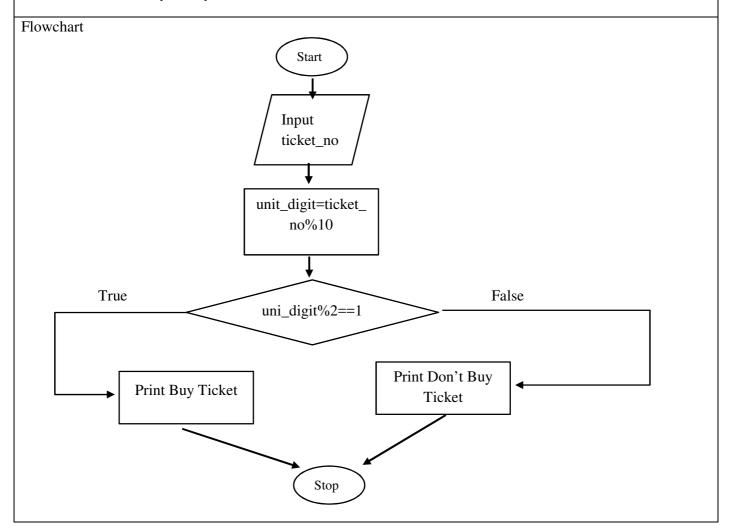
GWECA, B. Tech II Sem. Sec-B, I Mid-Term Exam.-MAR-2019, PPS, 2FY3-06, Time: 1 Hr, MM: 20

Q1. Suppose Rahul wants to buy a lottery, his astrologist has suggested him to buy such a ticket whose last digit of ticket number is odd. Write a pseudocode and draw a flowchart to help Rahul to select the ticket. (3+2)

Pseudocode

- 1. Input ticket_no
- 2. Perform unit_digit=ticket_no%10
- 3. If uni_digit%2==1
 - a. Print buy lottery ticket
- 4. Else
 - a. Print don't buy lottery ticket



Q2.What are arrays? Give their advantages and disadvantages? How a source code is converted into machine code through compilation process? (2+4)

Array: Array is collection of data items of same data type

int A[10];

The above statement means that A is an array having collection of 10 integers.

Adv:

Instead of making multiple variables, single variable can be used to store multiple data items of same data type for many entities e.g. marks of all students

Array elements are stored in contiguous memory locations so accessing array elements is fast as direct address can be calculated from base address

Array uses static memory allocation means the memory is allocated at compile time so even the number of elements actually not stored but total space taken by array in memory is statically allocated which may get wasted if less no. of elements are stored. If more elements than allocated size are required to e stored then array creates problem.

Q3.WAP to draw the following pattern? (6)

```
#include <stdio.h>
int main()
{
    int i,j,k=1;
    char ch='A';
    for (i=1;i<5;i++)
    {
        for(j=1;j<=i;j++)
        {
            printf("%c%d",ch++,k++);
        }
        printf("\n");
        }
        return 0;
}</pre>
```

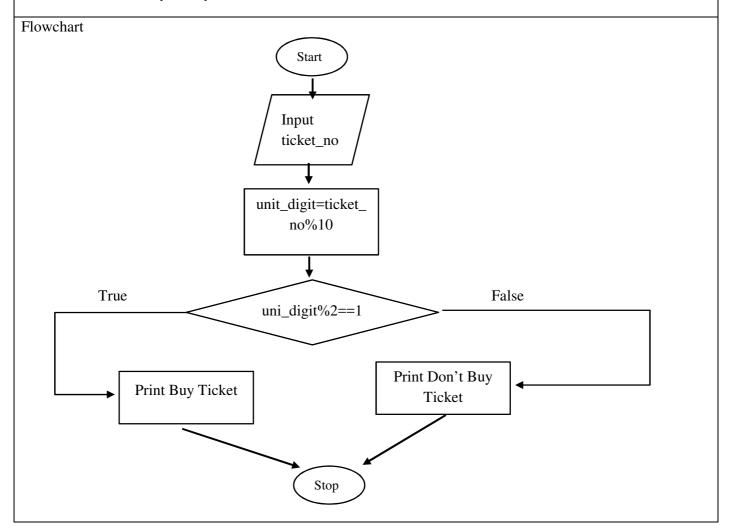
```
((a>b)?((a>c)?(printf("%d is greatest",a)):( printf("%d is greatest",c))):((b>c)?(printf("%d is greatest",b)):( printf("%d is greatest",c))))
```

