SAS Exam Practice Questions (Nov. 2018, XY)

1. The contents of the raw data file are listed below:

```
----+----10---+----20---+----30
1234 5678
```

The following SAS program is submitted:

```
data myDataSet;
        infile myFile;
        input @1 Value1 4. @6 Value2 4;
run;
```

Which one of the following is the value of the variable Value2 in tmyDataSet?

A. 5678
B. 1234
C. 4
D. . (missing numeric value)

2. You are given the SAS data set called aDataSet, which has numeric variables Va and Vb:

Va	Vb
10	1
20	2
10	6

The following SAS program is submitted:

```
data ds1 ds2 ds3;
        set aDataSet;
        if Va eq 10 then output ds1;
        if Vb lt 6 then output ds2;
        output;
run;
```

What is the result?

A. data set ds1 has 5 observations
   data set ds2 has 5 observations
   data set ds3 has 3 observations

B. data set ds1 has 2 observations
   data set ds2 has 2 observations
   data set ds3 has 1 observations

C. data set ds1 has 2 observations
   data set ds2 has 2 observations
   data set ds3 has 3 observations

D. data set ds1 has 3 observations
   data set ds2 has 3 observations
   data set ds3 has 3 observations

3. The following SAS program is submitted:

```
data WORK.TEST3;
        drop City;
        infile datalines;
        input
        Name $1-14 /
```

```
                Address $1-14 /
                City $1-12;
                if City='Pennsvil' then input @ 1 State $2.;
                else input;
                datalines;
John Conley
123 Main St.
Janesville
NJ
Mary Ngyuen
456 Alpha Ave.
Pennsvil
PA
Mark Jason
789 Mt. Diablo
Eureka
NY
;
```

What will the data set WORK. TEST3 contain?

A.

Name	Address	City	State
John Conley	123 Main St.	Janesville	
Mary Ngyuen	456 Alpha Ave.	Pennsvil	PA
Mark Jason	789 Mt. Diablo	Eureka	

B.

Name	Address	State
John Conley	123 Main St.	
Mary Ngyuen	456 Alpha Ave.	PA
Mark Jason	789 Mt. Diablo	

C.

Name	Address	City	State
Mary Ngyuen	456 Alpha Ave.	Pennsvil	PA

D.

Name	Address	State
Mary Ngyuen	456 Alpha Ave.	PA

4. Based on the following SAS code, what are the lengths of variables Unit and String respectively?

```
data test100;
        Unit="Cornell University";
        String=substr(Unit,1,4);
run;
```

A. 18 and 4
B. 18 and 1
C. 4 and 8
D. 18 and 18

5. Based on the following SAS code, what are the lengths of variables Unit and String respectively?

```
data test100;
        Unit="Cornell University";
        String=tranwrd(scan(Unit,1, ' ,'),'Cornell', 'Cornell Univeristy');
run;
```

A. 18 and 7
B. 18 and 4
C. 18 and 18
D. 18 and 200

6. In a sum statement, the accumulator variable
A. must be numeric.
B. is automatically set to 0 before the first observation is read.
C. retains its value from one DATA step to the next.
D. All of above.

7. The following SAS program is submitted:

```
data total_wage;
        retain Total;
        set SASUSER.wage;
        by dept;
        if First. dept then Total=0;
        Total+salary;
        if Last.dept;
run;
```

What is the initial value of the variable Total?

A. Missing
B. Zero
C. The value of the first observation's salary
D. Cannot be determined based on the information given

8. After you execute the following code, how many observations you will get in data set stress?

```
data stress;
   input ID $ 1-4 Name $ 6-25 RestHR 27-29 MaxHR 32-34
                 RecHR 36-38 TimeMin 40-41 TimeSec 43-44
                 Tolerance $ 46;
   if tolerance='D';
                TotalTime=(timemin*60)+timesec;
   datalines;
2458 Murray, W            72   185 128 12 38 D
2462 Almers, C            68   171 133 10 5  I
2501 Bonaventure, T       78   177 139 11 13 I
2523 Johnson, R           69   162 114 9  42 S
2539 LaMance, K           75   168 141 11 46 D
2544 Jones, M             79   187 136 12 26 N
2552 Reberson, P          69   158 139 15 41 D
2555 King, E              70   167 122 13 13 I
2563 Pitts, D             71   159 116 10 22 S
2568 Eberhardt, S         72   182 122 16 49 N
2571 Nunnelly, A          65   181 141 15 2  I
2572 Oberon, M            74   177 138 12 11 D
2574 Peterson, V          80   164 137 14 9  D
2575 Quigley, M           74   152 113 11 26 I
2578 Cameron, L           75   158 108 14 27 I
2579 Underwood, K         72   165 127 13 19 S
2584 Takahashi, Y         76   163 135 16 7  D
2586 Derber, B            68   176 119 17 35 N
2588 Ivan, H              70   182 126 15 41 N
2589 Wilcox, E            78   189 138 14 57 I
2595 Warren, C            77   170 136 12 10 S
;
```

