

# SAP Model Question Paper

## SAP Reasoning Test Questions

1. If \* means +, / means -, - means \* and + means /, then  $8 * 7 - 8 + 40 / 2 = ?$

- A. 1
- B.  $27 - 5$
- C.  $38 - 5$
- D. 44
- E. None of these

Answer: Option B

Solution:

Using the correct symbols, we have: Given expression =  $8 + 7 * 8 / 40 - 21 = 8 + 7 * - - 25 = 37 - 52 = 7 - 5$

2.  $125 : 216 :: 1331 : \underline{\hspace{1cm}}$

- A. 144
- B. 729
- C. 1728
- D. 2744
- E. 1000

Answer: Option C

3. (A) Recently, an Air India Airbus was grounded in Delhi because of a technical snag.

(B) Air India faces a severe shortage of maintenance engineers.

- A. if statement (A) is the cause and statement (B) is its effect.
- B. if statement (B) is the cause and statement (A) is its effect.
- C. if both the statements (A) and (B) are independent causes.
- D. if both the statements (A) and (B) are effects of independent causes.
- E. if both the statements are effect of some common causes.

Answer: Option B

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**Solution:**

As Air India is facing a severe shortage of maintenance engineers the technical snags is a common sight. Hence, (B) is the cause and (A) is the effect.

**4. Study the following information carefully and answer the given questions:**

A word and number arrangement machine when given an input line of words and numbers rearranges them following a particular rule in each step. The following is an illustration of input and rearrangement:

**Input: 25 280 345 36 93 147 550**

**Step I: 550 280 345 36 93 147 25**

**Step II: 550 345 280 36 93 147 25**

**Step III: 550 345 280 147 93 36 25**

This is the final arrangement and step III is the last step for this input.

**How many steps will be required to get the final output from the following input?**

**Input: 78 293 585 740 64 132 26**

- A. 4**
- B. 5**
- C. 3**
- D. 2**
- E. None of these**

**Answer: Option A**

**Solution:**

Numbers are getting arranged in descending order.

The largest of the given number interchanges its place with the first number. IN case the largest number is already arranged, the second largest is interchanged with the number next to the largest number, and so on until the numbers are arranged in descending order.

**5. Should there be an upper age limit for a person to assume the post of prime minister?**

**Arguments:**

**I. Yes, a leader must not only be wise and experienced but also be energetic and young enough to understand the trends of the world.**

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**II. No, older the leader, better he is, as he can lead more effectively owing to his experience.**

- A. if only argument I is strong.**
- B. if only argument II is strong.**
- C. if either I or II is strong.**
- D. if neither I nor II is strong.**
- E. if both I and II are strong.**

**Answer: Option E**

**Solution:**

**Statement I says that the prime minister must be “young enough” for some explained reasons. This implies that the prime minister must not be older than a certain age limit. This statement is strong.**

**Statement II: This says that there should not be an upper limit because older persons can perform better because of the experience gained. This is also strong.**

**6. Arrange the given words in alphabetical order and tick the one that comes in the middle ?**

- A. Catastrophe**
- B. Canvass**
- C. Crisp**
- D. Charcoal**
- E. Character**

**Answer: Option E**

**Solution:**

**Canvass, Catastrophe, Character, Charcoal, Crisp**

**7. The Supreme Court in its land mark judgement gave women the right to terminate their pregnancy as a constitutional right.**

**Which of the following, if true, can go against the Supreme Court’s judgement?**

- A. In several other countries abortion is illegal.**
- B. An unborn child should be treated as a person and every person has a fundamental right to live.**

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- C. The elected representatives of one of the states rejected the proposal to make abortion illegal in a 30-70 vote.
- D. If a foetus can be treated as a person, an embryo from which the foetus is formed should also be treated as a person.
- E. None of these

**Answer: Option B**

**Solution:**

Choice (a) does not state that every other country considers abortion as illegal. There is a possibility that there are some countries which treat abortion legal. Hence (a) does not go against the judgement.