GWECA, B. Tech II Sem. Sec-B, I Mid-Term Exam.-MAR-2019, PPS, 2FY3-06, Time: 1 Hr, MM: 20

Q1. Suppose Rahul wants to buy a lottery, his astrologist has suggested him to buy such a ticket whose last digit of ticket number is odd. Write a pseudocode and draw a flowchart to help Rahul to select the ticket. (3+2)

Pseudocode

- 1. Input ticket_no
- 2. Perform unit_digit=ticket_no%10
- 3. If uni_digit%2==1
 - a. Print buy lottery ticket
- 4. Else
 - a. Print don't buy lottery ticket



Q2.What are arrays? Give their advantages and disadvantages? How a source code is converted into machine code through compilation process? (2+4)

Array: Array is collection of data items of same data type

int A[10];

The above statement means that A is an array having collection of 10 integers.

Adv:

Instead of making multiple variables, single variable can be used to store multiple data items of same data type for many entities e.g. marks of all students

Array elements are stored in contiguous memory locations so accessing array elements is fast as direct address can be calculated from base address

Array uses static memory allocation means the memory is allocated at compile time so even the number of elements actually not stored but total space taken by array in memory is statically allocated which may get wasted if less no. of elements are stored. If more elements than allocated size are required to e stored then array creates problem.

Q3.WAP to draw the following pattern? (6)

```
#include <stdio.h>
int main()
{
    int i,j,k=1;
    char ch='A';
    for (i=1;i<5;i++)
    {
        for(j=1;j<=i;j++)
        {
            printf("%c%d",ch++,k++);
        }
        printf("\n");
        }
        return 0;
}</pre>
```

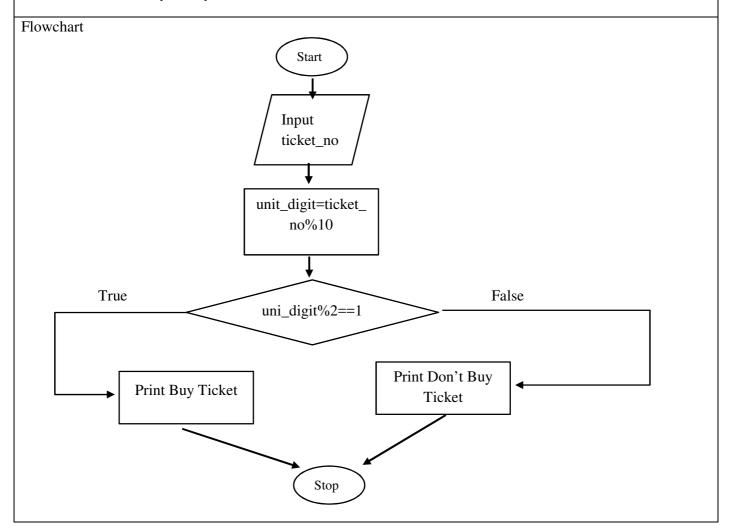
```
((a>b)?((a>c)?(printf("%d is greatest",a)):( printf("%d is greatest",c))):((b>c)?(printf("%d is greatest",b)):( printf("%d is greatest",c))))
```

GWECA, B. Tech II Sem. Sec-B, I Mid-Term Exam.-MAR-2019, PPS, 2FY3-06, Time: 1 Hr, MM: 20

Q1. Suppose Rahul wants to buy a lottery, his astrologist has suggested him to buy such a ticket whose last digit of ticket number is odd. Write a pseudocode and draw a flowchart to help Rahul to select the ticket. (3+2)

Pseudocode

- 1. Input ticket_no
- 2. Perform unit_digit=ticket_no%10
- 3. If uni_digit%2==1
 - a. Print buy lottery ticket
- 4. Else
 - a. Print don't buy lottery ticket



Q2.What are arrays? Give their advantages and disadvantages? How a source code is converted into machine code through compilation process? (2+4)

Array: Array is collection of data items of same data type

int A[10];

The above statement means that A is an array having collection of 10 integers.

