {
        System.out.println("Computer science");
    }
}
}
```

Output:

Cybersecurity

(1)

B.

```
class Test2 {  
    public static void main(String[] args) {  
        int X = 50;  
        int Y = 4;  
        X = X + Y; // 54  
        System.out.println(++X);  
        System.out.println(++X);  
        System.out.println(Y++);  
        System.out.println(X + 2);  
    }  
}
```

Output:

55 ✓
55 ✓
4 ✓
56 ✗

(2)

C. What does the switch statement output when the variable num is 5 ?

```
Scanner input = new Scanner(System.in);  
int num = input.nextInt();  
  
switch (num) {  
    case 1: System.out.println("Mira");  
        break;  
    case 2: System.out.println("Ahmad");  
        break;  
    case 3: System.out.println("Besan");  
        break;  
    case 5: System.out.println("Suzan");  
        break;  
    default: System.out.println("Suzan");  
        break;  
}
```

Output:

~~Besan~~ ✓
Besan ✓
Suzan ✓

(2)

Question 4: Write an algorithm (pseudocode), draw flowchart and write a Java program that reads a student's GPA and the number of completed credit hours. Using a Two-Way

If-Else statement, check whether the student meets the following requirements: (10 marks)

- ✓ • The student's GPA must be 3.5 or higher.
- ✓ • The student must have completed at least 30 credit hours.

9.75

If the student meets both requirements, the program should print: "Congratulations! You are on the Honor List." Otherwise, it should print: "You do not qualify for the Honor List."

- 1 Start
- 2 Prompt user to enter GPA
- 3 Read GPA
- 4 Prompt user to enter the number of completed credit hours
- 5 Read number of completed credit hours
- 6 Check If
 - GPA >= 3.5 and number of completed hours >= 30
 - then Print "Congratulations! you are on the honor list."
 - Else
 - Print "You do not qualify for the Honor list."
- 7 End

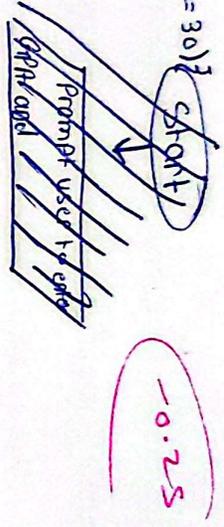
```
int GPA = input.nextInt();
int Credit hours = input.nextInt();

if (GPA >= 3.5 && credit hours >= 30)
    system.out.println("Congratulations! You are on the honor list.");
else
    system.out.println("You do not qualify for the Honor list.");
```

```

import java.util.Scanner;
public class Example {
    public static void main (String [] args) {
        Scanner input = new Scanner (System.in);
        System.out.println ("Enter your GPA and credit hour hours");
        int GPA = input.nextInt ();
        int CreditHours = input.nextInt ();
        if (GPA >= 3.5 && CreditHours >= 30) {
            System.out.println (" ");
        }
        else {
            System.out.println (" ");
        }
    }
}

```



-0.25