If choice (b) is true, the judgement of the court goes against the fundamental rights. This makes the court's judgement untenable. Hence (b) goes against the supreme court judgement.

According to choice (c), the elected representatives are in favour of making abortion legal.

Choice (d) does not state anything in favour or against the judgement. It is out of context.

Hence, choice (b) goes against the judgement.

8. If it is possible to make a meaningful word using the second, fifth, eight and tenth of letters of the word "DEVELOPMENT", then what is the second letter of the word? If no word can be formed, mark the answer as X, If two words can be formed, mark the answer as Y, If more than two words can be formed mark the answer as Z.

- A. L
- B. X
- C. E
- D. Y
- E. Z

**Answer: Option B**

**Solution:**

The 2nd, 5th, 8th and 10th letters of the given word are E, L, M, N. No word can be formed using the letters.

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9. How many pairs of letters are there in the word CRYSTALLIZE, which have as many between them as in the alphabet?

- A. 1
- B. 2
- C. 3
- D. 4
- E. None of these

Answer: Option C

10. NOPQ : MLKJ: HIJK:?

- A. DEFG
- B. EFGH
- C. FEDC
- D. GFED

Answer: Option D

Solution:

The 1st and 2nd 3rd and 4th letter of the 1st group are moved one two three five and seven steps backward respectively to obtained to the corresponding letter of the second group.

11. Which pair of English letters should be the next in the series of pairs of letters of English alphabet given below?

BE GK MR TZ BI

- A. JR
- B. KS
- C. JS
- D. KR
- E. JQ

Answer: Option B

Solution:

First letters of each group are in the order +5, +6, +7 and so on, where as the last

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letters of each group are in the order +6, +7, +8 and so on.

**12. By the time they reach adulthood, most people can perform many different activities involving motor skills. Motor skills involve such diverse tasks as riding a bicycle, threading a needle, and cooking a dinner. What all these activities have in common is their dependence on precision and timing of muscular movement. This paragraph best supports the statement that**

- A. most adults have not refined their motor skills.**
- B. all adults know how to ride a bicycle.**
- C. refined motor skills are specifically limited to adults.**
- D. children perform fewer fine motor activities in a day than adults do.**
- E. threading a needle is a precise motor skill.**

**Answer: Option E**

**Solution:**

**The second sentence states that threading a needle involves motor skill. The other choices are not in the paragraph**

**13. Statement:Should there be a restriction on the migration of people from one state to another in India?**

**Arguments:**

- I. No, any Indian citizen has a basic right to stay at any place of their choice and hence they cannot be stopped.**
- II. Yes, this is the way to effect an equitable distribution of resources across the states in India.**

- A. If only argument I is strong**
- B. If only argument II is strong**
- C. If either I or II is strong**
- D. If neither I nor II is strong**
- E. If both I and II are strong**

**Answer: Option A**

**Solution:**

**I is strong on the basis of constitutional right. II is not true. Hence, it is a weak argument.**

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14. Mark is working with a realtor to find a location for the toy store he plans to open in his town. He is looking for a place that is either in, or not too far from, the center of town and one that would attract the right kind of foot traffic. Which of the following locations should Mark's realtor call to his attention?

- A. a storefront in a new high-rise building near the train station in the center of town whose occupants are mainly young, childless professionals who use the train to commute to their offices each day
- B. a little shop three blocks away from the town's main street, located across the street from an elementary school and next door to an ice cream store
- C. a stand-alone storefront on a quiet residential street ten blocks away from the town's center
- D. a storefront in a small strip mall located on the outskirts of town that is also occupied by a pharmacy and a dry cleaner

Answer: Option B

Solution:

This option is both near the center of town and in a location (near a school and an ice cream store) where children and their parents are sure to be around. This is the only option that meets both of Mark's requirements.

15. Choose out the odd one.

- A. up
- B. Down
- C. Below
- D. Above
- E. Small

Answer: Option E

Solution:

All except smaller are prepositions while small is used as an adjective.

