

COMPANY SPECIFIC SERIES ACCENTURE - PSEUDOCODE - TRAINER HANDOUT

1. What will be the output of the following pseudocode for a = 3, b = 8?

```
Integer funn(Integer a, Integer b)
if(b \text{ mod } a < 2)
b = b >> 1
return a
End if
if(a \text{ mod } b < 2)
b = b + 12
return b
end if
return a + b + 5
End function funn()
a. 4 \qquad b. \text{ None of these} \qquad c. 16 \qquad d. 12
```

Answer: c. 16

2. What will be the value of the following pseudocode?

```
Integer value, n, num
Set value = 1, n = 45
num = num >> 1
num = num + value
Print num
a. 44 b. 0 c. 1 d. 12

Answer: c. 1
```

3. What will be the value of the following pseudocode?

```
Integer j, m 

Set m = 1, j = 1 

Integer a[3] = \{0,1,4\} 

if (a[m-1] \parallel (a[-1] \&\& a[1])) 

a[j] = 5 

End if 

m = m + a[j] 

Print m 

a. 3 b. 4 c. 6 d. 2
```

Answer: c. 6

4. What will be the value of the following pseudocode for x = 27?



```
Integer fun(Integer x)
   if(x > 9)
   fun(x/9)
   Print x - 1
   fun(x/3)
   else
   print x - 2
   end if
   end function fun()
   a. 1 26 7
                          b. 26 7 1
                                                c. 982
   Answer: a. 1 26 7
5. What will be the value of the following pseudocode?
   Integer x,y
   for(each x from 1 to 11)
           x = x + 2
   end for
   Print x
   a. 11
                          b. 10
                                                c. 12
   Answer: d. 13
6. What will be the value of the following pseudocode?
   Input f = 6, g = 9 and set sum = 0
   Integer n
   if (g > f)
           for (n = f; n < g; n = n + 1)
                   sum = sum + n
           End for loop
   else
           Print Error Message
   Print sum
   a. 6
                          b. 21
                                                 c. 15
   Answer: b. 21
   Integer j, m
```

d. 7801

d. 13

d. 9

7. What will be the value of the following pseudocode?

Set m = 1, j = 1Integer $a[3] = \{0, 1, 0\}$ a[0] = a[0] + a[1]a[1] = a[1] + a[2]a[2] = a[2] + a[0]if(a[0])a[j] = 5End if m = m = a[i]



```
Print m
   a. 3
                         b. 2
                                                c. 6
                                                                      d. 4
   Answer: c. 6
8. Which of the following options is correct for the given code for n = 39 and r = 13?
   Integer f1(Integer n, Integer r)
   if(n > 0)
   return (n - r + f1(n/3, 13))
   else
   return 0
   end if
   End function f1 ()
   a. 3
                         b. 0
                                                c. 5
                                                                      d. 1
   Answer: c. 5
9. What will be the value of the following pseudocode for k=150?
   fun(integer k)
           if(k>155)
                  return
           end if
           print k
           fun(k+2)
           print k
   End of function fun()
   a. 150 152 154
                                                                             d. None of the mentioned
                         b. 150 152 154 154 152 150
                                                              c. 150
   Answer: b. 150 152 154 154 152 150
10. Which of the following is the most appropriate option for the output of the given pseudocode for n = 25?
   Integer foo(Integer n)
   if(n EQUALS 1)
           return 1
   else if((n MOD 2) EQUALS 0)
           return n*2
   else
           return foo(n - 10/3)
   end if
   End function foo()
   a. 20
                         b. 44
                                                c. 15
                                                                      d. 25
   Answer: b. 44
```

```
Integer a, n, b

Set a = 0, n = 0, b

for(each n from 0 to 4)

n = n + 1
```



```
if(n EQUALS 3)
                   Print "Hello World"
           end if
           Jump out of the loop
   End for
   Print n
   a. 2
                          b. 1
                                                 c. 3
                                                                         d. Hello World
   Answer: b. 1
12. What will be the output of the following pseudocode?
   Integer a[5], b[5], c[5], k, l
   Set a[5] = \{5, 9, 7, 3, 1\}
   Set b[5] = \{2, 4, 6, 8, 10\}
   for(each k from 0 to 4)
           c[k] = a[k] - b[k]
   end for
   for(each 1 from 0 to 4)
           Print c[1]
   end for
   a. 7 13 13 11 11
                      b. 3 5 1 -5 -9
                                                 c. -3 -5 -1 5 9
                                                                        d. None
   Answer: b. 3 5 1 -5 -9
13. How many times "A" will be printed in the following pseudocode?
   Integer a, b, c
   for(a = 0 \text{ to } 4)
           for(b = 0 \text{ to } 2)
                   if(a is greater than b)
                          Print "A"
                   End if
           End for
   End for
   a. 8
                          b. 7
                                                 c. 9
                                                                         d. 10
   Answer: c. 9
14. What will be the output of the following pseudocode for a = 3?
   void fun(int a)
   if(a<1)
           return
   else
           print a
           fun(a-2)
           print a
           return
   End function fun()
   a. 2 1 1 2
                                                 c. 210
                                                                         d. 3 1 1 3
                          b. 12
```



```
Integer p, q r
Set q = 13
for(each p from 1 to 4)
       r = q \mod p
       p = p + 5
       q = p + r
end for
r = q/5
Print q, r
a. 64
                       b. 13
                                              c. 72
```

