Algorithm & flowchart

Q1. A) ALGORITHM

- 1) START
- 2) READ a, b, c
- 3) IF a>b THEN go to step 5

ELSE

go to step 4

ENDIF

4) IF b>c THEN

PRINT b is largest

ELSE

PRINT b is largest

ENDIF

go to step 6

5) IF a>c THEN

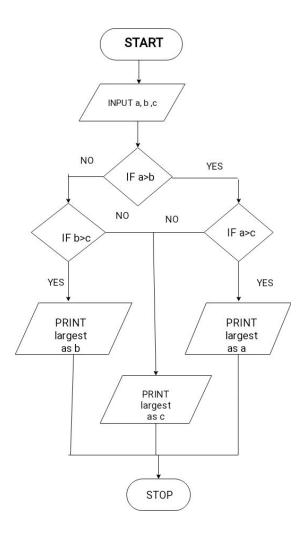
PRINT a is largest

ELSE

PRINT c is largest

ENDIF

6) STOP



2. A) ALGORITHM

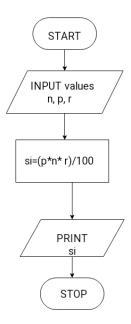
- 1) START
- 2) INPUT values of p, n, r
- 3) si = (p*n*r)/100
- 4) PRINT so
- 5) STOP

(Where, p : Principle Amount,

n : Time in Years,

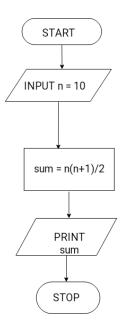
r: % Annual Rate of Interest,

si : Simple Interest)



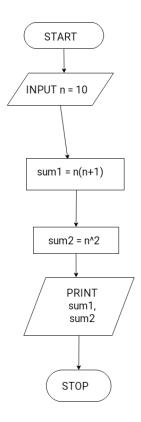
3. A) ALGORITHM

- 1) START
- 2) INPUT n =10
- 3) sum = n(n+1)/2
- 4) PRINT sum
- 5) STOP



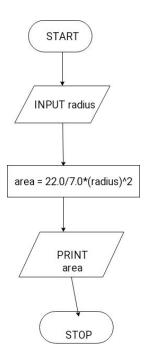
Q4. A) ALGORITHM

- 1) START
- 2) INPUT n = 10
- 3) sum1 = n(n+1) $sum2 = n^2$
- 4) PRINT sum1, sum2
- 5) STOP



Q5.A) ALGORITHM

- 1) START
- 2) INPUT radius
- 3) area = $22.0/7.0*(radius)^2$
- 4) PRINT area
- 5) STOP
- B) FLOWCHART



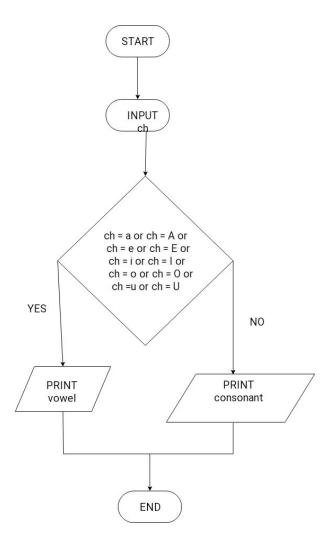
Q6.A) ALGORITHM

1) START

```
2) INPUT ch
3) IF (ch = a or ch = A or ch = e or ch = E or ch = i or ch = I or ch = o or ch = o or ch = u or ch = u or ch = U)
PRINT vowel
ELSE
PRINT consonant
```

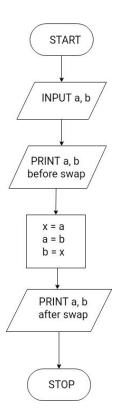
5) STOP

ENDIF



Q7. A) ALGORITHM

- 1) START
- 2) INPUT a, b
- 3) PRINT a, b (before swap)
- 4) x = a
- 5) a = b
- 6) b = x
- 7) PRINT a, b (after swap)
- 8) STOP



Q8. A) ALGORITHM

- 1) START
- 2) INPUT mark
- 3) IF mark<=100 and mark>=70

PRINT AA

ELSE

IF mark<=69 and mark>=60

PRINT BB

ELSE

IF mark <=59 and mark>=50

PRINT CC

ELSE

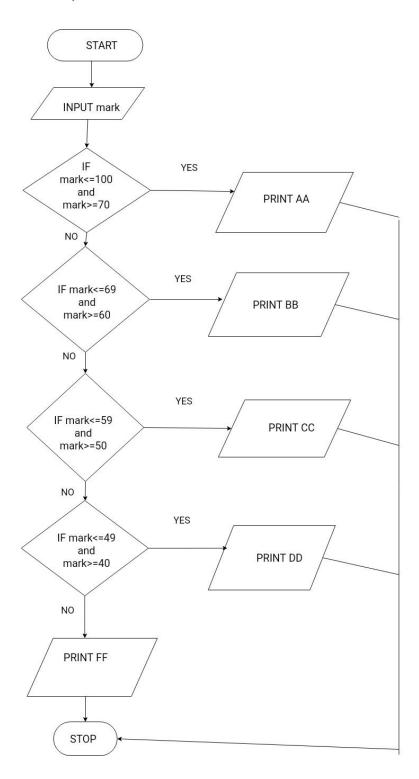
IF mark<=49 and mark>=40

PRINT DD

ELSE

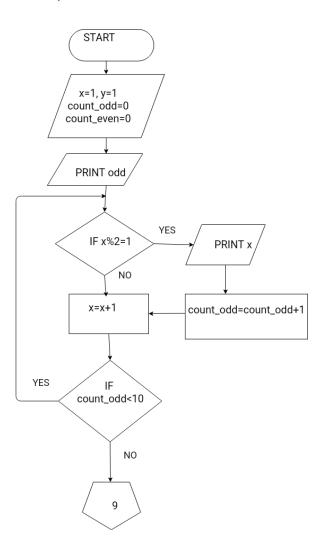
PRINT FF

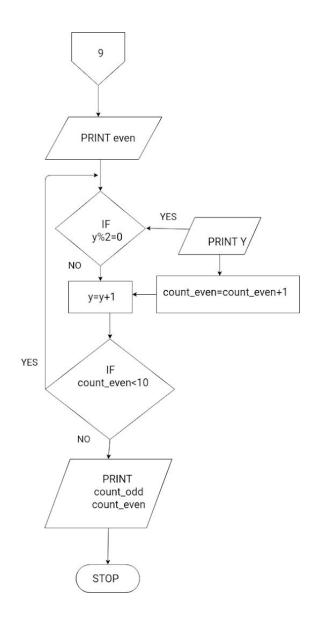
4) STOP



Q9.A) ALGORITHM

```
1) START
2) INPUT int x=1, y=1
   count_odd=0
   count_even=0
   count =0
3) PRINT odd
4) WHILE count_odd<10
     (IF x\%2=1)
      THEN PRINT x
      count_odd=count_odd +1
       x=x+1
      ELSE x=x+1
      ENDIF)
5) PRINT even
6) WHILE count_even<10
     ( IF y%2=0
        THEN PRINT y
        count_even = count_even+1
        y=y+1
      ELSE y=y+1
      ENDIF)
 7) PRINT count_odd and count_even
 8) STOP
```





Q10.A) ALGORITHM

- 1) START
- 2) INPUT
- 3) INPUT
- 4) WHILE i<=j

DO

prod =prod*i

i=i+1

DONE

- 5) PRINT factorial of j is prod
- 6) j=j+1
- 7) IF j<=5 THEN go to step 3
- 8) STOP