A. 6

B. 21
C. 1
D. 7

9. After you execute the following code, how many observations you will get in data set stress?

```
data stress;
   input ID $ 1-4 Name $ 6-25 RestHR 27-29 MaxHR 32-34
                 RecHR 36-38 TimeMin 40-41 TimeSec 43-44
                 Tolerance $ 46;
   if tolerance='D' then TotalTime=(timemin*60)+timesec;
   datalines;
2458 Murray, W            72   185 128 12 38 D
2462 Almers, C            68   171 133 10 5  I
2501 Bonaventure, T       78   177 139 11 13 I
2523 Johnson, R           69   162 114 9  42 S
2539 LaMance, K           75   168 141 11 46 D
2544 Jones, M             79   187 136 12 26 N
2552 Reberson, P          69   158 139 15 41 D
2555 King, E              70   167 122 13 13 I
2563 Pitts, D             71   159 116 10 22 S
2568 Eberhardt, S         72   182 122 16 49 N
2571 Nunnelly, A          65   181 141 15 2  I
2572 Oberon, M            74   177 138 12 11 D
2574 Peterson, V          80   164 137 14 9  D
2575 Quigley, M           74   152 113 11 26 I
2578 Cameron, L           75   158 108 14 27 I
2579 Underwood, K         72   165 127 13 19 S
2584 Takahashi, Y         76   163 135 16 7  D
2586 Derber, B            68   176 119 17 35 N
2588 Ivan, H              70   182 126 15 41 N
2589 Wilcox, E            78   189 138 14 57 I
2595 Warren, C            77   170 136 12 10 S
;
```

A. 6
B. 21
C. 1
D. 7

10. After you execute the following code, what are the values of variable TotalTime?

```
data stress;
   input ID $ 1-4 Name $ 6-25 RestHR 27-29 MaxHR 32-34
                 RecHR 36-38 TimeMin 40-41 TimeSec 43-44
                 Tolerance $ 46;
   if tolerance='D' then TotalTime=(timemin*60)+timesec;
   datalines;
2458 Murray, W            72   185 128 12 38 D
2462 Almers, C            68   171 133 10 5  I
2501 Bonaventure, T       78   177 139 11 13 I
2523 Johnson, R           69   162 114 9  42 S
2539 LaMance, K           75   168 141 11 46 D
2544 Jones, M             79   187 136 12 26 N
2552 Reberson, P          69   158 139 15 41 D
2555 King, E              70   167 122 13 13 I
2563 Pitts, D             71   159 116 10 22 S
2568 Eberhardt, S         72   182 122 16 49 N
2571 Nunnelly, A          65   181 141 15 2  I
2572 Oberon, M            74   177 138 12 11 D
2574 Peterson, V          80   164 137 14 9  D
2575 Quigley, M           74   152 113 11 26 I
2578 Cameron, L           75   158 108 14 27 I
```

```
2579 Underwood, K         72   165 127 13 19 S
2584 Takahashi, Y         76   163 135 16 7  D
2586 Derber, B            68   176 119 17 35 N
2588 Ivan, H              70   182 126 15 41 N
2589 Wilcox, E            78   189 138 14 57 I
2595 Warren, C            77   170 136 12 10 S
;
```

A. It has 21 non-missing values.
B. It has 15 non-missing values.
C. It has 6 non-missing values and 15 missing values.
D. It has 21 missing values.