Adv:

Instead of making multiple variables, single variable can be used to store multiple data items of same data type for many entities e.g. marks of all students

Array elements are stored in contiguous memory locations so accessing array elements is fast as direct address can be calculated from base address

Array uses static memory allocation means the memory is allocated at compile time so even the number of elements actually not stored but total space taken by array in memory is statically allocated which may get wasted if less no. of elements are stored. If more elements than allocated size are required to e stored then array creates problem.

Q3.WAP to draw the following pattern? (6)

```
#include <stdio.h>
int main()
{
    int i,j,k=1;
    char ch='A';
    for (i=1;i<5;i++)
    {
        for(j=1;j<=i;j++)
        {
            printf("%c%d",ch++,k++);
        }
        printf("\n");
        }
        return 0;
}</pre>
```

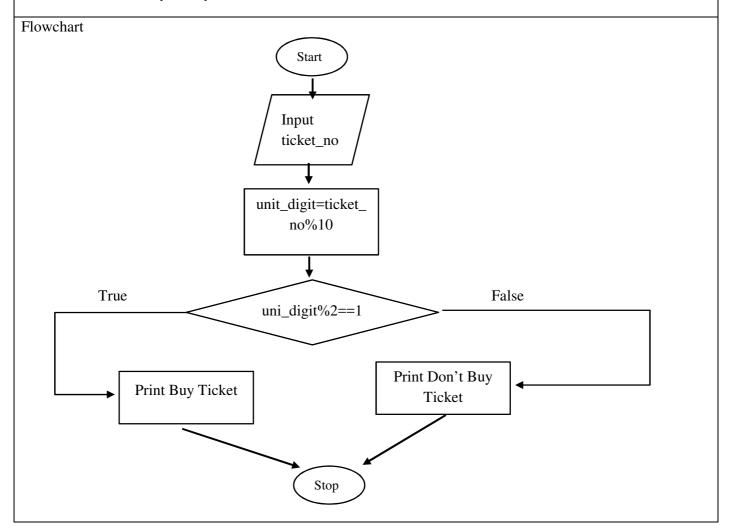
```
((a>b)?((a>c)?(printf("%d is greatest",a)):( printf("%d is greatest",c))):((b>c)?(printf("%d is greatest",b)):( printf("%d is greatest",c))))
```

GWECA, B. Tech II Sem. Sec-B, I Mid-Term Exam.-MAR-2019, PPS, 2FY3-06, Time: 1 Hr, MM: 20

Q1. Suppose Rahul wants to buy a lottery, his astrologist has suggested him to buy such a ticket whose last digit of ticket number is odd. Write a pseudocode and draw a flowchart to help Rahul to select the ticket. (3+2)

Pseudocode

- 1. Input ticket_no
- 2. Perform unit_digit=ticket_no%10
- 3. If uni_digit%2==1
 - a. Print buy lottery ticket
- 4. Else
 - a. Print don't buy lottery ticket



Q2.What are arrays? Give their advantages and disadvantages? How a source code is converted into machine code through compilation process? (2+4)

Array: Array is collection of data items of same data type

int A[10];

The above statement means that A is an array having collection of 10 integers.

Adv:

Instead of making multiple variables, single variable can be used to store multiple data items of same data type for many entities e.g. marks of all students

Array elements are stored in contiguous memory locations so accessing array elements is fast as direct address can be calculated from base address

Array uses static memory allocation means the memory is allocated at compile time so even the number of elements actually not stored but total space taken by array in memory is statically allocated which may get wasted if less no. of elements are stored. If more elements than allocated size are required to e stored then array creates problem.

