1.The following SAS program is submitted:

```
data WORK.TOTAL;
    set WORK.SALARY;
    by Department Gender;
    if First.<_insert_code_> then Payroll=0;
    Payroll+Wagerate;
    if Last.<_insert_code_>;
run;
```

The SAS data set WORK.SALARY is currently ordered by Gender within
Department.
Which inserted code will accumulate subtotals for each Gender within Department?
    A. Gender
    B. Department
    C. Gender Department
    D. Department Gender

2.Given the following raw data records in TEXTFILE.TXT:

```
----|----10---|----20---|----30
John,FEB,13,25,14,27,Final
John,MAR,26,17,29,11,23,Current
Tina,FEB,15,18,12,13,Final
Tina,MAR,29,14,19,27,20,Current
```

The following output is desired:

Obs	Name	Month	Status	Week1	Week2	Week3	Week4	Week5
1	John	FEB	Final	$13	$25	$14	$27	.
2	John	MAR	Current	$26	$17	$29	$11	$23
3	Tina	FEB	Final	$15	$18	$12	$13	.
4	Tina	MAR	Current	$29	$14	$19	$27	$20

Which SAS program correctly produces the desired output?

        A.
```
data WORK.NUMBERS;
    length Name $ 4 Month $ 3 Status $ 7;
    infile 'TEXTFILE.TXT' dsd;
    input Name $ Month $;
```

```
        if Month='FEB' then input Week1 Week2 Week3 Week4 Status $;
        else if Month='MAR' then input Week1 Week2 Week3 Week4 Week5 Status $;
        format Week1-Week5 dollar6.;
run;
proc print data=WORK.NUMBERS;
run;


        B.
  data WORK.NUMBERS;
        length Name $ 4 Month $ 3 Status $ 7;
        infile 'TEXTFILE.TXT' dlm=',' missover;
        input Name $ Month $;
        if Month='FEB' then input Week1 Week2 Week3 Week4 Status $;
        else if Month='MAR' then input Week1 Week2 Week3 Week4 Week5 Status $;
        format Week1-Week5 dollar6.;
run;
proc print data=WORK.NUMBERS;
run;


        C.
  data WORK.NUMBERS;
        length Name $ 4 Month $ 3 Status $ 7;
        infile 'TEXTFILE.TXT' dlm=',';
        input Name $ Month $ @;
        if Month='FEB' then input Week1 Week2 Week3 Week4 Status $;
        else if Month='MAR' then input Week1 Week2 Week3 Week4 Week5 Status $;
        format Week1-Week5 dollar6.;
run;
proc print data=WORK.NUMBERS;
run;


        D.
  data WORK.NUMBERS;
        length Name $ 4 Month $ 3 Status $ 7;
        infile 'TEXTFILE.TXT' dsd @;
        input Name $ Month $;
        if Month='FEB' then input Week1 Week2 Week3 Week4 Status $;
        else if Month='MAR' then input Week1 Week2 Week3 Week4 Week5 Status $;
        format Week1-Week5 dollar6.;
run;
proc print data=WORK.NUMBERS;
run;
```

3.The Excel workbook REGIONS.XLS contains the following four worksheets:
    EAST
    WEST
    NORTH
    SOUTH

The following program is submitted:

   libname MYXLS 'regions.xls';

Which PROC PRINT step correctly displays the NORTH worksheet?
        A. proc print data=MYXLS.NORTH;run;
        B. proc print data=MYXLS.NORTH$;run;
        C. proc print data=MYXLS.'NORTH'e;run;
        D. proc print data=MYXLS.'NORTH$'n;run;

4.The following SAS program is submitted:

   data WORK.DATE_INFO;
       Day="01" ;
       Yr=1960 ;
       X=mdy(Day,01,Yr) ;
   run;

What is the value of the variable X?
        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.

5.Which statement specifies that records 1 through 10 are to be read from the raw data
file customer.txt?

        A. infile 'customer.txt' 1-10;
        B. input 'customer.txt' stop@10;
        C. infile 'customer.txt' obs=10;
        D. input 'customer.txt' stop=10;

6.After a SAS program is submitted, the following is written to the SAS log:

```
101      data WORK.JANUARY;
102      set WORK.ALLYEAR(keep=product month num_Sold Cost);
103      if Month='Jan' then output WORK.JANUARY;
104      Sales=Cost * Num_Sold;
105      keep=Product Sales;
                              -----
                               22
```

ERROR 22-322: Syntax error, expecting one of the following: !,!!, &, *, **, +, -, ,
<=, <>, =, >, >=,

AND, EQ, GE, GT, IN, LE, LT, MAX, MIN, NE, NG,
NL,NOTIN, OR, ^=, |, ||, ~=.

```
106    run;
```

What changes should be made to the KEEP statement to correct the errors in the
LOG?

    A. keep=(Product Sales);
    B. keep Product, Sales;
    C. keep=Product, Sales;
    D. keep Product Sales;

7.Which of the following choices is an unacceptable ODS destination for producing
output that can be viewed in Microsoft Excel?

    A. MSOFFICE2K
    B. EXCELXP
    C. CSVALL
    D. WINXP

8.The SAS data set named WORK.SALARY contains 10 observations for each
department,and is currently ordered by Department. The following SAS program is
submitted:

```
data WORK.TOTAL;
    set WORK.SALARY(keep=Department MonthlyWageRate);
    by Department;
    if First.Department=1 then Payroll=0;
    Payroll+(MonthlyWageRate*12);
    if Last.Department=1;
```

run;

Which statement is true?