## SAP Technical Questions

1. If int is 2 bytes wide.What will be the output of the program?

# SAP Model Question Paper

```
#include
void fun(char**);
int main()
{
char *argv[] = {"ab", "cd", "ef", "gh"};
fun(argv);
return 0;
}
void fun(char **p)
{
char *t;
t = (p+= sizeof(int))[-1];
printf("%sn", t);
}
```

- A.ab
- B.cd
- C.ef
- D.gh

Answer: B

2. What will be the output of the program if the array begins at 65486 and each integer occupies 2 bytes?

```
int main()
{
int arr[] = {12, 14, 15, 23, 45};
printf("%u, %un", arr+1, &arr+1);
return 0;
}
```

- A.12, 65490
- B.14, 65492
- C.65488, 65496
- D.64490, 65498

Answer: C



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**Solution:**

Here, the base address(also the address of first element) of the array is 65486. => Here, arr is reference to arr has type "pointer to int". Therefore, arr+1 is pointing to second element of the array arr memory location. Hence  $65486 + 2 \text{ bytes} = 65488$  => Then, &arr is "pointer to array of 5 ints". Therefore, &arr+1 denotes " $5 \text{ ints} * 2 \text{ bytes} * 1 = 10 \text{ bytes}$ ". Hence, begining address  $65486 + 10 = 65496$ . So, &arr+1 = 65496. Hence the output of the program is 65488, 65496.

**3. Recursive functions are executed in a**

- A.last in first out order**
- B.first in First out order**
- C.Are maintained in a stack**
- D.none of the above**

**Answer: A**

**4. What will be the output of the program?**

```
#include
int main()
{
    int i=3, j=4, k, l;
    k = addmult(i, j);
    l = addmult(i, j);
    printf("%d %dn", k, l);
    return 0;
}
int addmult(int ii, int jj);
{
    int kk, ll;
    kk = ii + jj;
    ll = ii * jj;
    return (kk, ll);
}
```

- A. Function addmult()return 7 and 12**
- B.No output**
- C.Error: Compile error**
- D.None of above**

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**Answer: C**

**Solution:**

There is an error in this statement `int addmult(int ii, int jj);`. We have to remove the semi-colon, because it was an definition of the function `addmult()`

**5. Point out the error if any in the while loop.**

```
main()
{
int i =0;
while()
{
printf("%d",i++);
if(i>10)
break;
}
}
```

- A. the condition in the while loop is a must
- B. the while lop must be replaced by a for loop
- C. All of the Above
- D. None

**Answer: A**

**6. What will be the output of the program?**

```
#include
void fun(int);
int main()
{
int a=3;
fun(a);
return 0;
}
void fun(int n)
{
if(n > 0)
```

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```
{  
fun(-n);  
printf("%d,", n);  
fun(-n);  
}  
}
```

- A.0, 2, 1, 0
- B.1, 1, 2, 0
- C.0, 1, 0, 2
- D.0, 1, 2, 0

**Answer: D**

**7. What will be output of following c program?**

```
int main()  
{  
for(printf("1");!printf("0");printf("2")) printf("Sachin");  
return 0;  
}
```

- A.10sachin2
- B.10sachin
- C.10sachin210sachin2
- D.10

**Answer: D**

**8. What will be the output of the program?**

```
#include  
int main()  
{  
int fun();  
int i;  
i = fun();  
printf("%dn", i);  
return 0;  
}
```

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```
int fun()
{
  _AX = 1990;
}
```

- A.Garbage value
- B.0 (Zero)
- C.1990
- D.No output

**Answer: C**

**Solution:**

The return value of the function is taken from the Accumulator `_AX=1990`.