Answer: d. 61

16. What will be the output of the following pseudocode?

```
Integer x
Set x = 259
if(x EQUALS 0)
       Print "0"
otherwise if(x MOD 9 EQUALS 0)
       Print "9"
otherwise
       Print x MOD 9
end if
a. 8
                     b. 16
```

d. None

d. 61

Answer: c. 7

17. What will be the output of the following pseudocode?

```
Integer a[5], b[5], c[5], k, l
Set a[5] = \{1, 2, 3, 4, 5\}
Set b = [5] = \{6, 7, 8, 9, 10\}
for(each k from 0 to 4)
        c[k] = a[k] + b[k]
end for
Print c[1]
end for
a. 11 12 13 14 15
                        b. None
```

c. 7

c. 7 8 9 10 11 d. 7 9 11 13 15

Answer: d. 7 9 11 13 15

18. Which of the following output is correc for the given code if n = 64?

```
Integer large(Intger n)
        if(n \le 1)
                return 1
        end if
```



```
if(n mod 4 EQUALS 0)
                  return large(n/4)
           end if
           return large(n/4) + large(n/4 * 1)
   End function large()
                          b. 0
   a. 1
                                                c. 6
                                                                       d. 4
   Answer: a. 1
19. What will be the output of the following pseudocode?
   Integer j, m
   Set m = 1, j = 1
   Integer a[5] = \{6, 4, 3, 1, 4\}
   if(a[m-1])
           a[j] = a[j] + 5
   End if
   m = m + a[j]
   Print m
                          b. 9
   a. 10
                                                c. 8
                                                                       d. 4
   Answer: a. 10
20. What will be the output of the following pseudocode?
   Integer j, m
   Set m = 4
   Integer a[4] = \{4, 13, 2, 1\}
   for{each j from 0 to 3}
           if(j > 1)
                  m = m + a[j]
           End if
           if(j > 2)
                  Continue
           End if
           m = m + 1
           End for
   Print m
   a. 8
                          b. 10
                                                c. 1
                                                                       d. 4
   Answer: b. 10
21. What will be the output of the following pseudocode?
   Integer a, b, count, count1
   Set a = 1, b = 1
   while(a \leq 5)
           b = 1
           while(b \le 5)
```



b = b + 1

count1 = count1 + 1

```
end while a = a + 1
count = count + 1
end while Print count, count 1
a. 25 5 	 b. 24 5 	 c. 5 25
```

Answer: c. 5 25

22. What will be the output of the following pseudocode a=2, b=2?

```
Integer funn(Integer a, Integer b)  if(a \& b>0)   return \ 1 + funn(a-1,b) + funn(a,b-1)   End \ if   return \ 0   End \ function \ funn(\ )   a. \ 0 \qquad b. \ 2 \qquad c. \ 4 \qquad d. \ 9
```

d. 5 5

d. 37 24

Answer: a. 0

23. What will be the output of the following pseudocode?

```
Integer a, b

Set a = 12, b = 25

a = (a + b) \text{ MOD } 2

b = b = a

a = a + b - 13

Print a, b

a. -11 1 b. -12 00 c. 11 22
```