       A. The by statement in the DATA step causes a syntax error.

       B. The statement Payroll+(MonthlyWageRate*12); in the data step causes a syntax error.

       C. The values of the variable Payroll represent the monthly total for each department in the WORK.SALARY data set.

       D. The values of the variable Payroll represent a monthly total for all values of WAGERATE in the WORK.SALARY data set.

----

9. data course;
input exam;
datalines;
50.1
;
run;
proc format;
value score 1 – 50 = 'Fail'
       51 – 100 = 'Pass';
run;
proc report data =course nowd;
column exam;
define exam / display format=score.;
run;

What is the value for exam?
A. Fail
B. Pass
C. 50.1
D. No output

10.The following SAS program is submitted:

  data WORK.RETAIL;
    Cost='$20,000';
    Discount=.10*Cost;
  run;

What is the result?

A. The value of the variable Discount in the output data set is 2000.No messages are written to the SAS log.

B. The value of the variable Discount in the output data set is 2000.A note that conversion has taken place is written to the SAS log.

C. The value of the variable Discount in the output data set is missing. A note in the SAS log refers to invalid numeric data.

D. The variable Discount in the output data set is set to zero.No messages are written to the SAS log.

11.Given the existing SAS program:

```
proc format;
    value agegrp
        low-12 ='Pre-Teen'
        13-high = 'Teen';
run;

proc means data=SASHELP.CLASS;
    var Height;
    class Sex Age;
    format Age agegrp.;
run;
```

Which statement in the proc means step needs to be modified or added to generate the following results:

Analysis Variable : Height

Sex	Age	N Obs	Minimum	Maximum	Mean
F	Pre-Teen	3	51.3	59.8	55.8
	Teen	6	56.5	66.5	63.0
M	Pre-Teen	4	57.3	64.8	59.7
	Teen	6	62.5	72.0	66.8

A. var Height / nobs min max mean maxdec=1;

B. proc means data=SASHELP.CLASS maxdec=1 ;

C. proc means data=SASHELP.CLASS min max mean maxdec=1;

D. output nobs min max mean maxdec=1;

12.The Excel workbook QTR1.XLS contains the following three worksheets:

JAN

FEB

MAR

Which statement correctly assigns a library reference to the Excel workbook?

A. libname qtrdata 'qtr1.xls';

B. libname 'qtr1.xls' sheets=3;

C. libname jan feb mar 'qtr1.xls';

D. libname mydata 'qtr1.xls' WORK.heets=(jan,feb,mar);

13.The following SAS program is submitted:

```
data WORK.TEST;
   set WORK.MEASLES(keep=Janpt Febpt Marpt);
   array Diff{3}    Difcount1-Difcount3;
   array Patients{3} Janpt Febpt Marpt;
run;
```

What new variables are created?

A. Difcount1, Difcount2 and Difcount3

B. Diff1, Diff2 and Diff3

C. Janpt, Febpt, and Marpt

D. Patients1, Patients2 and Patients3

14.Which of the following programs correctly invokes the DATA Step Debugger:

A.

```
data WORK.TEST debug;
   set WORK.PILOTS;
   State=scan(cityState,2,' ');
   if State='NE' then description='Central';
run;
```

B.

```
data   WORK.TEST debugger;
```

```
    set WORK.PILOTS;
    State=scan(cityState,2,' ');
    if State='NE' then description='Central';
run;


    C.
  data WORK.TEST / debug;
    set WORK.PILOTS;
    State=scan(cityState,2,' ');
    if State='NE' then description='Central';
run;


    D.
  data   WORK.TEST / debugger;
    set WORK.PILOTS;
    State=scan(cityState,2,' ');
    if State='NE' then description='Central';
run;
```

----

15. Which statement is true concerning the SAS automatic variable _ERROR_?

    A. It cannot be used in an if/then condition.
    B. It cannot be used in an assignment statement.
    C. It can be put into a keep statement or keep= option.
    D. It is automatically dropped.

----

16. The following SAS program is submitted:

```
  data WORK.DATE_INFO;
     X='04jul2005'd;
     DayOfMonth=day(x);
     MonthOfYear=month(x);
     Year=year(x);
  run;
```

What types of variables are DayOfMonth, MonthOfYear, and Year?

    A. DayOfMonth, Year, and MonthOfYear are character.
    B. DayOfMonth, Year, and MonthOfYear are numeric.
    C. DayOfMonth and Year are numeric. MonthOfYear is character.

D. DayOfMonth, Year, and MonthOfYear are date values.

17.Given the following data step:

```
data WORK.GEO;
    infile datalines;
    input City $20.;
    if City='Tulsa' then
    State='OK';
    Region='Central';
    if City='Los Angeles' then
    State='CA';
    Region='Western';
datalines;
Tulsa
Los Angeles
Bangor
;
run;
```

After data step execution, what will data set WORK.GEO contain?

A.

City	State	Region
Tulsa	OK	Western
Los Angeles	CA	Western
Bangor		Western

B.

City	State	Region
Tulsa	OK	Western
Los Angeles	CA	Western
Bangor		

C.

City	State	Region
Tulsa	OK	Central
Los Angeles	CA	Western

Bangor   Western

        D.
 City   State   Region
-----------   -----   -------
Tulsa   OK   Central
Los   CA   Western
Bangor

18.Which statement describes a characteristic of the SAS automatic variable
ERROR?