**9. What will be output of following c program?**

```
void main()
{
  int a[]={5,10,15};
  int i=0,num;
  num=a[++i]+ ++i+(++i);
  printf("%d",num);
}
```

- A.6
- B.17
- C.16
- D.12

**Answer:A**

**10. What will be the output of the program?**

```
#include
int main()
{
  int i = 5;
  while(i- >= 0)
  printf("%d,", i);
  i = 5;
```

# SAP Model Question Paper

```
printf("n");  
while(i- >= 0)  
printf("%i,", i);  
while(i- >= 0)  
printf("%d,", i);  
return 0;  
}
```

A. 4, 3, 2, 1, 0, -1  
4, 3, 2, 1, 0, -1

B. 5, 4, 3, 2, 1, 0  
5, 4, 3, 2, 1, 0

C. Error

D. 5, 4, 3, 2, 1, 0  
5, 4, 3, 2, 1, 0  
5, 4, 3, 2, 1, 0

A.A  
B.B  
C.C  
D.D

Answer: A

11. Point out the error in the following program.

```
#include  
int main()  
{  
char str[] = "Freshersworld";  
printf("%.#s %2s", str, str);  
return 0;  
}
```

A.in Array declaration  
B.printf statement  
C.unspecified character in printf

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**D.No error**

**Answer: D**

**12. Find the output of following snippet?**

```
#include  
void main()  
{  
char letter = 'Z';  
printf("%c",letter);  
}
```

**A.Z**

**B.90**

**C.Garbage Value**

**D.error**

**Answer: A**

**13. What will be the output of the program?**

```
#include  
#define SQR(x)(x*x)  
int main()  
{  
int a, b=3;  
a = SQR(b+2);  
printf("%dn", a);  
return 0;  
}
```

**A.25**

**B.11**

**C.Error**

**D.Garbage value**

**Answer: B**

**Solution:**

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$a = \text{SQR}(b+2)$ ; becomes,  $\Rightarrow a = b+2 * b+2$ ; Here  $\text{SQR}(x)$  is replaced by macro to  $x*x$  .  $\Rightarrow a = 3+2 * 3+2$ ;  $\Rightarrow a = 3 + 6 + 2$ ;  $\Rightarrow a = 11$ ;

14. What will be the output of the program if value 25 given to scanf()?

```
#include
int main()
{
int i;
printf("%dn", scanf("%d", &i));
return 0;
}
```

- A.1
- B.2
- C.5
- D.25

Answer: A

Solution:

The scanf function returns the number of input is given. printf("%dn", scanf("%d", &i)); The scanf function returns the value 1(one). Therefore, the output of the program is '1'.

15. void main()

```
{
char far *farther, *farthest;
printf("%d..%d",sizeof(farther),sizeof(farthest));
}
```

What is the ouput of above snippet?

- A.2.4
- B.syntax error
- C.compiler error
- D.4.2

Answer: D

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16. What will be the content of 'file.c' after executing the following program?

```
#include
int main()
{
FILE *fp1, *fp2;
fp1=fopen("file.c", "w");
fp2=fopen("file.c", "w");
fputc('A', fp1);
fputc('B', fp2);
fclose(fp1);
fclose(fp2);
return 0;
}
```

- A.B
- B.A B
- C.B B
- D.Error in opening file 'file1.c'

Answer: A

17. What is the output of following snippet?

```
main()
{
int c[] = { 2.8,3.4,4,6.7,5};
int j,*p=c,*q=c;
for(j=0;j<5;j++)
{
printf("%d",*c);
++q;
}
for (j =0; j<5;j++)
{
printf("%d",*p);
++p;
}
}
```

- A. syntax error



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B.compiler error

C.2 2 2 2 2 2 3 4 6 5

D.5 6 4 5 2 2 2 2

Answer: C

18. What will be the output of the program ?

```
#include  
int main()  
{  
float arr[] = {12.4, 2.3, 4.5, 6.7};  
printf("%dn", sizeof(arr)/sizeof(arr[0]));  
return 0;  
}
```

A.4

B.5

C.6

D.7

Answer: A

Solution:

The variable arr has 4 elements. The size of the float variable is 4 bytes. Hence 4 elements x 4 bytes = 16 bytes sizeof(arr[0]) is 4 bytes Hence 16/4 is 4 bytes Hence the output of the program is '4'.

19. main()

```
{  
char *p;  
p ="Hello";  
printf ("%cn" * &*p);  
}
```

What is the output of above snippet ?