11. After you execute the following code, how many observations you will get in data set stress?

```
data stress;
   input ID $ 1-4 Name $ 6-25 RestHR 27-29 MaxHR 32-34
                 RecHR 36-38 TimeMin 40-41 TimeSec 43-44
                 Tolerance $ 46;
   if tolerance='D' then DO;
           TotalTime=(timemin*60)+timesec;
           output;
        end;
datalines;
2458 Murray, W            72   185 128 12 38 D
2462 Almers, C            68   171 133 10 5  I
2501 Bonaventure, T       78   177 139 11 13 I
2523 Johnson, R           69   162 114 9  42 S
2539 LaMance, K           75   168 141 11 46 D
2544 Jones, M             79   187 136 12 26 N
2552 Reberson, P          69   158 139 15 41 D
2555 King, E              70   167 122 13 13 I
2563 Pitts, D             71   159 116 10 22 S
2568 Eberhardt, S         72   182 122 16 49 N
2571 Nunnelly, A          65   181 141 15 2  I
2572 Oberon, M            74   177 138 12 11 D
2574 Peterson, V          80   164 137 14 9  D
2575 Quigley, M           74   152 113 11 26 I
2578 Cameron, L           75   158 108 14 27 I
2579 Underwood, K         72   165 127 13 19 S
2584 Takahashi, Y         76   163 135 16 7  D
2586 Derber, B            68   176 119 17 35 N
2588 Ivan, H              70   182 126 15 41 N
2589 Wilcox, E            78   189 138 14 57 I
2595 Warren, C            77   170 136 12 10 S
;
```

A. 6
B. 21
C. 1
D. 7

12. The following SAS program is submitted:

```
data total;
        set salary;
        by Department Gender;
        if First.<_insert_code_> then Payroll=0;
        Payroll+ Wage;
        if Last.<_insert_code_>;
run;
```

The SAS data set SALARY is currently ordered by Gender within Department. Which of the following will complete the code above?

A. Department Gender
B. Gender Department
C. Department
D. Gender

13. The following SAS program is submitted:

```
data dateValues;
        Month="01";
        Year= '1960';
        Value=mdy(Month,01,Year);
run;
```

What is the value of the variable Value?

A. the numeric value 0
B. the character value "01011960"
C. a missing value due to syntax errors
D. the step will not compile because of the character argument in the mdy() function

14. The following SAS program is submitted:

```
data work.retail;
        sales = “1,000,000”;
        bonus = .10*sales;
run;
```

What is the result?

A. The value of the variable bonus in the output data set is 1000000. No messages are written to the SAS log.
B. The value of the variable bonus in the output data set is 1000000. A note that conversion has taken place is written to the SAS log.
C. The value of the variable bonus in the output data set is missing. A note in the SAS log refers to invalid numeric data.
D. The variable bonus in the output data set is set to zero. No messages are written to the SAS log.

15. In the the following SAS program, what are the data type of variable sales and bonus?

```
data work.retail;
        sales = “1,000,000”;
        bonus = .10*sales;
run;
```

A. Both variables sales and bonus are numeric.
B. Variable sales is character and variable bonus is numeric.
C. Variable sales is numeric and variable bonus is character.
D. Both variables sales and bonus are character.

16. Which step displays a listing of all the data sets in the SASUSER library?

A. proc contents data=SASUSER; run;
B. proc contents data=SASUSER.all;run;
C. proc contents data=SASUSER._all_; run;
D. proc contents data=SASUSER _ALL_; run;

17. You're attempting to read a raw data file and you see the following messages displayed in the SAS Log:

```
NOTE: Invalid data for Salary in line 4 15-23.
RULE: ----+----1----+----2----+----3----+----4----+----5--
4     220105   F    88*36   10MAY1969
Employee_ld=l20104 employee_gender=F Salary=. birth_date=-2060 _ERROR_=l
_N_=4
NOTE: 20 records were read from the infile 'd:\employees.dat'.
The minimum record length was 34.
The maximum record length was 34.
NOTE: The data set WORK.EMPLOYEES has 20 observations and 4 variables.
```

What does it mean?

A. It is an error on the INPUT statement specification for reading the variable Salary.
B. It is a compiler error, triggered by an invalid character for the variable Salary.
C. It is an error that occurs on the 4th observation.
D. It is an execution error, triggered by an invalid character for the variable Salary.

18. You have the following incomplete code, which one of the following can complete the code and make the full name John Smith?

```
data makingFullName;
        FirstName="John";
        LastName="Smith";
        FullName=<_insert_code_here>;
run;
```

A. CATX(FirstName, ' ', LastName)
B. CATX(' ', FirstName, LastName)
C. CATX(FirstName, LastName)
D. CATX(FirstName, LastName, ' ')

19. What is the value of the variable FullName created by the following code?

```
data makingFullName;
        FirstName="John";
        LastName="Smith";
        FullName=CATX(FirstName, LastName);
run;
```

A. Smith
B. John
C. John Smith
D. There is an execution error and the value is missing.

20. The following SAS program is submitted:

```
proc sort data=payroll;
        by firstName descending salary;
run;
```

Which one of the following represents how the observations are sorted?

