1. The following SAS program is submitted:

```
%let this_year=%substr(&sysdate9.,6);
%let next_year=&this_year+1;
%let check_year=%eval(&next_year<2016);
%put two years after this year is &next_year+1;
%put &check_year;
```

Assume system time is 01Jan2013, What is written to the SAS log?

A. two years after this year is 2014+1
   1
B. two years after this year is 2015
   1
C. two years after this year is 2013+1+1
   2014<2016
D. two years after this year is 2013+1+1
   1

2.The following SAS program is submitted:

```
%let Value=11;
%let Add=5;
%let Newval=%eval(&Value/&Add);
 %put &Newval;
```

What is the value of the macro variable Newval when the %PUT statement executes?
A. 0.555
B. 2
C. 1.8
D. 1

3. Given the SAS data set SASUSER.HIGHWAY:

Steering	Seatbelt	Speed	Status	Count
Absent	No	0-29	serious	31
absent	No	0-29	not	1419
absent	No	30-49	serious	191
absent	no	30-49	not	2004
absent	no	50+	serious	216

The following SAS program is submitted:

```
%macro HIGHWAY(Belt=No);
proc print data=SASUSER.HIGHWAY;
where Seatbelt="&Belt" ;
run;
%mend;
%HIGHWAY(Belt=no)
```

How many observations appear in the generated report?
A. 0
B. 2
C. 3
D. 5

4.The following SAS program is submitted:

```
%macro CHECK(Num=10);
%let Result=%eval(&Num gt 5);
%put Result is &result;
%mend;
%check(Num=4)
```

What is written to the SAS log?

A.
Result is 0
B.
Result is 1
C.
Result is 10 gt 5
D.
Result is true

5.The following SAS program is submitted:

```
%let Mv=bicycles;
%macro PRODUCT(Mv=shoes);
%let Mv=clothes;
%mend;
%PRODUCT(Mv=tents)
%put Mv is &Mv;
```

What is written to the SAS log?

A. Mv is bicycles
B. Mv is clothes
C. Mv is shoes
D. Mv is tents

6.The following SAS program is submitted:

```
%macro COLS1;
Name Age;
%mend;
%macro COLS2;
Height Weight;
%mend;
proc print data=SASHELP.CLASS;
var Weight Height %COLS1;
run;
```

Which variables are in the output in order?
A. Weight Height Name Age
B. Weight Height %COLS1
C. Height Weight Name Age
D. %COLS 2 %COLS1;

7.The following SAS program is submitted:
```
%let Math1=Shoes;
%let Math2=Clothes;
%let Root=Math;
%let Suffix=2;
%put &&&Root&Suffix;
```

What is written to the SAS log?
A. &Name2
B. WARNING: Apparent symbolic reference ROOT2 not resolved.
C. &&&Root&Suffix
D. Clothes

8. Given the data set SA SHELP.CLASS:
```
Name Age
 ------- -----
Mary    15
Philip   16
Robert  12
Ronald 15
```

The following SAS program is submitted:
```
%macro MP_ONE(pname=print);
proc &pname data=SASHELP.CLASS;
run; %mend;
%MP_ONE(mean)
%MP_ONE()
```

Which PROC steps execute successfully?
A. PROC MEANS only
B. PROC PRINT only
C. PROC MEANS and PROC PRINT
D. No PROC steps execute successfully

9. Given the following macro program and invocation:
```
%macro MAKEPGM(NEWNAME, SETNAME);
data &NEWNAME;
set &SETNAME;
run;
%put !!! in &NEWNAME &SETNAME;
%mend;
%MAKEPGM(WORK.NEW, SASHELP.CLASS)
%put !!! out &NEWNAME &SETNAME;
```

Which of these choices shows the correct %PUT statement output if the program is submitted at the beginning of a new SAS session? Note that other lines may be written to the SAS log by the program but only the %PUT output is shown here.

A. !!! in WORK.NEW SASHELP.CLASS
   !!! out WORK.NEW SASHELP.CLASS
B. !!! in WORK.NEW SASHELP.CLASS
   !!! out &NEWNAME &SETNAME
C. !!! in &NEWNAME &SETNAME
   !!! out WORK.NEW SASHELP.CLASS

D. !!! in &NEWNAME &SETNAME
!!! out &NEWNAME &SETNAME

10.Given the SAS data set SASUSER.HIGHWAY:

Steering	Seatbelt	Speed	Status	Count
Absent	No	0-29	serious	31
absent	No	0-29	not	1419
absent	No	30-49	serious	191
absent	no	30-49	not	2004
absent	no	50+	serious	216

The following SAS program is submitted:

```
proc sql noprint;
select distinct Speed
[_insert_SQL_clause_]
from SASUSER.HIGHWAY ;
quit;
title1 “Speed values represented are: &GROUPS”;
proc print data=SASUSER.HIGHWAY;
run;
```

Which SQL clause stores the text 0-29,30-49,50+ in the macro variable GROUPS?
A. into : GROUPS separated= ‘,’
B. :into GROUPS separated by ‘,'
C. into GROUPS delimiter by ‘,’
D. into :GROUPS separated by ‘,'

11. The following SAS program is submitted:

```
%let a=cat;
%macro animal;
%let a=dog;
%mend;
%animal
%put a is &a;
```

Which one of the following is written to the SAS log?
A. a is
B. a is &a
C. a is cat
D. a is dog

12. The following SAS program is submitted:

```
<insert statement here>;
%let development = ontime;
proc print data = sasuser.highway;
title "For &dept";
title2 "This project was completed &development";
run;
```

Which one of the following statements completes the above and resolves title1 to "For research&development"?

