King Abdullah II School of Information Technology

**Computer Skills2**

**Problem Solving Homework**

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**Choose the correct answer for each of the following questions:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Question** | **Choice 1** | **Choice 2** | **Choice 3** | **Choice 4** |
| **1.** | If the value of z is 2.1 x 10-3, then the data type of the z is: | Integer | Real | String | Boolean |
| **2.** | The data type of the following value "-3.5\*10^4" is: | Integer | Real | String | Boolean |
| **3.** | One of the following assignment statements is **correct** | y+1=3+x | A+2= 4 | A = B | 22=A |
| **4.** | The value of Y after solving the following equation is:  Y = 3\*2-10+5-(4\*1+2^-2\*4) | -4 | 5 | 11 | 7 |
| **5.** | The value of X after solving the following equation is:  X= 16+3mod7\*2-4mod 3 | 21 | 17 | 18 | 11 |
| **6.** | The value of A after solving the following equation is:  A= 4\*(5\*2^2/5+1)/(4+1)+2^4-9 | 39 | 9 | 10 | 11 |
| **7.** | The value of Z after solving the following equation is  Z= 6-3^2 mod 10 <7 and not(5+2\*4<>12)or false | True | False | 3 | 0 |
| **8.** | The value of X after solving the following equation is:  X = 10^2>100 or 2^(6-14mod8)=1 | True | False | 2 | 8 |
| **9.** | The value of Y after solving the following equation is:  Y=not( 8mod10 =10mod8) or true and 3^2=3\*2 | True | False | 5 | 0 |
| **10.** | The output of the following flowchart is:  f1 | 1 1 3 1 5 1 | 1 1 3 1 5 1 6 5 | 1 1 3 1 5 1 4 5 | None of them |
| **11.** | The structure of the flowchart in question 10 is | Looping | Selection | Sequence | Can’t Determine |
| **12.** | The equivalent Pseudo Code for the flowchart in question 10 is: | 1. Start  2. let x=5, n=1, m=1  3. print n, m  4.Increment n by 2  5.If n<=x then goto3  6.n=n-1,m=m+4  7.Print n, m  8. end | 1. Start  2. let x=5, n=1, m=1  3. print n, m  4.Increment n by 2  5.If n<=x then goto2 else n=n-1  6. m=m+4  7. end | 1. Start  2. let x=5, n=1, m=1  3. print n, m  4.Increment n by 2  5.If n<=x then n=n-1, m=m+4  6.Print n, m  7. end | None of them |
| **13.** | What are the suitable words to be filled in the blanks so that the following pseudo code will:  Print the summation of the odd numbers between 1 to 10.   1. Start 2. count=1 3. sum=0 4. sum=sum+\_\_\_\_\_\_ 5. count=count+2 6. if count<=10 then goto \_\_\_\_\_ 7. print \_\_\_\_\_\_ 8. Stop | 4. count  6. step 4  7. count | 4. 2  6. step 4  7. sum | 4. count  6. step 4  7. sum | 4. count  6. step 3  7. count |
| **14.** | What is the output for the following flowchart:  Assume that n= 10:  f2 | 5 4 | 1 2 1 | 5 4 4 | None of them |
| **15.** | Which one of the following pseudo codes solve the following problem:  **Printing numbers from 30 to 1 in descending order** | 1.Start  2. c=30  3. Print c  4.c=c+1  5.if c>=1 then goto 3  6.stop | 1.Start  2. c=1  3. Print c  4.c=c-1  5.if c>=30 then goto 3  6.Stop | 1.Start  2. c=30  3. Print c  4.c=c-1  5.if c>=1 then goto 3  6.Stop | None of them |
| **16.** | What is the output for the following code  If the inputs are 4,7,3   1. c = 5 2. if c > 0 then goto 4 3. goto 9 4. input m 5. x=m+c 6. print x 7. c=c-2 8. goto 2 9. end | 5 3 1 | 9 10 | 9 10 4 | None of them |
| **17.** | Write the equivalent Pseudo Code for the following Flowchart | 1. Let a = 6, b = 10 2. If b-a = 0 then print "good"  3. if a+b<>10 then print x else  a=a-1 ,b=b+1,  print a,b  4. end | 1. Let a = 6, b = 10 2. If b-a = 0 then print "good" else if a+b<>10 then print x else  a=a-1  b=b+1  print a,b  3. end | 1. Let a = 6, b = 10 2. If b-a = 0 then print "good"  3. if a+b<>10 then print x else  a=a-1 , b=b+1  5. print a,b  6. end | None of them |
| **18.** | What is the output for the following flowchart: | good | 2 8 | good 2 8 | None of them |
| **19.** | What is the output from the following flowchart, use the following set of Integers for the values of y:  12 5 7 9 6 4  a1 | 12 5 7 9 6 4 | 5 7 4 | 1 2 3 4 5 6 | 12 9 6 |
| **20.** | **The error in the following flowchart is:** | The symbol used for the start statement | The symbol used for the stop statement | The symbol used for the input statement | No error |
| **21.** | **The error in the following flowchart is:** | The symbol used for the start statement | The symbol used for the stop statement | The symbol used for the input statement | No error |