A. The data set payroll is stored in ascending order by both firstName and Salary values.

B. The data set payroll is stored in descending order by both firstName and Salary values.
C. The data set payroll is stored in descending order by firstName and ascending order by Salary values.
d. The data set payroll is stored in ascending order by firstName and in descending order by Salary values.

21. Which of the following statements creates a numeric variable named aNum with a value of 1234?

A. aNum=1234;
B. aNum="1234";
C. length aNum=8;
D. length aNum $ 8;

22. Which of the following permanently associates a format with a variable?

A. The PROC FORMAT procedure.
B. An INPUT statement with formatted style input.
C. An INPUT function with format modifiers.
D. A FORMAT statement in a DATA step.

23. Which TITLE statement will display Cornell's MPS as the text of the title?
A. title "Cornell"s MPS";
B. title 'Cornell"s MPS';
C. title "Cornell's MPS";
D. title 'Cornell' ' 's MPS';

24. The following SAS program is submitted:

```
data anArray;
        set dataSet;
        array t{3} <insert text here> (5, 10, 15);
run;
```

Which one of the following completes the ARRAY statement and creates data elements that are not included in the SAS data set Work.anArray?

A. _DROP_
B. _TEMPORARY_
C. __TEMP_
D. DROP

25. The following SAS program is submitted:

```
data city;
        length city $20;
        city='New York';
        city2=trim(city);
run;
```

Which one of the following is the length of the city2 variable?
A. 8
B. 6
C. 7
D. 20

26. The following SAS program is submitted:

```
data counting;
        do while (i le 20);
                i+1;
        end;
```

```
run;
```

Which one of the following is the value of variable i in the data set counting?

A. 20
B. 21
C. 1
D. 0

27. Which one of the following is true of the RETAIN statement in a SAS DATA step?

A. It is only valid when it is used with a sum function.
B. It can be used to assign an initial value to _N_ .
C. It has no effect on variables read with the SET, MERGE and UPDATE statements.
D. It always needs to be assigned an initial value.

28. The following SAS program is submitted:

```
proc datasets;
        contents data = clinic.admit varnum;
run;
```

Which one of the following is the purpose of the VARNUM option?

A. To print a list of the variables in the order they were created.
B. To print the total number of variables.
C. To print a list of the variables in alphabetic order.
D. To print a list of variable names.

29. The following SAS program is submitted:

```
data last_sale;
        set sales <insert option here> = x;
        if x=l then output;
run;
```

Which of the following options should be used in the DATA step to create a data set called Last_ Sale that contains the last observation in Sales?

A. END
B. NOBS
C. LASTOBS
D. _N_

30. The following SAS program is submitted:

```
data result;
        lname="jameston";
        <insert statement here>;
run;
```

Which statement completes the program and creates the variable x with a value of Jameston?

A. x=upcase (lname);
B. x=propcase (lname);
B. x=uppercase (lname, 1) ;
D x=propercase(lname);

31. What is the correct form of the sum statement in a DATA step?

A. total+varl+var2;

B. total=sum(total+varl+var2);
C. total=total+varl+var2;
D. total=sum(varl,var2);

32. The following SAS program is submitted:

```
data work.ds3;
        array Look{3};
run;
```

What variables are written to the Work.Ds3 data set?

A. No variables are written out.
B. Only the variable Look is written out.
C. There is a syntax error and the program fails to execute.
D. The variables Lookl, Look2, and Look3 are output.

33. In SAS9, when creating user-defined formats with the FORMAT procedure, which statement below is not true of the format name on the VALUE statement?

A. The user-defined format name cannot end in a number.
B. The format name can be up to 200 characters in length.
C. The format name must not end with a period.
D. User-defined formats cannot have the same name as a SAS format.

34. Assume that Work.Ds1 and Work.Ds2 exist and the following SAS program is submitted:

```
Ods pdf file='results.pdf';
proc print data=work.dsl;
run;
proc freq data=work.dsl;
proc freq data=work.ds2;
run;
Ods pdf close;
```

How many PDF files are created?

A. 1 PDF file with all the output combined
B. 2 PDF files -- one file for each data set used
C. 2 PDF files -- one for the PRINT output and one for the FREQ output
D. 3 PDF files-- one per procedure request

35. The following SAS program is submitted:

```
data work.new;
    date='02Nov10'd;
run;
```

What is the value of the Date variable?

A. a character string with the value 02Nov2010
B. a numeric value that represents the number of days between 01Jan1960 and 02Nov2010
C. the numeric value 02112010
D. There is a syntax error and the value of Date is missing.