**SAS Assessment**

**Q1**. The contents of the raw data file AMOUNT are listed below:

----|----10---|----20---|----30

$1,234

The following SAS program is submitted:

data test;

infile 'amount';

input @1 salary 6.;

if \_error\_ then description = 'Problems';

else description = 'No Problems';

run;

Which one of the following is the value of the DESCRIPTION variable?

A. Problems

B. No Problems

C. ' ' (missing character value)

D. The value can not be determined as the program fails to execute due to

error.

Ans - Option A

**Q2**. 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;

run;

The data set named WORK.MONTHLYSALES has one observation per month

for each of five years for a total of 60 observations.

Which one of the following is the result of the above program?

A. The program fails execution due to data errors.

B. The program fails execution due to syntax errors.

C. The program executes with warnings and creates the WORK.TOTALSALES

data set.

D. The program executes without errors or warnings and creates the

WORK.TOTALSALES data set.

Ans - Option B

**Q3**. The following SAS program is submitted:

data work.january;

set work.allmonths (keep = product month num\_sold cost);

if month = 'Jan' then output work.january;

sales = cost \* num\_sold;

keep = product sales;

run;

Which variables does the WORK.JANUARY data set contain?

A. PRODUCT and SALES only

B. PRODUCT, MONTH, NUM\_SOLD and COST only

C. PRODUCT, SALES, MONTH, NUM\_SOLD and COST only

D. An incomplete output data set is created due to syntax errors.

Ans - Option D

**Q4**. The contents of the raw data file CALENDAR are listed below:

----|----10---|----20---|----30

01012000

The following SAS program is submitted:

data test;

infile 'calendar';

input @1 date mmddyy10.;

if date = '01012000'd then event = 'January 1st';

run;

Which one of the following is the value of the EVENT variable?

A. 01012000

B. January 1st

C. . (missing numeric value)

D. The value can not be determined as the program fails to execute due to

errors.

Ans - Option D

**Q5**. A SAS program is submitted and the following SAS log is produced:

2 data gt100;

3 set ia.airplanes

4 if mpg gt 100 then output;

22 202

ERROR: File WORK.IF.DATA does not exist.

ERROR: File WORK.MPG.DATA does not exist.

ERROR: File WORK.GT.DATA does not exist.

ERROR: File WORK.THEN.DATA does not exist.

ERROR: File WORK.OUTPUT.DATA does not exist.

ERROR 22-322: Syntax error, expecting one of the following: a name,

a quoted string, (, ;, END, KEY, KEYS, NOBS, OPEN, POINT, \_DATA\_,

\_LAST\_, \_NULL\_.

ERROR 202-322: The option or parameter is not recognized and will be

ignored.

5 run;

The IA libref was previously assigned in this SAS session.

Which one of the following corrects the errors in the LOG?

A. Delete the word THEN on the IF statement.

B. Add a semicolon at the end of the SET statement.

C. Place quotes around the value on the IF statement.

D. Add an END statement to conclude the IF statement.

Ans - Option B

**Q6**. The following SAS program is submitted:

libname sasdata 'SAS-data-library';

data test;

set sasdata.chemists;

if jobcode = 'chem3'

then description = 'Senior Chemist';

else description = 'Unknown';

run;

A value for the variable JOBCODE is listed below:

JOBCODE

CHEM3

Which one of the following values does the variable DESCRIPTION contain?

A. chem3

B. Unknown

C. Senior Chemist

D. ' ' (missing character value)

Ans - Option B

**Q7**. The following SAS program is submitted:

proc format;

value score 1 - 50 = 'Fail'

51 - 100 = 'Pass';

run;

proc report data = work.courses nowd;

column exam;

define exam / display format = score.;

run;

The variable EXAM has a value of 50.5.

How will the EXAM variable value be displayed in the REPORT procedure

output?

A. Fail

B. Pass

C. 50.5

D. . (missing numeric value)

Ans - Option C

**Q8**. Click the Exhibit button to view two reports. Assume permanent variable

labels have been assigned.