A.H

B.syntax error

C.compiler error

D.E

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**Answer: A**

```
20. main()
{
int i;
print("%d",scanf("%d",&i));
// value 10 is given to the input here
}
```

**What is the output of above snippet?**

- A.1**
- B.compiler error**
- C.syntax error**
- D.2**

**Answer: A**

**21. What will be output of following c program?**

```
void main()
{
int a,i=4;
a=-i+-i+-5;
printf("%d %d",a,i);
}
```

- A.13 4**
- B.-3 2**
- C.7 2**
- D.-13 4**

**Answer: A**

**22. Find the output from following program?**

```
#include
int main()
{
int a = 10, b;
a >= 5 ? b=100: b=200;
```

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```
printf("%dn", b);  
return 0;  
}
```

A.100

B.200

C.Error: L value required for b

D.Garbage value

**Answer: C**

**Solution:**

variable b is not assigned

**23. What will be output of following c program?**

```
void main()  
{  
int z;  
z=(5,3,2);  
printf("%d",z);  
}
```

A.5

B.3

C.2

D.10

**Answer: C**

**24. What will be the output of the program?**

```
#include  
int main()  
{  
unsigned int i = 65535;  
/* Assume 2 byte integer*/  
while(i++ != 0)  
printf("%d",++i);  
printf("n");  
return 0;
```

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```
}
```

A.Infinite loop

B.0 1 2 ... 65535

C.0 1 2 ... 32767 – 32766 -32765 -1 0

D.No output

Answer: A

25. What will be output of following c program?

```
int main()
{
float **(*ptr)[4]=(float **(*)[4]);
ptr+=5;
printf(“%d %d”,ptr,sizeof ptr); return 0;
}
```

A.0 2

B.5 2

C.4 2

D.40 2

Answer: D

26. What will be output of following c program?

```
struct myStruct
{
int a;
char b;
}
*ptr;
int main()
{
struct myStruct ms={400,'A'};
printf(“%d %d”,ptr->a,ptr->b);
return 0;
}
```

A.400 A

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B.400 65  
C.400 97  
D.0 0

Answer: D

27. What will be the output of the program?

```
#include  
int main()  
{  
int i;  
i = printf("How r un");  
i = printf("%d", i);  
printf("%d", i);  
return 0;  
}
```

A. How r u 7 2  
B. How r u 8 2  
C. How r u 1 1  
D. Error: cannot assign printf to variable

Answer: B

28. What will be output of following c program?

```
#include "string.h"  
typedef struct stu1  
{  
int roll;  
char *name;  
double marks;  
}  
STU1;  
typedef struct stu2  
{  
int roll;  
char *name;  
double marks;  
}
```

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```
STU2;  
void main()  
{  
STU1 s1={25,"Rohit",87.43},*p1;  
STU2 *p2; p1=&s1;  
memcpy(p2,p1,4);  
printf("Roll : %dn",p2->roll);  
printf("Name : %sn",p2->name);  
printf("Marks : %lf",p2->marks);  
}
```

- A. Roll : 25 Name : Rohit Marks : 87.430000
- B. Roll : 25 Name : Rohit Marks : 0.000000
- C. Roll : 0 Name : Rohit Marks : 87.430000
- D. Roll : 0 Name : null Marks : 0.000000

Answer: B

29. Assume integer is 2 bytes wide. How many bytes will be allocated for the following code?

```
#include  
#include  
#define MAXROW 3  
#define MAXCOL 4  
int main()  
{  
int (*p)[MAXCOL];  
p = (int (*) [MAXCOL])malloc(MAXROW *sizeof(*p));  
return 0;  
}
```

- A.56 bytes
- B.128 bytes
- C.24 bytes
- D.12 bytes

Answer: C

30. What will be output when you will execute following c code?

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```
void main()
{
volatile int a=11;
printf("%d",a);
}
```

- A. Garbage
- B. 11
- C. 2
- D. We cannot predict

Answer: D

## SAP English Sample Questions

1. We hope that we shall win the match.

- A. We hope that we shall win the match.
- B. It is hoped that the match will be won by us.
- C. Match winning is our hope.
- D. The match is hoped to be won.