        A. The _ERROR_ variable maintains a count of the number of data errors in a
DATA step.
        B. The _ERROR_ variable is added to the program data vector and becomes
part of the data set being created.
        C. The _ERROR_ variable can be used in expressions in the DATA step.
        D. The _ERROR_ variable contains the number of the observation that caused
the data error.

19.The SAS data set WORK.ONE contains a numeric variable named Num and a
character variable named Char:

  WORK.ONE

  Num   Char
  ---   ----
    1   23
    3   23
    1   77

The following SAS program is submitted:

  proc print data=WORK.ONE;
      where Num='1';
  run;

What is output?

A.

 Num   Char

 ---   ----

 1   23

     B.

 Num   Char

 ---   ----

 1   23
 1   77

     C.

 Num   Char

 ---   ----

 1   23
 3   23
 1   77

     D. No output is generated.

----

20. The data set WORK.REALESTATE has the variable LocalFee with a format of 9.
and a variable CountryFee with a format of 7.;

The following SAS program is submitted:

```
  data WORK.FEE_STRUCTURE;
      format LocalFee CountryFee percent7.2;
      set WORK.REALESTAT;
      LocalFee=LocalFee/100;
      CountryFee=CountryFee/100;
  run;
```

What are the formats of the variables LOCALFEE and COUNTRYFEE in the output
dataset?

     A. LocalFee has format of 9. and CountryFee has a format of 7.
     B. LocalFee has format of 9. and CountryFee has a format of percent7.2
     C. Both LocalFee and CountryFee have a format of percent7.2
     D. The data step fails execution; there is no format for LocalFee.

21.Given the SAS data set WORK.PRODUCTS:

ProdId	Price	ProductType	Sales	Returns
------	-----	-----------	-----	-------
K12S	95.50	OUTDOOR	15	2
B132S	2.99	CLOTHING	300	10
R18KY2	51.99	EQUIPMENT	25	5
3KL8BY	6.39	OUTDOOR	125	15
DY65DW	5.60	OUTDOOR	45	5
DGTY23	34.55	EQUIPMENT	67	2

The following SAS program is submitted:

```
data WORK.OUTDOOR WORK.CLOTH WORK.EQUIP;
   set WORK.PRODUCTS;
   if Sales GT 30;
   if        ProductType EQ 'OUTDOOR'   then output WORK.OUTDOOR;
   else if ProductType EQ 'CLOTHING' then output WORK.CLOTH;
   else if ProductType EQ 'EQUIPMENT' then output WORK.EQUIP;
run;
```

How many observations does the WORK.OUTDOOR data set contain?
    A. 1
    B. 2
    C. 3
    D. 6

22.Which step displays a listing of all the data sets in the WORK library?
    A. proc contents lib=WORK run;
    B. proc contents lib=WORK.all;run;
    C. proc contents data=WORK._all_; run;
    D. proc contents data=WORK _ALL_; run;

23.Which is a valid LIBNAME statement?
    A. libname "_SAS_data_library_location_";
    B. sasdata libname "_SAS_data_library_location_";
    C. libname sasdata "_SAS_data_library_location_";
    D. libname sasdata sas "_SAS_data_library_location_";

24.Given the following raw data records:

```
----|----10---|----20---|----30
Susan*12/29/1970*10
Michael**6
```

The following output is desired:

Obs	employee	bdate	years
1	Susan	4015	10
2	Michael	.	6

Which SAS program correctly reads in the raw data?

A.
```
data employees;
   infile 'file specification' dlm='*';
   input employee $ bdate : mmddyy10. years;
run;
```

B.
```
data employees;
   infile 'file specification' dsd='*';
   input employee $ bdate mmddyy10. years;
run;
```

C.
```
data employees;
   infile 'file specification' dlm dsd;
   input employee $ bdate mmddyy10. years;
run;
```

D.
```
data employees;
   infile 'file specification' dlm='*' dsd;
   input employee $ bdate : mmddyy10. years;
run;
```

25.Given the following code:

```
proc print data=SASHELP.CLASS(firstobs=5 obs=15);
   where Sex='M';
run;
```

How many observations will be displayed?

    A. 11
    B. 15
    C. 10 or fewer
    D. 11 or fewer

26.Which step sorts the observations of a permanent SAS data set by two variables and stores the sorted observations in a temporary SAS data set?

    A.
```
 proc sort out=EMPLOYEES data=EMPSORT;
    by Lname and Fname;
run;
```

    B.
```
 proc sort data=SASUSER.EMPLOYEES out=EMPSORT;
    by Lname Fname;
run;
```

    C.
```
 proc sort out=SASUSER.EMPLOYEES data=WORK.EMPSORT;
    by Lname Fname;
run;
```

    D.
```
 proc sort data=SASUSER.EMPLOYEES out=SASUSER.EMPSORT;
   by Lname and Fname;
run;
```

27.Given the SAS data set WORK.TEMPS:

Day	Month	Temp
1	May	75
15	May	70
15	June	80
3	June	76
2	July	85

```
        14   July      89
```

The following program is submitted:

```
  proc sort data=WORK.TEMPS;
      by descending Month Day;
  run;

  proc print data=WORK.TEMPS;
  run;
```

Which output is correct?

A.

Obs	Day	Month	Temp
1	2	July	85
2	14	July	89
3	3	June	76
4	15	June	80
5	1	May	75
6	15	May	7

B.