Answer: a. -11 1

24. What will be the output of the following pseudocode?

```
Integer i Set i = 0 Start : i = 12 Print i if(i < 60) goto Start else Print i + 1 end if a. 0 12 0 12 13 b. 12 24 36 48 60 61 c. 12 infinite times d. 0 12 24 25 Answer: c. 12 infinite times
```



```
print y1/y2
while(y1/y2)
end do while
a. It will print 1 infinite time
b. 8
c. 0
d. 1
Answer: a. It will print 1 infinite time
```

```
Integer a, b, c
Set b = 10, a = 1
for(each c from 1 to 3)
       a = (a + c) * c
       b = b - c
End for
if (0 && 1 && (2^3))
       b = a - 1
       a = a - 1
       a = b + 1
        a = a >> 1
       b = b \gg a
Else
       a = b + 1
       b = a - 1
       a = a - 1
End if
Print a + b
a. 7
                       b. 3
                                                                       d. 8
                                               c. 4
Answer: d. 8
```

27. What will be the output of the following pseudocode?

```
Integer a, b, c

Set a = 4, b = 4, c = 4

if(a & (b ^ b) & c)

a = a >> 1

End if

Print a + b + c

a. 16 b. 24 c. 8 d. 12

Answer: d. 12
```

28. What will be the output of the following pseudocode for a = 10, b = 11?

```
Integer funn(Integer a, Integer b) if(0) return a - b - funn(-7, -1) End if a = a + a + a + a return a
```



```
End function funn()
a. 40
                                             c. 44
                                                                    d. 0
                      b. 30
```

Answer: a. 40

29. What will be the output of the following pseudocode for a = 5, b = 1?

```
Integer funn(Integer a, Integer b)
       if((b + a || a - b) && (b > a) && 1)
               a = a + b + b - 2
               return 3 - a
       Else
               return a - b + 1
       End if
       return a + b
End function fun()
a. 0
                       b. 5
                                              c. 16
                                                                      d. 11
```

Answer: b. 5

30. What will be the output of the following pseudocode for a = 5, b = 3?

```
Integer funn(Integer a, Integer b)
        if((b \mod a > a \mod b) \parallel (a \land b > a))
                 a = a \wedge b
                if(a)
                         b = 1
                         return 4^5^6
                 End if
                 return 1^2^3
        End if
        return a+b
End function funn ()
a. 7
                                                                            d. 3
                         b. 9
                                                   c. 16
```

Answer: a. 7

31. What will be the output of the following pseudocode for a = 5, b = 1?

```
Integer funn(Integer a, Integer b)
        if((b mod a && a mod b) || (a \land b > a))
                a = a \wedge b
        Else
                return a - b
        End if
        return a + b
End function funn()
a. -9
                        b. 5
                                                 c. 6
                                                                          d. 21
```

Answer: b. 5

32. What will be the output of the following pseudocode a = 1, b = 3?



```
Integer funn(Integer a, Integer b)
           if(a&1 && 1)
                  return funn(a-1, a+a) + funn(a-1, b+b)
           Else
                  return b^a
   End if
   a. 8
                          b. 26
                                                c. 1
                                                                       d. 15
   Answer: a. 8
33. What will be the output of the following pseudocode for a = 4, b = 8?
   Integer funn(Integer a, Integer b)
           if(a > b)
                  b = b \wedge a
           End if
           if(b > a)
                  a = a \wedge b
           End if
           return a + b
   End function funn ()
   a. 35
                          b. 20
                                                c. 14
                                                                       d. 25
   Answer: b. 20
34. What will be the output of the following pseudocode?
   Integer x
   Set x = 2
   if(x is EQUAL TO 1)
           if(x IS EQUAL TO 0)
                  Print "A"
           else
                  Print "B"
           end if
   else
           Print "C"
   end if
   a. B C
                          b. C
                                                                       d. B
                                                c. A
   Answer: b. C
35. What will be the output of the following pseudocode for input 7?
   Read the value of N.
   Set m = 1, T = 0
   if(M>N) // line 3
           Go to line no. 9
   else
           T = T + m
           m = m + 1
```



```
Go to line no. 3
           Print T // line 9
   a. 76
                          b. 32
                                                c. 56
                                                                       d. 28
   Answer: d. 28
36. What will be the output of the following pseudocode?
   Integer a, b
   Set b = 2
   for(each a from 1 to 6)
           a = a + 2
           b = b + a - 4
   end for
   Print b
   a. 3
                          b. 4
                                                 c. 1
                                                                       d. 8
   Answer: a. 3
37. What will be the output of the following pseudocode?
   Integer value, n
   Set value = 1, n = 45
   while(value less than equal to n)
           value = value << 1
   end loop
   Print value
   a. 64
                          b. 32
                                                 c. None
                                                                       d. 45
   Answer: a. 64
38. What will be the output of the following pseudocode?
   Integer j, m
   Set m = 1
   Integer a[4] = \{1, 0, 1, 1\}
   for(each j from 0 to 1)
           if(j > 2)
                   Continue
           Else
                  if(a[j])
                          m = a[j]
                   End if
           End if
   End for
   Print m
   a. 5
                          b. 8
                                                                       d. 7
                                                 c. 1
   Answer: c. 1
```