The following SAS program is submitted and produces the first report:

proc report data = sasuser.shoes nowd;

column region subsidiary sales;

define subsidiary / display;

define region / group;

define sales / sum;

run;

Which one of the following corrects the program above to produce the second

report shown in the exhibit?

A. Define the variable SUBSIDIARY with a SUM usage.

B. Define the variable SUBSIDIARY with a GROUP usage.

C. Define the variable SUBSIDIARY with an ORDER usage.

D. Define the variable SUBSIDIARY with an ACROSS usage.

Ans - No sample report is available

**Q9**. The following SAS program is submitted:

data work.month;

date = input('13mar2000',date9.);

run;

Which one of the following represents the type and length of the variable

DATE in the output data set?

A. numeric, 8 bytes

B. numeric, 9 bytes

C. character, 8 bytes

D. character, 9 bytes

Ans - Option A

**Q10**. The SAS data set named WORK.TEST is listed below:

capacity airplanetype staff

150 Large 10

Which one of the following SAS programs created this data set?

A. data work.test;

capacity = 150;

if 100 le capacity le 200 then

airplanetype = 'Large' and staff = 10;

else airplanetype = 'Small' and staff = 5;

run;

B. data work.test;

capacity = 150;

if 100 le capacity le 200 then

do;

airplanetype = 'Large';

staff = 10;

end;

else

do;

airplanetype = 'Small';

staff = 5;

end;

run;

C. data work.test;

capacity = 150;

if 100 le capacity le 200 then

do;

airplanetype = 'Large';

staff = 10;

else

do;

airplanetype = 'Small';

staff = 5;

end;

run;

D. data work.test;

capacity = 150;

if 100 le capacity le 200 then;

airplanetype = 'Small';

staff = 5;

else;

airplanetype = 'Large';

staff = 10;

run; **(P)**

Ans - Option B

**Q11**. The following SAS program is submitted:

data stats;

set revenue;

array weekly{5} mon tue wed thu fri;

<insert DO statement here>

total = weekly{i} \* .25;

output;

end;

run;

Which one of the following DO statements completes the program and

processes the elements of the WEEKLY array?

A. do i = 1 to 5;

B. do weekly{i} = 1 to 5;

C. do i = mon tue wed thu fri;

D. A DO loop cannot be used because the v ariables referenced do not end in

a digit. **(E)**

Ans - Option A

**Q12**. The following SAS program is submitted:

data work.test;

set work.staff (keep = jansales febsales marsales);

array diff\_sales{3} difsales1 - difsales3;

array monthly{3} jansales febsales marsales;

run;

Which one of the following represents the new variables that are created?

A. JANSALES, FEBSALES and MARSALES

B. MONTHLY1, MONTHLY2 and MONTHLY3

C. DIFSALES1, DIFSALES2 and DIFSALES3

D. DIFF\_SALES1, DIFF\_SALES2 and DIFF\_SALES3 (B)

Ans - Option C

**Q13**. The contents of the SAS data set PERM.JAN\_SALES are listed below:

VARIABLE NAME TYPE

idnum character variable

sales\_date numeric date value

A comma delimited raw data file needs to be created from the

PERM.JAN\_SALES data set. The SALES\_DATE values need to be in

a MMDDYY10 form.

Which one of the following SAS DATA steps correctly creates this raw data

file?

A. libname perm 'SAS-data-library';

data \_null\_;

set perm.jan\_sales;

file 'file-specification' dsd = ',';

put idnum sales\_date : mmddyy10.;

run;

B. libname perm 'SAS-data-library';

data \_null\_;

set perm.jan\_sales;

file 'file-specification' dlm = ',';

put idnum sales\_date : mmddyy10.;

run;

C. libname perm 'SAS-data-library';

data \_null\_;

set perm.jan\_sales;

file 'file-specification';

put idnum sales\_date : mmddyy10. dlm = ',';

run;

D. libname perm 'SAS-data-library';

data \_null\_;

set perm.jan\_sales;

file 'file-specification';

put idnum sales\_date : mmddyy10. dsd = ',';

run;

Ans - Option B

14. The following SAS program is submitted:

data revenue;

set year\_1;

var1 = mdy(1,15,1960);

run;

Which one of the following values does the variable named VAR1 contain?