Q3.WAP to draw the following pattern? (6)

```
#include <stdio.h>
int main()
{
    int i,j,k=1;
    char ch='A';
    for (i=1;i<5;i++)
    {
        for(j=1;j<=i;j++)
        {
            printf("%c%d",ch++,k++);
        }
        printf("\n");
        }
        return 0;
}</pre>
```

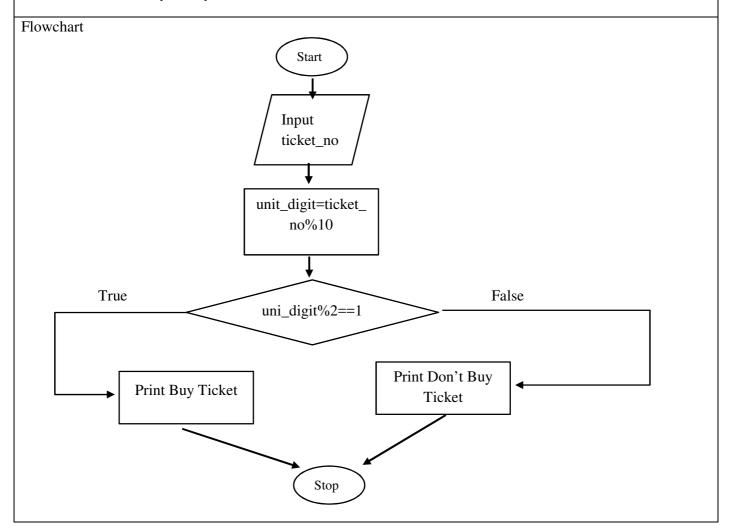
```
((a>b)?((a>c)?(printf("%d is greatest",a)):( printf("%d is greatest",c))):((b>c)?(printf("%d is greatest",b)):( printf("%d is greatest",c))))
```

GWECA, B. Tech II Sem. Sec-B, I Mid-Term Exam.-MAR-2019, PPS, 2FY3-06, Time: 1 Hr, MM: 20

Q1. Suppose Rahul wants to buy a lottery, his astrologist has suggested him to buy such a ticket whose last digit of ticket number is odd. Write a pseudocode and draw a flowchart to help Rahul to select the ticket. (3+2)

Pseudocode

- 1. Input ticket_no
- 2. Perform unit_digit=ticket_no%10
- 3. If uni_digit%2==1
 - a. Print buy lottery ticket
- 4. Else
 - a. Print don't buy lottery ticket



Q2.What are arrays? Give their advantages and disadvantages? How a source code is converted into machine code through compilation process? (2+4)

Array: Array is collection of data items of same data type

int A[10];

The above statement means that A is an array having collection of 10 integers.

Adv:

Instead of making multiple variables, single variable can be used to store multiple data items of same data type for many entities e.g. marks of all students

Array elements are stored in contiguous memory locations so accessing array elements is fast as direct address can be calculated from base address

Array uses static memory allocation means the memory is allocated at compile time so even the number of elements actually not stored but total space taken by array in memory is statically allocated which may get wasted if less no. of elements are stored. If more elements than allocated size are required to e stored then array creates problem.

Q3.WAP to draw the following pattern? (6)

```
#include <stdio.h>
int main()
{
    int i,j,k=1;
    char ch='A';
    for (i=1;i<5;i++)
    {
        for(j=1;j<=i;j++)
        {
            printf("%c%d",ch++,k++);
        }
        printf("\n");
        }
        return 0;
}</pre>
```

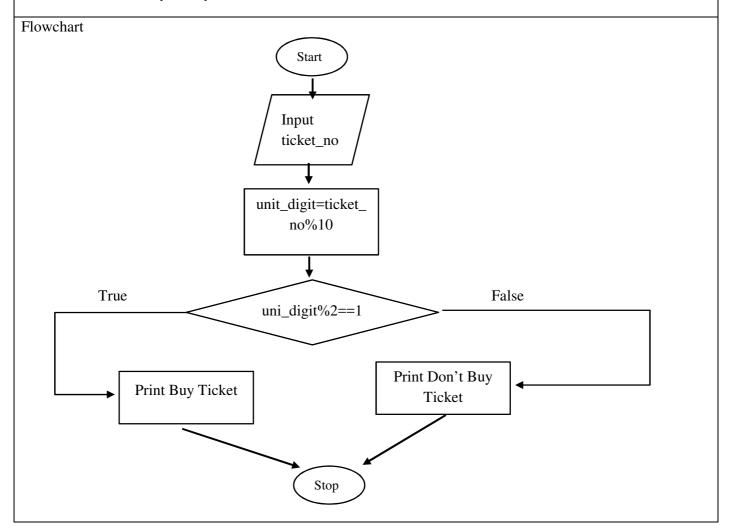
```
((a>b)?((a>c)?(printf("%d is greatest",a)):( printf("%d is greatest",c))):((b>c)?(printf("%d is greatest",b)):( printf("%d is greatest",c))))
```