Obs	Day	Month	Temp
1	1	May	75
2	2	July	85
3	3	June	76
4	14	July	89
5	15	May	70
6	15	June	80

C.

Obs	Day	Month	Temp
1	1	May	75
2	15	May	70
3	3	June	76
4	15	June	80
5	2	July	85
6	14	July	89

D.

Obs	Day	Month	Temp
---	---	-----	----
1	15	May	70
2	1	May	75
3	15	June	80
4	3	June	76
5	14	July	89
6	2	July	85

28.Given the SAS data set WORK.P2000:

Location	Pop2000
--------	-------
Alaska	626931
Delaware	783595
Vermont	608826
Wyoming	493782

and the SAS data set WORK.P2008:

State	Pop2008
--------	-------
Alaska	686293
Delaware	873092
Wyoming	532668

The following output is desired:

Obs	State	Pop2000	Pop2008	Difference
1	Alaska	626931	686293	59362
2	Delaware	783595	873092	89497
3	Wyoming	493782	532668	38886

Which SAS program correctly combines the data?

A.
```
data compare;
 merge WORK.P2000(in=_a Location=State)
        WORK.P2008(in=_b);
   by State;
```

```
    if _a and _b;
    Difference=Pop2008-Pop2000;
run;


        B.
  data compare;
    merge WORK.P2000(rename=(Location=State))
            WORK.P2008;
      by State;
      if _a and _b;
      Difference=Pop2008-Pop2000;
run;


        C.
  data compare;
    merge WORK.P2000(in=_a rename=(Location=State))
            WORK.P2008(in=_b);
      by State;
      if _a and _b;
      Difference=Pop2008-Pop2000;
run;


        D.
  data compare;
    merge WORK.P2000(in=_a) (rename=(Location=State))
            WORK.P2008(in=_b);
      by State;
      if _a and _b;
      Difference=Pop2008-Pop2000;
run;
```

----

29. The following SAS program is sumbitted:

```
  data WORK.INFO;
      infile 'DATAFILE.TXT';
      input @1 Company $20. @25 State $2. @;
      if State=' ' then input @30 Year;
      else input @30 City Year;
      input NumEmployees;
  run;
```

How many raw data records are read during each iteration of the DATA step?

     A. 1
     B. 2
     C. 3
     D. 4

30.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            120104   F     46#30       11MAY1954 33
 Employee_Id=120104 employee_gender=F Salary=. birth_date=-2061 _ERROR_=1
_N_=4
 NOTE: 20 records were read from the infile 'c:\employees.dat'.
         The minimum record length was 33.
         The maximum record length was 33.
 NOTE: The data set WORK.EMPLOYEES has 20 observations and 4 variables.
```

What does it mean?

     A. A compiler error, triggered by an invalid character for the variable Salary.
     B. An execution error, triggered by an invalid character for the variable Salary.
     C. The 1st of potentially many errors, this one occurring on the 4th observation.
     D. An error on the INPUT statement specification for reading the variable
Salary.

----

31. Given the following raw data records in DATAFILE.TXT:

```
   ----|----10---|----20---|----30
  Kim,Basketball,Golf,Tennis
  Bill,Football
  Tracy,Soccer,Track
```

The following program is submitted:

```
  data WORK.SPORTS_INFO;
      length Fname Sport1-Sport3 $ 10;
      infile 'DATAFILE.TXT' dlm=',';
```

```
    input Fname $ Sport1 $ Sport2 $ Sport3 $;
  run;

  proc print data=WORK.SPORTS_INFO;
  run;
```

Which output is correct based on the submitted program?

A.

Obs	Fname	Sport1	Sport2	Sport3
1	Kim	Basketball	Golf	Tennis
2	Bill	Football		
3	Tracy	Soccer	Track	

B.

Obs	Fname	Sport1	Sport2	Sport3
1	Kim	Basketball	Golf	Tennis
2	Bill	Football	Football	Football
3	Tracy	Soccer	Track	Track

C.

Obs	Fname	Sport1	Sport2	Sport3
1	Kim	Basketball	Golf	Tennis
2	Bill	Football	Tracy	Soccer

D.

Obs	Fname	Sport1	Sport2	Sport3
1	Kim	Basketball	Golf	Tennis
2	Bill	Football		

32.Consider the following data step:

```
 data WORK.NEW;
    set WORK.OLD;
    Count+1;
 run;
```

The variable Count is created using a sum statement. Which statement regarding this variable is true?

A. It is assigned a value 0 when the data step begins execution.
B. It is assigned a value of missing when the data step begins execution.
C. It is assigned a value 0 at compile time.
D. It is assigned a value of missing at compile time.

33.The following SAS program is submitted:

```
data WORK.TEST;
    set WORK.PILOTS;
    if Jobcode='Pilot2' then Description='Senior Pilot';
    else Description='Unknown';
run;
```

The value for the variable Jobcode is: PILOT2.What is the value of the variable Description?

       A. PILOT2
       B. Unknown
       C. Senior Pilot
       D. ' '   (missing character value)

34.A user-defined format has been created using the FORMAT procedure.How is it stored?

       A. in a SAS catalog
       B. in a memory resident lookup table
       C. in a SAS dataset in the WORK library
       D. in a SAS dataset in a permanent SAS data library

35.given the SAS data set SASDATA.TWO:

```
X   Y
-- --
5   2
3   1
5   6
```

The following SAS program is submitted:
```
data SASUSER.ONE   SASUSER.TWO   OTHER;
    set SASDATA.TWO;
    if X eq 5 then output SASUSER.ONE;
    if Y lt 5 then output SASUSER.TWO;
```