A. %let dept = %str(research&development);

B. %let dept = %str(research%&development);
C. %let dept = %nrstr(research&development);
D. %let dept = %nrstr(research%&development);
13. Given the following partial SAS log:

[xxx]: Parameter DS has value sasuser.houses
[xxx]: %IF condition %sysprod(graph)=1 is TRUE
[xxx]: Beginning execution.
[xxx]: Parameter PROC has value gplot
[xxx]: Parameter DATA has value sasuser.houses

Which SAS System option to do macro debugging?

A.MLOGIC B.MPRINT C.SYMBOLGEN D.MSGLEVEL= I

14. A batch (non -interactive) job is submitted on Wednesday, 20 January 1999 (SAS date 14264). The program completes the following day.
The following code is the last step in the SAS program:

```
data _null_;
   call symput('mdate', input("&sysdate", date7.));
run;
```

Which of the following is the value of the macro variable mdate?
a. 14264
b. 14265
c. 20JAN99
d. 21JAN99

15. Given the following partial SAS log:

```
29 %macro test;
30 %if &a = 5 %then %do;
31 proc print data = sashelp.prdsale;
32 run; 33 %end;
34 %else %put a is not 5;
35 %mend;
36 37 %let a = 5;
38 %test
(TEST): Beginning execution.
        : Macro variable A resolves to 5
(TEST): %IF condition &a = 5 is TRUE
(TEST): proc print data = sashelp.prdsale;
(TEST): run;
```

Which SAS System option writes to the SAS log the note Macro variable A resolves to 5?
A.MLOGIC B.MPRINT C.SYMBOLGEN D.MSGLEVEL= I

16. Given the following SAS data set Mylib.Mydata:
Mylib.Mydata

Name	Animal	Age
Max	Cat	9
Brown	Dog	22

Large	Pig	1

The following SAS program is submitted:

```
data _null_;
   set mylib.mydata;
   call symput('animal' || left(_n_), name);
run;
%let i=2;
title "The value is &&animal&i";
```

Which one of the following does the TITLE statement resolve to?

a. The value is Dog
b. The value is animal2
c. The value is Brown
d. The value is &animal2

17. Given the following SAS statement:

```
%let idcode = Prod567;
```

Which one of the following statements stores the value 567 in the macro variable CODENUM?

A. %let codenum = substr(&idcode, length(&idcode)-2);
B. %let codenum = substr(&idcode, length(&idcode)-3);
C. %let codenum = %substr(&idcode,%length(&idcode)-2);
D. %let codenum = %substr(&idcode,%length(&idcode)-3);

18. Given the following SAS data set ONE:

ONE

GROUP	SUM
A	765
B	123
C	564

The following SAS program is submitted:

```
data null:
Set one;
call Symput(group, Sum);
run;
```

Which one of the following is the result when the program finishes execution?
A. Macro variable C has a value of 564.
B. Macro variable C has a value of 1452.
C. Macro variable GROUP has a value of 564.
D. Macro variable GROUP has a value of 1452.

19. Which one of the following automatic SAS macro variables contains the return code from a previously executed step?
A. &RC B. &ERR C. &SYSRC D. &SYSERR

20. Text is sent to the SAS compiler as a result of macro execution. Which one of the following SAS System options writes that text to the log?
A. MPRINT B. MILOGIC C. MSOURCE D. SOURCE2

21. The following SAS program is submitted:

```
options yearcutoff = 1950;
%macro y2kopt(date);
%if &date >= 14610 %then  %do;
options yearcutoff = 2000;
%end;
%else %do;
options yearcutoff = 1900;
%end;
%mend;

data null;
date = "01jan2000"d;
call symput("date", left(date));
run;

%y2kopt(&date)
```

The SAS date for January 1, 2000 is 14610 and the SAS system option for YEARCUTOFF is set to 1920 prior to submitting the above program.

Which one of the following is the value of YEARCUTOFF when the macro finishes execution?
A. 1900
B. 1920
C. 1950
D. 2000

22. Given the following SAS data set named WORK.INTERNAT:

WORKINTERNAT

LOCATION	SUM
USA	30
EUR	40

The following SAS program is submitted:

```
%let LOC = Usa;
proc Sql;
select *
from internat where location = "&Loc";
quit;
```

Which one of the following is the result when the above code is executed on the above data set?
A. A report is generated with one destination.
B. No report is generated as the case of the compared values is different.
C. No report is generated as the case of the macro variable name is different.
D. A report is generated with the two original observations as the where clause does not work.

23. The following SAS program is submitted:

```
%let value = 0.5;
%let add = 5;
```

%let newval = %eval (&value + &add); Which one of the following is the resulting value of the macro variable NEWVAL?
A. 5 B. 5.5 C. 0.5 +5 D. null

24. Given the following SAS data set ONE:

DIVISION	SALES
A	1234
A	3654
B	5678

The following SAS program is submitted:

```
data null;
 set one;
 by division;
 if first.division then call symput('mfirst',sales);
 if last.division then call symput('mlast', sales);
run;
```

Which one of the following is the value of the macro variable MFIRST when the above program finishes execution?

A. null B. 1234 C. 3654 D. 5678

25. Given the SAS data set ONE:

DIVISION	SALES
A	1234
A	3654
B	5678

The following SAS program is submitted:

```
data _null_;
 set one;
 by division;
 if first.division then do;
 %let mfirst = sales;
 end;
run;
```

What is the value of the macro variable MFIRST when the program finishes execution?

A. 1234 B. 5678 C. null D. sales

26. The following SAS program is submitted:

```
%macro let(name);
proc print data = &name;
run;
%mend;
%let(sashelp.class)
```

Why does the program fail to execute?

A. There is no equal sign after the parameter name.
B. The word LET is a reserved word for macro names.
C. There should be no parentheses around SASHELP.CLASS.
D. The %LET call needs a semicolon at the end of the statement.