Integer a, b, c Set a = 4, b = 0, c = 0 if(a) a = a << 1End if $b = b \land (c >> 1)$ Print a + b + c

a. 11

c. 8

d. 18

Answer: c. 8

40. What will be the output of the following pseudocode?

b. 5

Integer a, b, c

Set
$$a = 4$$
, $b = 2$, $c = 3$
if($a \parallel a \& b \parallel a \& b \& c$)
 $c = 1$
 $a = c \land 1$

Else

$$c = 1$$
$$b = b \wedge 3$$

End if

Print
$$a + b + c$$

a. 4

b. -1

c. 3

d. 23

Answer: c. 3

EXTRA QUESTIONS

1. What will be the output of the following pseudocode?

Integer a, b, c

Set
$$a = 5$$
, $b = 5$, $c = 9$
if((b && (c >> 1)) || (b && (c << 1)))
 $a = a^{1}$

End if

Print a + b + c

a. 18

b. 27

c. 14

d. 19

Answer: a. 18

2. What will be the output of the following pseudocode?

Integer a, b, c

Set
$$a = 4$$
, $b = 1$, $c = 2$
if($b \land (c \& a) \&\& a \land (c \& b)$)
 $c = a + a$
 $a = c + c$

Else

$$c = b + b$$

$$b = c + c$$

End if



```
Print a + b + c
a. 22 b. 31 c. 34 d. 25
Answer: d. 25
```

```
Integer a, b, c
Set a = 1, b = 2
for(each c from 4 to 6)
a = a \wedge b
if(c - a < b + a)
b = 2
a = 1
Jump out of the loop
End if
a = a \wedge c
End for
Print a + b
```

a. -2

b. 8

c. 3

d. 16

Answer: c. 3

4. What will be the output of the following pseudocode?

```
Integer a, b, c

Set a = 2, b = 1

for(each c from 1 to 5)

if(c > 3 \parallel b > 3)

a = a + c

End if

b = b - 1

b = b + a

End for

b = b + 1

Print a + b
```

b. 33

c. 31

d. 37

Answer: c. 31

a. 30

```
Integer a, b, c

Set a =4, b = 1, c = 2

if(b ^{\land} (c & a) && a ^{\land} (c & b))

c = a + a

a = c + c

Else

c = b + b

b = c + c

End if
```



Print a + b + c a. 22 b. 31 c. 34 d. 25 **Answer: d. 25**

6. What will be the output of the following pseudocode for a = 6, b = 7?

Integer funn(Integer a, Integer b) if(a < b && a > 0) a = a + 10 if(a > 0 && b > 0) $a = a \wedge b$ End if a = a >> 1End if return a + bEnd function funn() a. 27 b. 14 c. 18 d. 20

Answer: c. 18

7. What will be the output of the following pseudocode?

Integer a, b Set b = 8 Set a = b Print a // line 4 a = a + b - 10 if(a > 0) Go to line 4 End if a. 8 8 8 0 b. 6 4 2 0

c. 8 6 4 2

d. 842

Answer: c. 8 6 4 2

8. What will be the output of the following pseudocode?

Integer a, b Set a = 20, b = 4while (a >= b) a = a >> 1end while Print a a. 2

b. 3

c. 4

d. 5

Answer: a. 2

9. What will be the value of s if n = 127?

Read n i=0,s=0 Function Sample(int n) while (n>0)



```
\begin{array}{c} r=n\%10\\ p=8^{\circ}i\\ s=s+p*r\\ i++\\ n=n/10\\ End\ While\\ return\ s;\\ End\ Function\\ a.\ 27 \qquad b.\ 187 \qquad c.\ 87 \qquad d.\ 120 \end{array}
```

Answer: c. 87

Solution: The following code is converting an octal number into its decimal representation. Here we are treating 127 as an octal input and converting it into its decimal representation that is 87.

10. What will be the value of s if N=20?

```
Read N
```

```
Function sample(N) s = 0, f = 1, i = 1; Do Until i <= N f = f * i; s = s + (i / f); i = i + 1 End Do return(s); End Function a. 666667 \qquad b. infinite loop \qquad c. 708333 \qquad d. 716667
```

Answer: b. infinite loop

Solution: This code will never end because the value of n is never been updated.