GWECA, B. Tech II Sem. Sec-B, I Mid-Term Exam.-MAR-2019, PPS, 2FY3-06, Time: 1 Hr, MM: 20

Q1. Suppose Rahul wants to buy a lottery, his astrologist has suggested him to buy such a ticket whose last digit of ticket number is odd. Write a pseudocode and draw a flowchart to help Rahul to select the ticket. (3+2)

Pseudocode

- 1. Input ticket_no
- 2. Perform unit_digit=ticket_no%10
- 3. If uni_digit%2==1
 - a. Print buy lottery ticket
- 4. Else
 - a. Print don't buy lottery ticket



Q2.What are arrays? Give their advantages and disadvantages? How a source code is converted into machine code through compilation process? (2+4)

Array: Array is collection of data items of same data type

int A[10];

The above statement means that A is an array having collection of 10 integers.

Adv:

Instead of making multiple variables, single variable can be used to store multiple data items of same data type for many entities e.g. marks of all students

Array elements are stored in contiguous memory locations so accessing array elements is fast as direct address can be calculated from base address

Array uses static memory allocation means the memory is allocated at compile time so even the number of elements actually not stored but total space taken by array in memory is statically allocated which may get wasted if less no. of elements are stored. If more elements than allocated size are required to e stored then array creates problem.

Q3.WAP to draw the following pattern? (6)

```
#include <stdio.h>
int main()
{
    int i,j,k=1;
    char ch='A';
    for (i=1;i<5;i++)
    {
        for(j=1;j<=i;j++)
        {
            printf("%c%d",ch++,k++);
        }
        printf("\n");
        }
        return 0;
}</pre>
```

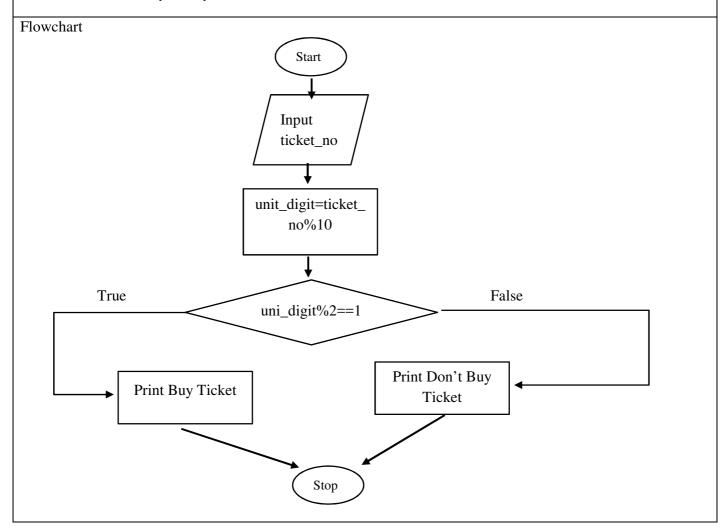
```
((a>b)?((a>c)?(printf("%d is greatest",a)):( printf("%d is greatest",c))):((b>c)?(printf("%d is greatest",b)):( printf("%d is greatest",c))))
```

GWECA, B. Tech II Sem. Sec-B, I Mid-Term Exam.-MAR-2019, PPS, 2FY3-06, Time: 1 Hr, MM: 20

Q1. Suppose Rahul wants to buy a lottery, his astrologist has suggested him to buy such a ticket whose last digit of ticket number is odd. Write a pseudocode and draw a flowchart to help Rahul to select the ticket. (3+2)

Pseudocode

- 1. Input ticket_no
- 2. Perform unit_digit=ticket_no%10
- 3. If uni_digit%2==1
 - a. Print buy lottery ticket
- 4. Else
 - a. Print don't buy lottery ticket



Q2.What are arrays? Give their advantages and disadvantages? How a source code is converted into machine code through compilation process? (2+4)

Array: Array is collection of data items of same data type

int A[10];

The above statement means that A is an array having collection of 10 integers.

