全國高級中等學校 105 學年度商業類學生技藝競賽

【程式設計】職種【學科】試卷

崗位編號：＿＿＿＿＿＿　　姓名：＿＿＿＿＿＿＿

注意事項：請將答案劃記於答案卡，未依規定劃記者不予計分。

試題說明：(選擇題每題 4 分，共 100 分)

(   )1. 執行以下 Visual Basic 程式片段，其結果為何？(A) 15　　(B) 12　　(C) 7　　(D) 3

```
Dim i As Byte
i = &HFC
Console.WriteLine(Not i)
```

說明：Visual basic 中 Not 為求 1 的補數。

(   )2. 執行以下 Visual Basic 程式片段，其結果為何？ (A) 10　(B) 9　(C) 8　(D) 7

```
Dim i, j, c As Integer
c = 0
For i = 0 To 4
    j = 4 - i
    Do
        j = j - 1
        c = c + j
    Loop Until j <= 0
Next
Console.WriteLine(c)
```

(   ) 3. 執行下列 Visual Basic 程式片段，其結果為何？(A) 55　　(B) 30　　(C) 25　　(D) 45

```
Dim k, j As Integer
k = 0
For j = 1 To 10 Step 2
    k = k + j
Next j
Console.WriteLine(k)
```

( )4. 執行以下 Visual Basic 程式片段，其結果為何？(A) 1　　(B) 5　　(C) 25　　(D) 125

```
Dim A, B, C As Integer
A = 125
B = 125
While (B > 0)
    C = A Mod B
    A = B
    B = C
End While
Console.Write(A)
```

( )5. 執行下列 Visual Basic 程式片段，輸出結果為何? (A) 10　　(B) 15　　(C) 21　　(D) 6

```
Dim c, s As Integer
c = 3 : s=1
While c <= 6
    s = s * c / (c - 2)
    c = c + 1
End While
Console.Write(s)
```

( )6. 執行下列 Visual Basic 程式片段，輸出結果為何? (A) 333　(B) 66　(C) 44　(D) 666

```
Dim i, j As Integer
Dim A(,) As Integer = {{1, 11, 111, 1111}, {3, 33, 333, 3333}, {2, 22, 222, 2222}}
Dim B(3, 4) As Integer
For i = 0 To 2
    For j = 0 To 3
        B(j, i) = A(i, j)
    Next j
Next i
Console.WriteLine(A(1, 2) + B(2, 1))
```

( )7. 執行下列 Visual Basic 程式片段，輸出結果為何? (A) 171　(B) 190　(C) 200　(D) 210

```
Dim i, j, n, k As Integer
j = 0 : n = 20
For i = 1 To n
    For k = i + 1 To n - 1
        j = j + 1
    Next k
Next i
Console.WriteLine(j)
```

(　) 8. 執行下列 Visual Basic 程式片段，輸出結果為何? (A) 10　　(B) 9　　(C) 8　　(D) 5

```
Dim A, S As Decimal
S = 0 : A = 1023
While A > 0
    S = S + (A Mod 2)
    A = Math.Floor(A / 2)
End While
Console.WriteLine(S)
```

(　) 9. 執行下列 Visual Basic 程式片段，輸出結果為何?　(A) 1　(B) 4　(C) 5　(D) 6

```
Dim I, J, K, Temp, A(5) As Integer
For K = 0 To 5
    A(K) = (K ^ 2 + 4) Mod 7
Next K
For I = 5 To 1 Step -1
    For J = 0 To I - 1
        If A(J) > A(J + 1) Then
            Temp = A(J)
            A(J) = A(J + 1)
            A(J + 1) = Temp
        End If
    Next
Next
Console.WriteLine(A(4))
```

(　)10. 執行下列 Visual Basic 程式，輸出結果為何? (A) 1　　(B) 6　(C) 36　(D) 648

```
Sub Main()
    Console.WriteLine(A(5))
End Sub
Function A(ByVal i As Integer) As Integer
    If (i <= 3) Then
        Return i
    End If
    Return A(i - 1) * A(i - 2) * A(i - 3)
End Function
```

( )11. 執行下列 Visual Basic 程式片段，輸出結果為何? (A) 133　　(B) 85　(C) 28　(D) 15

```
Dim Sum, i, j As Integer
Sum = 0 : i = 0
While i <= 5
    For j = 1 To i + 2
        Sum = Sum + i
    Next j
    i = i + 1
End While
Console.WriteLine(Sum)
```

( )12. 執行下列 Visual Basic 程式片段，輸出結果為何? (A) 1　(B) 3　(C) 6　(D) 10

```
Dim A(3, 3), i, j As Integer
For i = 0 To 3
    For j = 0 To 3
        If (i Mod 2) = 1 Then
            A(i, j) = i + j
        Else
            A(i, j) = i * j
        End If
    Next
Next
For i = 1 To 3
    For j = 1 To 3
        A(i, j) = A(i - 1, j) + A(i, j - 1) + A(i - 1, j - 1)
    Next
Next
Console.WriteLine(A(2, 3))
```

( ) 13. 執行下列 Visual Basic 程式片段，輸出結果為何? (A) 24　　(B) 28　(C) 60　(D) 144

```
Dim i, j, k, sum As Integer
sum = 0
For i = 0 To 2
    For j = i To 3
        For k = j To 4
            sum = sum + 1
        Next
    Next
Next
Console.WriteLine(sum)
```

(　　) 14. 執行下列 Visual Basic 程式片段，輸出結果為何? (A) -2　　(B) 2　(C) 18　(D) -18

```
Dim i, j, sum As Integer
sum = 2
For i = 1 To 3
    For j = 1 To 3
        sum = sum * -1
    Next
Next
Console.WriteLine(sum)
```