Answer: Option B

2. One who believes in God.

- A. agnostic
- B. theist
- C. secularist
- D. devotee

Answer: Option B

3. WANTON

- A. immoral
- B. moral
- C. unjust
- D. justifiable

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E. capricious

**Answer: Option B**

**Solution:**

The words wanton and moral are antonyms.

4. I like listening to Wesley go on about politics and social issues; his opinions are \_\_\_\_\_ with my own beliefs.

- A. latent
- B. explicit
- C. consonant
- D. ensconced
- E. rife

**Answer: Option C**

**Solution:**

Consonant (adj.) means in agreement or accord, harmonious; having similar sounds.

5. Childhood obesity is an alarming health issue. It is rife in the cities.

(A) Childhood obesity is an alarming health issue that is .....

(B) Childhood obesity which is an alarming .....

(C) Childhood obesity is an alarming health issue because .....

- A. A and C
- B. B and C
- C. A and B
- D. Only A
- E. All the three

**Answer: Option C**

**Solution:**

The second sentence gives additional information to what is stated in the first. Hence the use of 'that' and 'which' can combine them without changing their



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meaning. But the use of 'because' distorts the meaning and hence cannot be used.

6. My cousin has invested a lot of money ——— farming.

- A. in
- B. for
- C. on
- D. into

Answer: Option A

7. Select the odd one out

- A. Canteen
- B. Dancer
- C. Stage
- D. Makeup

Answer: Option A

8. MAROONED

- A. knotted
- B. smooth
- C. stranded
- D. mended
- E. repaired

Answer: Option C

Solution:

To be marooned means to be abandoned alone in a remote place. Stranded also means the same.

9. Being a strong adherent of \_\_\_\_\_ and modesty he resents any ostentatious display of wealth.

- (A) grandeur
- (B) thrift

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- (C) frugality
- (D) flamboyance
- (E) extravagance
- (F) humbleness

- A. A and D
- B. B and C
- C. C and F
- D. A and E
- E. D and E

**Answer: Option B**

**Solution:**

The word which can fit into the blank is linked to the word 'modesty' with the conjunction 'and', hence the word which goes into the blank should be similar to the word 'modesty'. Hence 'frugality' and 'thrift' are most appropriate.

**10. Gradual recovery from illness**

- A. Hysteria
- B. Amnesia
- C. Superannuation
- D. Convalescence

**Answer: Option D**

**Solution:**

**Convalescence**

**11. — apples I bought are sour**

- A. no article
- B. a
- C. an
- D. the

**Answer: Option D**

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12. Most of the candidates are over-qualified for the post. Mohan is the only person who is the least qualified among them.

- (A) Mohan is the only qualified person .....
- (B) While most of the candidates are over qualified .....
- (C) Except Mohan all other candidates .....

- A. Only A
- B. Only B
- C. A and B
- D. B and C
- E. None of these.

Answer: Option D

Solution:

B and C convey the meaning correctly, while A is incorrect.

13. Choose the correct spelt word out of the given alternatives.

- A. Restaurent
- B. Restaurant
- C. Rastaurent
- D. Rasteraunt

Answer: Option B

14. To perform this experiment (a) / drop little sugar (b) / into a glass of water(c) / No error (d)

- A. to perform this experiment
- B. drop little sugar
- C. into a glass of water
- D. no error

Answer: Option B

15. The recent natural calamities not only produced casualties, it also triggered, emergency relief intended to address the life-threatening problems of survivors.

## SAP Model Question Paper

- A. and it also triggered
- B. and also it triggered
- C. but they also triggered
- D. but also they triggered
- E. No correction required

**Answer: Option C**

**Solution:**

**‘Calamities’ is a plural word and hence it should be indicated by the pronoun ‘they’. Hence the correct expression ‘they also triggered’.**