Adv:

Instead of making multiple variables, single variable can be used to store multiple data items of same data type for many entities e.g. marks of all students

Array elements are stored in contiguous memory locations so accessing array elements is fast as direct address can be calculated from base address

Array uses static memory allocation means the memory is allocated at compile time so even the number of elements actually not stored but total space taken by array in memory is statically allocated which may get wasted if less no. of elements are stored. If more elements than allocated size are required to e stored then array creates problem.

Q3.WAP to draw the following pattern? (6)

```
#include <stdio.h>
int main()
{
    int i,j,k=1;
    char ch='A';
    for (i=1;i<5;i++)
    {
        for(j=1;j<=i;j++)
        {
            printf("%c%d",ch++,k++);
        }
        printf("\n");
        }
        return 0;
}</pre>
```

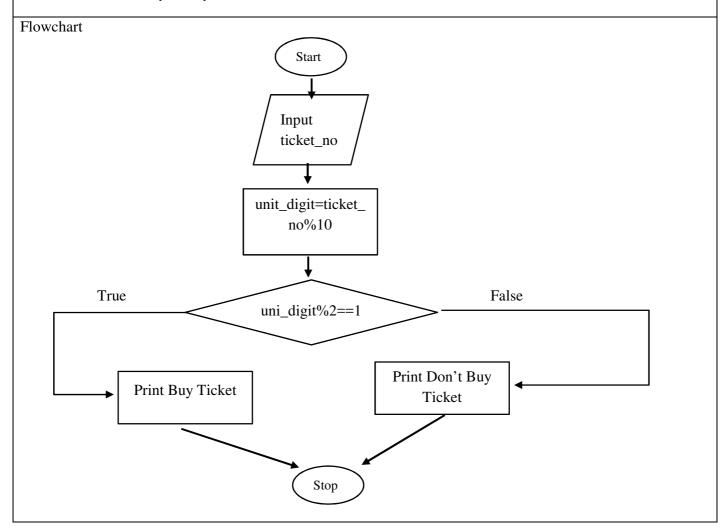
```
((a>b)?((a>c)?(printf("%d is greatest",a)):( printf("%d is greatest",c))):((b>c)?(printf("%d is greatest",b)):( printf("%d is greatest",c))))
```

GWECA, B. Tech II Sem. Sec-B, I Mid-Term Exam.-MAR-2019, PPS, 2FY3-06, Time: 1 Hr, MM: 20

Q1. Suppose Rahul wants to buy a lottery, his astrologist has suggested him to buy such a ticket whose last digit of ticket number is odd. Write a pseudocode and draw a flowchart to help Rahul to select the ticket. (3+2)

Pseudocode

- 1. Input ticket_no
- 2. Perform unit_digit=ticket_no%10
- 3. If uni_digit%2==1
 - a. Print buy lottery ticket
- 4. Else
 - a. Print don't buy lottery ticket



Q2.What are arrays? Give their advantages and disadvantages? How a source code is converted into machine code through compilation process? (2+4)

Array: Array is collection of data items of same data type

int A[10];

The above statement means that A is an array having collection of 10 integers.

Adv:

Instead of making multiple variables, single variable can be used to store multiple data items of same data type for many entities e.g. marks of all students

Array elements are stored in contiguous memory locations so accessing array elements is fast as direct address can be calculated from base address

Array uses static memory allocation means the memory is allocated at compile time so even the number of elements actually not stored but total space taken by array in memory is statically allocated which may get wasted if less no. of elements are stored. If more elements than allocated size are required to e stored then array creates problem.

Q3.WAP to draw the following pattern? (6)

```
#include <stdio.h>
int main()
{
    int i,j,k=1;
    char ch='A';
    for (i=1;i<5;i++)
    {
        for(j=1;j<=i;j++)
        {
            printf("%c%d",ch++,k++);
        }
        printf("\n");
        }
        return 0;
}</pre>
```

```
((a>b)?((a>c)?(printf("%d is greatest",a)):( printf("%d is greatest",c))):((b>c)?(printf("%d is greatest",b)):( printf("%d is greatest",c))))
```