```
        output;
    run;
```

What is the result?

      A.

  data set SASUSER.ONE has 5 observations
data set SASUSER.TWO has 5 observations
data set WORK.OTHER   has 3 observations

      B.

  data set SASUSER.ONE has 2 observations
data set SASUSER.TWO has 2 observations
data set WORK.OTHER   has 1 observations

      C.

  data set SASUSER.ONE has 2 observations
data set SASUSER.TWO has 2 observations
data set WORK.OTHER   has 5 observations

      D. No data sets are output. The DATA step fails execution due to syntax errors.

36.Given the contents of the raw data file 'EMPLOYEE.TXT':

   ----+----10---+----20---+----30--
  Xing   2 19 2004 ACCT
  Bob   5 22 2004 MKTG
  Jorge   3 14 2004 EDUC

The following SAS program is submitted:

```
  data WORK.EMPLOYEE;
      infile 'EMPLOYEE.TXT';
      input
          @1    FirstName $
          @15 StartDate
          @25 Department $;
  run;
```

Which SAS informat correctly completes the program?
      A. date9.
      B. mmddyy10.
      C. ddmmyy10.

D. mondayyr10.

37.The SAS data set Fed.Banks contains a variable Open_Date which has
been assigned a permanent label of "Open Date". Which SAS program temporarily
replaces the label "Open Date" with the label "Starting Date" in the output?

      A.

```
 proc print data=SASUSER.HOUSES label;
   label Open_Date "Starting Date";
run;
```

    B.

```
 proc print data=SASUSER.HOUSES label;
   label Open_Date="Starting Date";
run;
```

    C.

```
 proc print data=SASUSER.HOUSES;
   label Open_Date="Starting Date";
run;
```

    D.

```
 proc print data=SASUSER.HOUSES;
   Open_Date="Starting Date";
run;
```

38.Given the SAS data set WORK.ONE:

```
  X   Y   Z
  -   -   --
  1   A   27
  1   A   33
  1   B   45
  2   A   52
  2   B   69
  3   B   70
  4   A   82
  4   C   91
```

The following SAS program is submitted:

```
data WORK.TWO;
   set WORK.ONE;
   by X Y;
   if First.Y;
run;
proc print data=WORK.TWO noobs;
run;
```

Which report is produced?

A.

X	Y	Z
1	B	45
2	A	52
2	B	69
3	B	70
4	A	82
4	C	91

B.

X	Y	Z
1	A	27
1	B	45
2	A	52
2	B	69
3	B	70
4	A	82
4	C	91

C.

X	Y	Z
1	A	33
1	B	45
2	A	52
2	B	69
3	B	70
4	A	82
4	C	91

D. The PRINT procedure fails because the data set WORK.TWO is not created in the DATA step.

39.The following SAS program is submitted:

```
data WORK.AUTHORS;
    array Favorites{3} $ 8 ('Shakespeare','Hemingway','McCaffrey');
run;
```

What is the value of the second variable in the dataset WORK.AUTHORS?
A. Hemingway
B. Hemingwa
C. ' ' (a missing value)
D. The program contains errors. No variables are created.

40.The following SAS program is submitted:

```
data WORK.PRODUCTS;
   Prod=1;
   do while(Prod LE 6);
      Prod + 1;
   end;
run;
```

What is the value of the variable Prod in the output data set?

A. 6
B. 7
C. 8
D. . (missing numeric)

41.Given the raw data record in the file phone.txt:

```
----|----10---|----20---|----30---|
Stevens James SALES 304-923-3721 14
```

The following SAS program is submitted:

```
data WORK.PHONES;
    infile 'phone.txt';
    input EmpLName $ EmpFName $ Dept $ Phone $ Extension;
    <_insert_code_>
run;
```

Which SAS statement completes the program and results in a value of "James Stevens" for the variable FullName?

     A. FullName=CATX(' ',EmpFName,EmpLName);
     B. FullName=CAT(' ',EmpFName,EmpLName);
     C. FullName=EmpFName!!EmpLName;
     D. FullName=EmpFName + EmpLName;

42.The following SAS program is submitted:

```
data WORK.ONE;
    Text='Australia, US, Denmark';
    Pos=find(Text,'US','i',5);
run;
```

What value will SAS assign to Pos?

     A. 0
     B. 1
     C. 2
     D. 12

43.Given the SAS data set WORK.ORDERS:

  WORK.ORDERS

order_id	customer	shipped
9341	Josh Martin	02FEB2009
9874	Rachel Lords	14MAR2009
10233	Takashi Sato	07JUL2009

The variable order_id is numeric; customer is character; and shipped is numeric, contains a SAS date value, and is shown with the DATE9. format.

A programmer would like to create a new variable, ship_note, that shows a character value with the order_id,shipped date, and customer name.

For example, given the first observation ship_note would have the value "Order 9341 shipped on 02FEB2009 to Josh Martin".

Which of the following statement will correctly create the value and assign it to ship_note?

      A. ship_note=catx(' ','Order',order_id,'shipped on',input(shipped,date9.),'to',customer);
      B. ship_note=catx(' ','Order',order_id,'shipped on',char(shipped,date9.),'to',customer);
      C. ship_note=catx(' ','Order',order_id,'shipped on',transwrd(shipped,date9.),'to',customer);
      D. ship_note=catx(' ','Order',order_id,'shipped on',put(shipped,date9.),'to',customer);

44.The following SAS program is submitted:

```
  data ONE TWO SASUSER.TWO
      set SASUSER.ONE;
  run;
```

Assuming that SASUSER.ONE exists, how many temporary and permanent SAS data sets are created?

      A. 2 temporary and 1 permanent SAS data sets are created
      B. 3 temporary and 2 permanent SAS data sets are created
      C. 2 temporary and 2 permanent SAS data sets are created
      D. there is an error and no new data sets are created

45.The following SAS program is submitted:

```
  ods csvall file='c:\test.cvs';
  proc print data=WORK.ONE;
      var Name Score Grade;
      by IdNumber;
  run;
```

ods csvall close;

What is produced as output?

      A. A file named test.cvs that can only be opened in Excel.
      B. A text file named test.cvs that can be opened in Excel or in any text editor.
      C. A text file named test.cvs that can only be opened in a text editor.
      D. A file named test.cvs that can only be opened by SAS.

----

46. Given the SAS data set WORK.ONE:

Obs	Revenue2008	Revenue2009	Revenue2010
1	1.2	1.6	2.0

The following SAS program is submitted:

```
data WORK.TWO;
   set WORK.ONE;
   Total=mean(of Rev:);
run;
```

What value will SAS assign to Total?

      A. 3
      B. 1.6
      C. 4.8
      D. The program fails to execute due to errors.

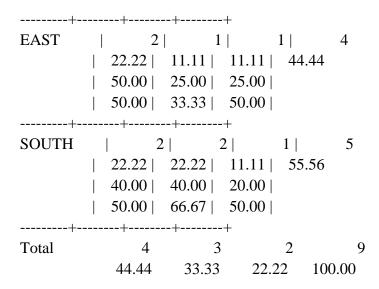
47. The following output is created by the FREQUENCY procedure:

      The FREQ Procedure

  Table of region by product

  region   product

  Frequency|
  Percent |
  Row Pct |
  Col Pct |corn |cotton |oranges | Total

```
---------+--------+--------+--------+
EAST      |      2 |      1 |      1 |       4
          |  22.22 |  11.11 |  11.11 |   44.44
          |  50.00 |  25.00 |  25.00 |
          |  50.00 |  33.33 |  50.00 |
---------+--------+--------+--------+
SOUTH     |      2 |      2 |      1 |       5
          |  22.22 |  22.22 |  11.11 |   55.56
          |  40.00 |  40.00 |  20.00 |
          |  50.00 |  66.67 |  50.00 |
---------+--------+--------+--------+
Total            4        3        2        9
              44.44    33.33    22.22   100.00
```

Which TABLES option(s) would be used to eliminate the   row and column counts and just see the frequencies and percents?

    A. norowcount nocolcount
    B. freq percent
    C. norow nocol
    D. nocounts

48.The following SAS program is submitted:

```
data WORK.TEST;
    drop City;
    infile datalines;
    input
        Name $ 1-14 /
        Address $ 1-14 /
        City $ 1-12 ;
    if City='New York    ' then input @1 State $2.;
    else input;
datalines;
Joe Conley
123 Main St.
Janesville
WI
Jane Ngyuen
555 Alpha Ave.
New York
NY
```

Jennifer Jason
666 Mt. Diablo
Eureka
CA
;

What will the data set WORK.TEST contain?

A.

Name	Address	State
Joe Conley	123 Main St.	
Jane Ngyuen	555 Alpha Ave.	NY
Jennifer Jason	666 Mt. Diablo	

B.

Name	Address	City	State
Joe Conley	123 Main St.	Janesville	
Jane Ngyuen	555 Alpha Ave.	New York	NY
Jennifer Jason	666 Mt. Diablo	Eureka	

C.

Name	Address	State
Jane Ngyuen	555 Alpha Ave.	NY

D. O observations,there is a syntax error in the data step.

49.The following SAS program is submitted:

```
data WORK.TOTALSALES(keep=MonthSales{12});
   set WORK.MONTHLYSALES(keep=Year Product Sales);
   array MonthSales{12};
   do i=1 to 12;
       MonthSales{i}=Sales;
   end;
   drop i;
run;
```

The program fails execution due to syntax errors.

What is the cause of the syntax error?
    A. An array cannot be referenced on a keep= data set option.
    B. The keep= data set option should be (keep=MonthSales*).
    C. The keep= data set option should be the statement KEEP MonthSales{12}.
    D. The variable MonthSales does not exist.

50.Given the SAS data set WORK.ONE:

```
 Id   Char1
 ---   -----
 111   A
 158   B
 329   C
 644   D
```

and the SAS data set WORK.TWO:

```
 Id   Char2
 ---   -----
 111   E
 538   F
 644   G
```

The following program is submitted:

```
data WORK.BOTH;
    set WORK.ONE WORK.TWO;
    by Id;
run;
```

What is the first observation in SAS data set WORK.BOTH?

    A.   Id   Char1   Char2
         ---   -----   -----
         111   A

    B.
  Id   Char1   Char2
---   -----   -----
111   E

    C.