(　　)15. 執行下列 Visual Basic 程式片段，輸出結果為何? (A) 12　　(B) 16　　(C) 3　　(D) 4

```
Dim i, j, S As Integer
S = 0 : i = 2 : j = 1
Do While i <= 4
    Do While j <= 4
        S = S + 1
        j = j + 1
    Loop
    i = i + 1
Loop
Console.Write(S)
```

(　　) 16. 執行下列 Visual Basic 程式片段，輸出結果為何? (A) 4　　(B) 8　　(C) 12　　(D) 45

```
Dim K, S As Integer
S = 0 : K = 0
While K < 10
    S = S + K
    K = K + 4
End While
Console.Write(S)
```

(　　)17. 執行下列 Visual Basic 程式片段，輸出結果為何? (A) 1　　(B) 2　(C) 3　(D) 4

```
Dim A(3, 3) As Integer
For i = 1 To 3
    For j = 1 To 3
        A(i, j) = (i Mod 2) + (j Mod 3)
    Next j
Next i
Console.Write(A(2, 2))
```

( )18. 執行下列 Visual Basic 程式片段，輸出結果為何? (A) 0　　(B) 3　　(C) 13　　(D) 23

```
Dim i, j, k As Integer
Dim A(,) As Integer = {{1, 2, 3, 4}, {1, 0, 1, 0}, {1, 2, 3, 4}}
Dim B(,) As Integer = {{1, 2, 3, 4, 5}, {1, 0, 1, 0, 1}, {0, 1, 0, 1, 0}, {1, 2, 3, 4, 5}}
Dim C(3, 5) As Integer
For i = 0 To 2
    For j = 0 To 4
        For k = 0 To 3
            C(i, j) = A(i, k) * B(k, j)
        Next k
    Next j
Next i
Console.WriteLine(C(1, 2))
```

( )19. 執行下列 Visual Basic 程式片段，輸出結果為何? (A) 8　　(B) 13　　(C) 21　　(D) 34

```
Sub Main()
    Console.WriteLine(F(F(6)))
End Sub
Function F(ByVal n) As Integer
Dim a1, a2, a3, i As Integer
a1 = 0 : a2 = 1
If n = 0 Or n = 1 Then
    Return n
End If
For i = 2 To n
    a3 = a1 + a2
    a1 = a2
    a2 = a3
Next
Return a3
End Function
```

( )20. 執行下列 Visual Basic 程式片段，輸出結果為何? (A) 0　　(B) 1　　(C) 2　　(D) 3

```
Console.Write((99 Mod 17) Mod 4)
```

（　）21.　執行下列 Visual Basic 程式片段，輸出結果為何? (A) 1　　(B) 4　　(C) 18　　(D) 48

```
Sub Main()
    Console.WriteLine(F25(4))
End Sub

Function F25(ByVal n As Integer) As Integer
    If n = 1 Or n = 2 Then
        Return 1
    Else
        Return F25(n - 1) * F25(n - 2)
    End If
End Function
```

（　）22.　執行下列 Visual Basic 程式片段，輸出結果為何? (A) 1　　(B) 4　　(C) 18　　(D) 48

```
Sub Main()
    Console.WriteLine(F22(4))
End Sub

Function F22(ByVal n As Integer) As Integer
    If n = 1 Or n = 2 Then
        Return n
    Else
        Return F22(n - 1) * F22(n - 2)
    End If
End Function
```

（　）23.　執行下列 Visual Basic 程式片段，輸出結果為何? (A) 4　　(B) 7　　(C) 15　　(D) 18

```
Sub Main()
    Console.WriteLine(F17(2, 3))
End Sub
Function F17(ByVal A, ByVal B) As Integer
    If (A > 0) And (B > 0) Then
        Return (F17(A - 1, B) + F17(A, B - 1))
    Else
        Return (A + B)
    End If
End Function
```

(　　)24. 執行下列 Visual Basic 程式片段，輸出結果為何? (A) 7　　 (B) 5　　 (C) 4　　 (D) 3

```vb
Sub Main()
    Console.WriteLine(FNackermann(1, 2))
End Sub


Function FNackermann(ByVal m As Integer, ByVal n As Integer) As Integer
    If m = 0 Then Return n + 1
    If n = 0 Then Return FNackermann(m - 1, 1)
    If (m > 0 And n > 0) Then
        Return FNackermann(m - 1, FNackermann(m, n - 1))
    End If
End Function
```

(　　)25. 執行下列 Visual Basic 程式片段，輸出結果為何? (A) 04　　 (B) 40　　 (C) 22　　 (D) 20

```vb
Dim checkA, checkB, comanswer(3) As Integer
Dim Str As String
Str = "5612"
checkA = 0
checkB = 0
comanswer(0) = 5 : comanswer(1) = 6 : comanswer(2) = 2 : comanswer(3) = 1
For i = 0 To 3
    For j = 0 To 3
        If comanswer(i) = Val(Mid(Str, j + 1, 1)) Then
            If i = j Then
                checkA += 1
            Else
                checkB += 1
            End If
        End If
    Next
Next
Console.Write(checkA)
Console.WriteLine(checkB)
```

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【程式設計】職種【學科】試卷答案

題號	1	2	3	4	5	6	7	8	9	10
答案	D	B	C	D	B	D	A	A	D	C

題號	11	12	13	14	15	16	17	18	19	20
答案	B	C	B	A	D	C	B	A	C	C

題號	21	22	23	24	25	26	27	28	29	30
答案	A	B	C	C	C					

題號	31	32	33	34	35	36	37	38	39	40
答案										

題號	41	42	43	44	45	46	47	48	49	50
答案										