UNIVERSITI
TEKNOLOGI
PETRONAS

FINAL EXAMINATION
MAY 2024 SEMESTER

COURSE : **TEB3323 - ENTERPRISE SYSTEMS DEVELOPMENT**

DATE : **12 AUGUST 2024 (MONDAY)**

TIME : **9:00 AM - 12:00 NOON (3 HOURS)**

INSTRUCTIONS TO CANDIDATES

1. Answer **ALL** questions in the Answer Booklet.
2. Begin **EACH** answer on a new page in the Answer Booklet.
3. Indicate clearly answers that are cancelled, if any.
4. Where applicable, show clearly steps taken in arriving at the solutions and indicate **ALL** assumptions, if any.
5. **DO NOT** open this Question Booklet until instructed.

Note :

i. There are **EIGHT (8)** pages in this Question Booklet including the cover page

ii. **DOUBLE-SIDED** Question Booklet.

1. a. Develop an Advanced Business Application Programming (ABAP) program with input as shown in **FIGURE Q1a** and an output as shown in **FIGURE Q1b**, using the following requirements:

- Use `Do ... Enddo` syntax.
- Use `sy-index` as your looping indicator.
- Use `exit` syntax to terminate your loop.
- `MIN_NUM` is of type integer referring to the initial number that you want to start. While `MAX_NUM` is of type integer referring to the maximum number that you want to stop.
- `ROW` is of type integer referring to the maximum number of rows that your output should have.

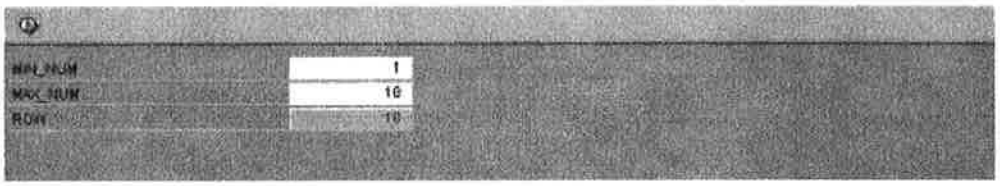

FIGURE Q1a: Input

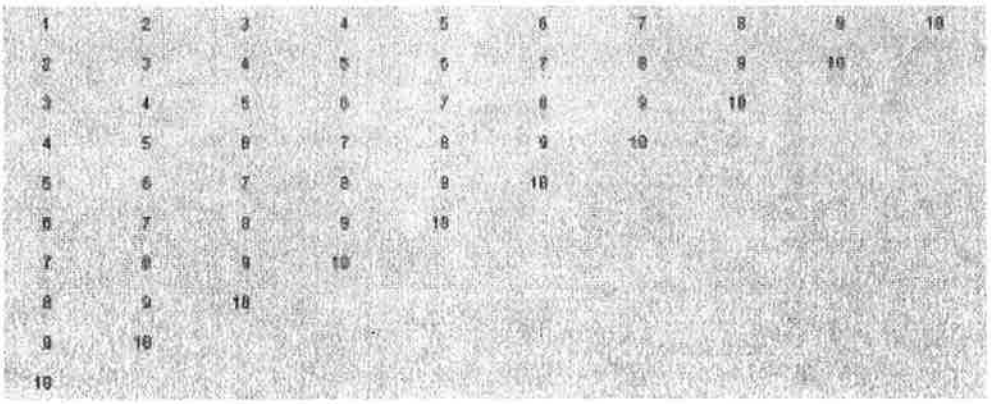

FIGURE Q1b: Output

[14 marks]

b. Describe the function of DATA.

[2 marks]

c. Explain **TWO (2)** components of a work process.

[4 marks]

2. a. Develop an ABAP program based on the following requirements:

- `zsemester` is a table type, `ztsemester` is a structure type and `zstudent` is a table.
- Start the main program by calling a subroutine `calc_tuition` and pass the internal table `it_semester` to the subroutine.
- The internal table `it_semester` should have the updated value after the subroutine operation ends.
- Declare a local work area in a subroutine called `wa_calc_tuition` to retrieve the data from the `zstudent` table by selecting `name`, `address`, `major`, `year` and `credit_hours` attributes.
- Store every data into the internal table `it_calc_tuition`.
- If there is data selected or retrieved from the `zstudent` table, loop the internal table `it_calc_tuition` to modify the `tuition` value by using the formula in **FIGURE Q2.**

```
tuition = 240 * credit_hours.
```

FIGURE Q2: Tuition

[14 marks]

b. Identify the maximum number of external and internal sessions that a user can open simultaneously during one user terminal session.

[2 marks]

c. Illustrate a user dispatching process in the three-tier client-server architecture of the R/3 systems.

[4 marks]

3. a. Psychographics is one of the marketing strategies used in e-business. Analyze this marketing strategy with example.

[4 marks]

b. Interpret territorial jurisdiction with **TWO (2)** examples.

[4 Marks]

c. i. Describe the term 'domain tasting'.

[2 Marks]

ii. Based on **part (c)(i)**, illustrate its negative effects on web users.

[2 Marks]

d. Analyze global marketing elements that marketer should consider in e-business.

[4 Marks]

e. Differentiate between a network access provider and an internet service provider.

[4 Marks]

4. a. Consider the guidelines in **FIGURE Q4a**:

- `address` structure contains `room_no`, `village` and `building`.
- `department` structure contains `dept_code` and `program_code`.
- `student` structure contains `name`, `address` structure and `department` structure.

FIGURE Q4a: Guideline of Structures

i. Construct an ABAP code to create three structured data types called `address`, `department` and `student`.

[8 marks]

ii. Consider the data object and customer information as shown in **FIGURE Q4b** and **TABLE Q4** respectively.

```
Data: wa_student type student.
```

FIGURE Q4b: Data Object

TABLE Q4: Customer Information

Name	Room No	Village	Building	Dept Code	Program Code
Mike Dooley	202	V5	Iris	CIS	BIS

Assign the data into the structures defined in **part (a)(i)**.

[4 marks]

iii. Construct an ABAP code to display all data inserted in **part (a)(ii)**.

[4 marks]

b. Differentiate **TWO (2)** ways of accessing records in internal tables.

[4 marks]

5. a. Explain Value Added Network (VAN) with reference to Electronic Data Interchanged (EDI) implementation.

[8 Marks]

b. A website on which it sells products or services has to be similar to those it sells in its physical retail stores. This is called 'touch point consistency'. Analyze Customer Life-Cycle that firms provide level of services which it maintains 'touch point consistency'.

[8 Marks]

c. Design 'Warranty Disclaimer'.

[4 Marks]

-END OF PAPER-