```
   Id   Char1   Char2
---   -----   -----
111   A         E
```

          D.
```
   Id   Char1   Char2
---   -----   -----
644   D         G
```

51.The following program is submitted:

    proc contents data=_all_;
    run;

Which statement best describes the output from the submitted program?

         A. The output contains only a list of the SAS data sets that are contained in the
WORK library.
         B. The output displays only the contents of the SAS data sets that are contained
in the WORK library.
         C. The output displays only the variables in the SAS data sets that are contained
in the WORK library.
         D. The output contains a list of the SAS data sets that are contained in the
WORK library and displays the contents of those data sets.

52.Given the SAS data set WORK.EMP_NAME:

```
   Name   EmpID
   ----   -----
   Jill    1864
   Jack    2121
   Joan    4698
   John    5463
```

Given the SAS data set WORK.EMP_DEPT:

```
   EmpID   Department
   -----   ----------
    2121   Accounting
    3567   Finance
    4698   Marketing
```

The following program is submitted:

```
data WORK.ALL;
    merge WORK.EMP_NAME(in=Emp_N)
          WORK.EMP_DEPT(in=Emp_D);
    by Empid;
    if (Emp_N and not Emp_D) or (Emp_D and not Emp_N);
run;
```

How many observations are in data set WORK.ALL after submitting the program?

    A. 1
    B. 2
    C. 3
    D. 5

53.The following SAS program is submitted:

```
data WORK.TOTAL_SALARY;
    retain Total;
    set WORK.SALARY;
    by Department;
    if First.Department
        then Total=0;
    Total=sum(Total, Wagerate);
    if Last.Total;
run;
```

What is the initial value of the variable Total?

    A. 0
    B. Missing
    C. The value of the first observations Wagerate
    D. Cannot be determined from the information given

54.Consider the following data step:

```
data WORK.TEST;
    set SASHELP.CLASS(obs=5);
```

```
    retain City 'Beverly Hills';
    State='California';
  run;
```

The computed variables City and State have their values assigned using two different methods, a RETAIN statement and an Assignment statement. Which statement regarding this program is true?

    A. The RETAIN statement is fine, but the value of City will be truncated to 8 bytes as the LENGTH statement has been omitted.

    B. Both the RETAIN and assignment statement are being used to initialize new variables and are equally efficient. Method used is a matter of programmer preference.

    C. The assignment statement is fine, but the value of City will be truncated to 8 bytes as the LENGTH statement has been omitted.

    D. City's value will be assigned one time, State's value 5 times.

55.The following SAS program is submitted:

```
  data WORK.DATE_INFO;
     X="01Jan1960" D ;
  run;
```

Variable X contains what value?

    A. the numeric value 0
    B. the character value "01Jan1960"
    C. the date value 01011960
    D. the code contains a syntax error and does not execute.

56.The following output is created by the FREQUENCY procedure:

      The FREQ Procedure

     Table of region by product

  region   product

  Frequency|

```
Percent   |
Row Pct   |
Col Pct   |corn     |cotton   |oranges |   Total
---------+--------+--------+--------+
EAST      |      2 |      1 |      1 |      4
          |  22.22 |  11.11 |  11.11 |  44.44
          |  50.00 |  25.00 |  25.00 |
          |  50.00 |  33.33 |  50.00 |
---------+--------+--------+--------+
SOUTH     |      2 |      2 |      1 |      5
          |  22.22 |  22.22 |  11.11 |  55.56
          |  40.00 |  40.00 |  20.00 |
          |  50.00 |  66.67 |  50.00 |
---------+--------+--------+--------+
Total            4        3        2        9
              44.44    33.33    22.22   100.00
```

Which TABLES statement was used to completed the following program that produced the output?

```
proc freq data=sales;
<_insert_code_>
run;
```

    A. tables region product;
    B. tables region,product
    C. tables region/product;
    D. tables region*product;

57.Given the SAS data set WORK.ONE:

```
N     BeginDate
-     ---------
1     09JAN2010
2     12JAN2010
```

The following SAS program is submitted:

```
data WORK.TWO;
   set WORK.ONE;
   Day=<_insert_code_>;
   format BeginDate date9.;
```

```
    run;
```

The data set WORK.TWO is created, where Day would be 1 for Sunday, 2 for Monday, 3 for Tuesday, ... :

```
    WORK.TWO

    N    BeginDate    Day
    -    ---------    ---
    1    09JAN2010     1
    2    12JAN2010     4
```

Which expression successfully completed the program and creates the variable Day?

      A. day(BeginDate)
      B. weekday(BeginDate)
      C. dayofweek(BeginDate)
      D. getday(BeginDate,today())

58.The following program is submitted:

```
   proc format;
       value salfmt.
           0 -< 50000     = 'Less than 50K'
           50000 - high = '50K or Greater';

   options fmterr nodate pageno=1;
   title 'Employee Report';
   proc print data=work.employees noobs;
       var fullname salary hiredate;
       format
           salary salfmt.
           hiredate date9.;
       label
           fullname='Name of Employee'
           salary='Annual Salary'
           hiredate='Date of Hire';
   run;
```

Why does the program fail?

      A. The PAGENO option is invalid in the OPTIONS statement.
      B. The RUN statement is missing after the FORMAT procedure.

C. The format name contains a period in the VALUE statement.
D. The LABEL option is missing from the PROC PRINT statement.

59.Given the contents of the raw data file TYPECOLOR.DAT:

```
----+----10---+----20---+----30
daisyyellow
```

The following SAS program is submitted:

```
data FLOWERS;
    infile 'TYPECOLOR.DAT' truncover;
    length
        Type $ 5
        Color $ 11;
    input
        Type $
        Color $;
run;
```

What are the values of the variables Type and Color?

A. Type=daisy, Color=yellow
B. Type=daisy, Color=w
C. Type=daisy, Color=daisyyellow
D. Type=daisy, Color=

60.Given the SAS data set WORK.PRODUCTS:

ProdId	Price	ProductType	Sales	Returns
K12S	95.50	OUTDOOR	15	2
B132S	2.99	CLOTHING	300	10
R18KY2	51.99	EQUIPMENT	25	5
3KL8BY	6.39	OUTDOOR	125	15
DY65DW	5.60	OUTDOOR	45	5
DGTY23	34.55	EQUIPMENT	67	2

The following SAS program is submitted:

```
data WORK.REVENUE(drop=Sales Returns Price);
    set WORK.PRODUCTS(keep=ProdId Price Sales Returns);
    Revenue=Price*(Sales-Returns);
run;
```

How many variables does the WORK.REVENUE data set contain?

    A. 2
    B. 3
    C. 4
    D. 6

61.Consider the data step:

```
data WORK.TEST;
    infile 'c:\class1.csv' dsd;
    input Name $ Sex $ Age Height Weight;
    if Age NE 16 and Age NE 15 then Group=1;
    else Group=2;
run;
```

Which statement produces a functionally equivalent result for assigning Group a value?

    A. if Age not in(15,16) then Group=1;   else Group=2;
    B. if (Age NE 16) or (Age NE 15) then Group=1;   else Group=2;
    C. where Age not between 15 and 16 then Group=1; else Group=2;
    D. both A or C will work.

62.The following SAS program is submitted:

```
<_insert_ods_code_>
    proc means data=SASUSER.SHOES;
        where Product in ('Sandal' , 'Slipper' , 'Boot');
    run;
<_insert_ods_code_>
```

Which ODS statements, inserted in the two locations above, create a report stored in an html file?

A.
ods html open='sales.html';
ods html close;

B.
ods file='sales.html' / html;
ods file close;

C.
ods html file='sales.html';
ods html close;

D.
ods file html='sales.html';
ods file close;

63.The following SAS program is submitted:

```
data WORK.OUTDS;
    do until(Prod GT 6);
        Prod + 1;
    end;
run;
```

What is the value of the variable Prod in the output data set?

A. . (missing)
B. 6
C. 7
D. Undetermined, infinite loop.

65.The following SAS program is submitted:

```
data WORK.ACCOUNTING;
    set WORK.DEPARTMENT;
    label Jobcode='Job Description';
run;
```

Which statement is true about the output dataset?

A. The label of the variable Jobcode is Job (only the first word).
B. The label of the variable Jobcode is Job Desc (only the first 8 characters).
C. The label of the variable Jobcode is Job Description.
D. The program fails to execute due to errors. Labels must be defined in a PROC step.

66.The following SAS program is submitted:

```
data WORK.SALES;
    do Year=1 to 5;
        do Month=1 to 12;
            X + 1;
        end;
    end;
run;
```

How many observations are written to the WORK.SALES data set?

A. 0
B. 1
C. 5
D. 60

67.Consider the following data step:

```
data WORK.NEW;
    set WORK.OLD(keep=X);
    if X < 10 then X=1;
    else if X >= 10 AND X LT 20 then X=2;
    else X=3;
run;
```

In filtering the values of the variable X in data set WORK.OLD, what new value would be assigned to X if its original value was a missing value?

A. X would get a value of 1.
B. X would get a value of 3.
C. X would retain its original value of missing.
D. This step does not run because of syntax errors.

68.The following SAS program is submitted:

```
data WORK.ACCOUNTING;
    set WORK.DEPARTMENT;
    length EmpId $6;
    CharEmpid=EmpId;
run;
```

If data set WORK.DEPARTMENT has a numeric variable EmpId,which statement is true about the output dataset?

     A. The type of the variable CharEmpid is numeric.
     B. The type of the variable CharEmpid is unknown.
     C. The type of the variable CharEmpid is character.
     D. The program fails to execute due to errors.

69.Given the data set WORK.EMPDATA:

Employee_
Manager_

ID	Job_Title	Department	ID
120101	Director	Sales Management	120261
120102	Sales Manager	Sales Management	120101
120103	Sales Manager II	Sales Management	120101
120104	Administration Manager	Administration	120101
120105	Secretary I	Administration	120101

Which one of the following where statements would display observations with job titles containing the word 'Manager'?

     A. where substr(Job_Title,(length(Job_Title)-6))='Manager';
     B. where upcase(scan(Job_Title,-1,' '))='MANAGER';
     C. where Job_Title='% Manager ';
     D. where Job_Title like '%Manager%';

70.After a SAS program is submitted, the following is written to the SAS log:

```
105     data WORK.JANUARY;
106     set WORK.ALLYEAR(keep=Product Month Quantity Cost);
107     if Month='JAN' then output WORK.JANUARY;
108     Sales=Cost * Quantity;
```

109   drop=Month Quantity Cost;

                            22

ERROR 22-322: Syntax error, expecting one of the following: !,
                   !!, &, *, **, +, -,
, <=, <>, =, >, >=,
                   AND, EQ, GE, GT, IN, LE, LT, MAX, MIN, NE, NG, NL,
                   NOTIN, OR, ^=, |, ||, ~=.
110   run;

What data set option could be attached to WORK.JANUARY to replace the DROP
statement that generated the error in the log?

    A. (drop Month   Quantity   Cost)
    B. (drop Month, Quantity, Cost)
    C. (drop=Month, Quantity, Cost)
    D. (drop=Month   Quantity   Cost)