A. 14

B. 15

C. 1151960

D. '1/15/1960'

Ans - Option A

**Q15.** A raw data file is listed below:

RANCH,1250,2,1,Sheppard Avenue,"$64,000"

SPLIT,1190,1,1,Rand Street,"$65,850"

CONDO,1400,2,1.5,Market Street,"80,050"

TWOSTORY,1810,4,3,Garris Street,"$107,250"

RANCH,1500,3,3,Kemble Avenue,"$86,650"

SPLIT,1615,4,3,West Drive,"94,450"

SPLIT,1305,3,1.5,Graham Avenue,"$73,650"

The following SAS program is submitted using the raw data file as input:

data work.condo\_ranch;

infile 'file-specification' dsd;

input style $ @;

if style = 'CONDO' or style = 'RANCH' then

input sqfeet bedrooms baths street $ price : dollar10.;

run;

How many observations does the WORK.CONDO\_RANCH data set contain?

A. 0

B. 3

C. 5

D. 7

Ans - Option D

**Q16.** What is the different between “Having” and “where” clause in proc SQL? And, can we use the calculated variable in having clause? If yes, please write the syntax for the same.

Ans - Where is used to filter rows whereas having is used to filer groups .Basically “having “ used after we apply group by cluse but “where”is to be used to to filter row .

Yes we can use the calculated variables in having clause.

Data marks;

input id $ sal;

cards;

01 10000

01 49000

02 54986

02 56839

;

run;

Proc sql;

create table xx

as select id ,sum(sal) as tot\_sal

from marks

group by id

having tot\_sal ge 100000;

quit;

**Q17**. Which one of the following is true of the SUM statement in a SAS DATA

step program?

A. It is only valid in conjunction with a SUM function.

B. It is not valid with the SET, MERGE and UPDATE statements.

C. It adds the value of an expression to an accumulator variable and ignores

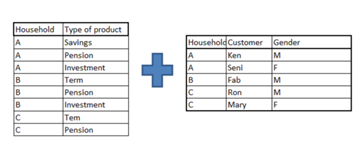
missing values.

D. It does not retain the accumulator variable value from one iteration of the

SAS DATA step to the next.

Ans - Option C

Q18.

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We have two data sets given above. If we want to merge these datasets to the get the common rows, please write the syntax using data and proc step along with the final dataset. Also, please explain whether the results from both these steps would be same. If yes, then how?

Ans -

Data x;

input household $ type\_of\_prodct $;

cards;

A Savings

A Pension

A Investment

B Term

B Pension

B Investment

C Term

C Pension

;

Data Y;

input household $ customer $ gender $;

cards;

A Ken M

A Seni F

B Fab M

C Ron M

C Mary F

;

Data merge\_data;

merge x(in=a) y(in=b);

by household;

if a and b;

run;

Proc sql;

create table merge\_sql as select

A.\*,b.customer,b.gender from

x as a

inner join

y as b

on a.household=b.household;

quit;

No, resultant datasets would be different in data set merge and proc sql join.As SAS data step merging can not perform a cartesian product in case of many to many merging .

Q19. Which of these measures are used to analyze the central tendency of data?

A) Mean and Normal Distribution

B) Mean, Median and Mode

C) Mode, Alpha & Range

D) Standard Deviation, Range and Mean

E) Median, Range and Normal Distribution

Ans - Option B

Q20. Which of the following measures of central tendency will always change if a single value in the data changes?

A) Mean

B) Median

C) Mode

D) All of these

Ans - Option A .

Q21. If a positively skewed distribution has a median of 50, which of the following statement is true?

A) Mean is greater than 50

B) Mean is less than 50

C) Mode is less than 50

D) Mode is greater than 50

E) Both A and C

F) Both B and D

Ans - Both option A and C are true so option E.

4) Standard deviation can be negative.

A) TRUE B) FALSE

Ans - Option B (Negative SD is not possible).