UNIVERSITI UTARA MALAYSIA

FINAL EXAMINATION
FIRST SEMESTER 2008/2009

CODE/COURSE : QIT 1013 / PENGATURCARAAN DALAM APLIKASI
              PERNIAGAAN
DATE : 9 NOV 2008
TIME : 9.00 – 11.00 AM (2 HOURS)
VENUE : DSB K. TM

INSTRUCTIONS:
1. This book script contains SEVEN (7) questions in ELEVEN (11) printed pages excluding the cover page.
2. Answer ALL the questions in the space provided.

MATRIC NO : [Blank]
( in words )

IDENTITY CARD/ PASSPORT NO: [Blank]
( in numbers )

LECTURER : [Blank]

GROUP : [Blank]
TABLE NO: [Blank]

DO NOT OPEN THE PAGE UNTIL YOU ARE TOLD TO DO SO

CONFIDENTIAL
QUESTION 1 (12 MARKS)

a. Based on the code below, what is the value for variable comment when the variable mark is 58?

```
Select Case mark
    Case Is <= 100
        Comment = "Excellent"
    Case 60 To 80
        Comment = "Good"
    Case 40 To 60
        Comment = "Moderate"
    Case Else
        Print "Very poor!"
End Select
```

(1 mark)

b. Identify and correct the errors in the following statement.

```
Dim age As Integer
Dim status As Currency

If age >= 45 Then
    status = "Old"
If age < 45 AND age <= 30 Then
    status = "Mature"
If age < 30 AND age >= 18 Then
    status = "Adult"
Else
    status = "other"
End
```

(5 marks)
c. How many loop will iterate if:

    Dim counter As Integer
    counter = 1
    Do
        counter = counter + 2
    Loop Until counter > 10

    (1 mark)

d. The following code will ask the user to enter 5 characters one at a time as a password. The variable UserInput will store the characters entered by the user. Variable Password will store the combined characters, meanwhile the variable Counter is used to count the number of characters entered. Complete the code.

    Dim Password As String
    Dim Counter As Integer
    Dim UserInput As String

    For (_______ To ______)
        UserInput = InputBox("Please enter character (one character at a time)", "User Input")
        ______ = __________________
    Next ______
    Print Password

    (5 marks)
QUESTION 2 (10 MARKS)

Determine the output if:

a. \( \text{Sqr(Len(Right("Kolej Sastera dan Sains",9)))} \)  
   (2 marks)

b. \( \text{Ucase(Trim(Mid("Sultanah Bolkiah",4,9)))} \)  
   (2 marks)

c. \( X = 5 \times (9 / 3) - 10 \times (4 + 1) \)  
   (2 marks)

d. \( X = (\text{Sqr}(225))/(2 + 1) \text{ Mod 7} \)  
   (2 marks)

e. \( \text{txtname.Text = "Peperangan" + "di" & Iraq} \)  
   (2 marks)
QUESTION 3 (10 MARKS)

Convert the following flow chart into programming code.

Start

Number of students

Marks

Total = Total + Marks
counter = counter + 1

counter = Number of students?

No

Yes

Average = Total / Number of students

Average

End
QUESTION 4 (6 MARKS)

Given the following programming segment:

```vbnet
price = Val(txtprice.Text)
If price <= 6 Then
    seat = MsgBox "Row 1 to Row 5"
ElseIf price <= 10 And price > 6 Then
    seat = MsgBox "Row 6 to Row 10"
ElseIf price > 10 Then
    seat = MsgBox "Row 11 to Row 15"
Else
    seat = MsgBox "Please enter price"
End If
```

a) Rewrite the programming code above using Select...Case statement.  (5 marks)
b) What is the output if price = 1?

(1 mark)

QUESTION 5 (6 MARKS)

Given the following fragment of code:

```
Dim StrInput As Integer

StrInput = 1

Do While StrInput <> 5
    If StrInput = 3 Then
        GoTo msg1
    ElseIf StrInput > 4 Then
        GoTo msg2
    EndIf
    GoTo msg3
    StrInput = StrInput + 1
Loop

msg1: Print StrInput
msg2: Print StrInput + 1
msg3: MsgBox "QIT 1013"
```

Explains the differences between subprogram and function, then give one example for each.

<table>
<thead>
<tr>
<th>Sub Program</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Example:
QUESTION 6 (12 MARKS)

Given the following table from Paint database:

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Price</th>
<th>Discount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Berger 4506</td>
<td>2635</td>
<td>48</td>
<td>5%</td>
</tr>
<tr>
<td>Keris</td>
<td>2147</td>
<td>33</td>
<td>3%</td>
</tr>
<tr>
<td>Majestic</td>
<td>2487</td>
<td>45</td>
<td>4%</td>
</tr>
<tr>
<td>Colorland</td>
<td>1458</td>
<td>88</td>
<td>8%</td>
</tr>
<tr>
<td>ICI</td>
<td>2322</td>
<td>124</td>
<td>8%</td>
</tr>
<tr>
<td>Nippon</td>
<td>2411</td>
<td>125</td>
<td>10%</td>
</tr>
</tbody>
</table>

Table 1: Paint list ordered by supplier

*Hint: use Data1*

a) Give command to insert following new data, into Table 1.

    Jotun, 2222, 120, 4%

    (2 marks)

b) Give command to delete third record.

    (2 marks)

c) Give command to traverse last record.

    (2 marks)

d) Give SQL statement to select 8% discount item only.

    (2 marks)

e) Give SQL statement to view all records.

    (2 marks)
f) Give SQL statement to filter record(s), which its quantity more than 2300.  

(2 marks)

QUESTION 7 (24 MARKS)

As a programmer, you are required to develop a system which able to determine the score marks input by students using evaluation form. Example of calculation is shown in Table 2.

<table>
<thead>
<tr>
<th>Item</th>
<th>Weight</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) What do you think about this course?</td>
<td>1 2 3 4 5</td>
<td>4</td>
</tr>
<tr>
<td>b) Are you intend to learn advance course?</td>
<td>1 2 3 4 5</td>
<td>5</td>
</tr>
<tr>
<td>c) How do you think about the course delivery?</td>
<td>1 2 3 4 5</td>
<td>3</td>
</tr>
<tr>
<td>d) Will you recommend this course to your colleagues?</td>
<td>1 2 3 4 5</td>
<td>3</td>
</tr>
<tr>
<td>e) Teaching environment is conducive.</td>
<td>1 2 3 4 5</td>
<td>5</td>
</tr>
</tbody>
</table>

Total Score 20

Score weight = (20/25) * 100
= 80 %

NOTES:

score > 90 % - EXCELLENT  
75 % < score <= 89 % - PRETTY GOOD  
score < 74 % - AVERAGE

Output example:

Total score : 20  
Percentage : 80 %  
Indicator : PRETTY GOOD
a) Design the interface for the required system based on Table 2 above. Please label for each control. 

(6 marks)

b) Define the variables and constants will be use in the code

(6 marks)
c) Write the complete programming code to calculate the total score, percentage and indicator.

(12 marks)
ADDITIONAL SPACE FOR CODING

END OF QUESTION