Accenture Test 2

Test Summary

- No. of Sections: 4
- No. of Questions: 80
- Total Duration: 80 min

Section 1 - Quantitative Aptitude

Section Summary

- No. of Questions: 20
- Duration: 20 min

Additional Instructions:

None

Q1. amit is 40 m south of ravi . if satish is 40 south east of ravi . then satish is in which direction of amit

- east
- west
- north – east
- south

Q2. In a box, there are 8 red, 7 blue and 6 green balls. One ball is picked up randomly. What is the probability that it is neither red nor green?

- 1/3
- 3/4
- 7/19
- 8/21

Q3. What is the probability of getting a sum 9 from two throws of a dice?

- 1/6
- 1/8
- 1/9
- 1/12

Q4. If the average of five consecutive numbers is 27, find the smallest number.

23

24

25

26

Q5. By selling 20 articles for a rupee a man loses 10%. How many for a rupee did he buy?

16

18

14

12

Q6. A boy runs 450m race in 60s. His speed is.

6.4m/s

7.5m/s

8.6m/s

9.2m/s

Q7. A train travels at 48km/hr. How many metres will it travel in 15 min?

850m

900m

1200m

740m

Q8. Find the ratio of the interest earned on Rs 10000 compounded half yearly at the rate of 5%,in six months

2:1

1:2

1:3

3:1

Q9. The heights of two poles are 80m and 62.5m if the line joining their tops makes an angle of 45°with the horizontal, then find the distance between the poles

3.5m

8.5

12.5

17.5m

Q10. Two car are approaching from opposite direction to a flyover from the highest point of the flyover which is 100 m the angle of depression is 30°and 45°what is the distance between cars

545m

273m

130m

290m

Q11. The elevation angle of a hot air balloon flying at a height of 250m is 60°.what id the shortest distance between the point of observation and the balloon

300m

288.69 m

388.69 m

144.34m

Q12. Calculate the cost price if the selling price is is 125000 with a loss of 20%

Rs 150550

Rs 156250

Rs 155200

Rs 151000

Q13. calculate the cost cost price if the selling price is 6500 with a loss of 48%

Rs 1240

Rs 1200

Rs 1230

Rs 1220

Q14. A man stand on the lop of a hill and observe a truck moving with a uniform speed directly low what time the truck reaches him

15.20m

19.25m

20.20m

15.25m

Q15. To do a certain work C alone takes twice as long as A and B together. A would take B take separately?

20,12,15 days

18,12,17 days

18,12,16 days

18,10,17 days

Q16. A Can do 1/3 of the work in 5 days and B can do 2/5 of the work in 10 days. In how many days both A and B can do the work?

75/8 days

26/3 days

49/9 days

48/5 days

Q17. . Calculate simple interest,
The rate of interest per years is 3% for lending Rs 80000 for 2 years

Rs 4200

Rs 4800

Rs 3200

Rs 4501

Q18. A 24 m high lighthouse casts a shadow of 8m and a ship next to the lighthouse casts a shadow of 4 m. Find the height of the ship

24m

12m

4m

2m

Q19. The banker’s gain on a bill due 1 year hence at 12% per annum Is Rs. 6. The true discount Is

Rs 72

Rs 36

Rs 54

Rs 50

Q20. if a quarter kg of potato costs 60 paise, how many paise will 200 gm cost?

48 paise

54 paise

56 paise

72 paise

Section 2 - Verbal

Section Summary

- No. of Questions: 20
- Duration: 20 min

Additional Instructions:

None

Q1. the little girl said to her mother “did the sun rise in thje east”

a. the little girl said to her mother that the sun rose in the east

b. the little girl said to her mother if the sun rose in the east

c. the little girl said to her mother if the sun roses in the east

d. the little girl said to her motherif the sun is in the east

Q2. **statement**
In the order to bring punctuality in our office ,we must provide conveyance allowance to our employees – in charge of a company tells personnel manager
Asseumptions
1. Conveyance allowance will not help bringing punctuality
2. Discipline and reward should always go hand in had

a.Only assumption I is impicit

b. Only assumption ll is impicit

c.either I or II impicit

d.neither I nor II impicit

Q3. meaning the word -ARGUMENTATIVE

A.strident

b. controversial

c.irreverent

d.vociferous

Q4. Which word does not have a similar meaning to **amiss**

a.improper

b.unsutable

c.avoid

d.incorrect

Q5. find the odd one pair among the given pairs

A. SHOE –LEATHER

B.TABLE-WOOD

C.IRON-AXE

Q6. Statement: “In order to bring punctuality in our office, we must provide conveyance allowance to our employees” – In charge company tells Personnel manager.

Assumptions:
I. Conveyance allowance will not help in bringing punctuality.
II. Discipline and reward should always go hand in hand.

A. Only assumption I is implicit

B. Only assumption II is implicit

C. Either I or II is implicit

D. Neither is implicit

Q7. Please do not_____ an offer made by the chairman.

A. Deny

B. Refuse

C. Refrain

D. None of these

Q8. In the questions below the sentence has been given In ActIve / Passive vote. From the given allematNes. choose me ore wash best expresses the been sentence In Pass that 'Active yoke.
'After ahem professor Kumar to the museum she dropped him at his hotel'
Response

a. After, hemp drag° to the mascara. Professor Kumar was drooped al his hail

b. Professor kumar, w as being Owen trapped at IS need

c. Met she had driven professor Kumar l to the she had museum dropped him at is hote

d. after She wasgiven professor Kumar to the museum dropped him at is hotel

Q9. Find the correctly spelt word.

a.Efficient

b.treatmeant

c.element

d.employd

Q10. Synonym **for EMBEZZLE**

a. misapropriate

b.balance

c.remunearts

d.clear

Q11. Synonym for AUGUST

a Cammon

b. PettY

c.retculaious

d.dignified

Q12. Antoryrn **for OUIESCENT**

a.Damant

b. Weak

c.unconcerned

d.active

Q13. Synonym for **CANNY**

a.obstinete

b. Halftone

c. Cautions

d. Stout

Q14. 8. antonym tor **ENORMOUS**

a.soft

b. average

c.tiny

b.weak

Q15. Synonym for **BRIEF**

a.limited

b. Small

c. little

d. enoromous

Q16. In each question an imcomplete statement(stem) followed by fillers is given. Pick out yhe best one which can complete incomplete stem correctly and meaningfully.
Devite his best efforts to conceal his anger. ----------?

a. we could detect Mel he was very happy

b.he failed to give us on impression of his agony

c.he succeedad in campouflaging his emotions

d. people came to know that he was annoyed

Q17. RELINQUISH

a.abdicate

b.renounce

possess

deny

Q18. Extreme old age when a man behaves like a fool

a.imbecility

b.senility

c.dotage

d.superannuation

Q19. find the correct spelling words

a.foreign

b.foreine

c.fariegn

d.forein

Q20. Each question consist of two words which have a certain relationship to each other followed by four pairs of related words, Select the pair which has the same relationship.
DIVA:OPERA

a.producer:theatre

b.director:drama

c.conductor:bus

d.thespian:play

Section 3 - Reasoning

Section Summary

- No. of Questions: 20
- Duration: 20 min

Additional Instructions:
None

Q1. Pointing to boy surya said “he is the son of my grandfathers only son” how is the boy related to surya

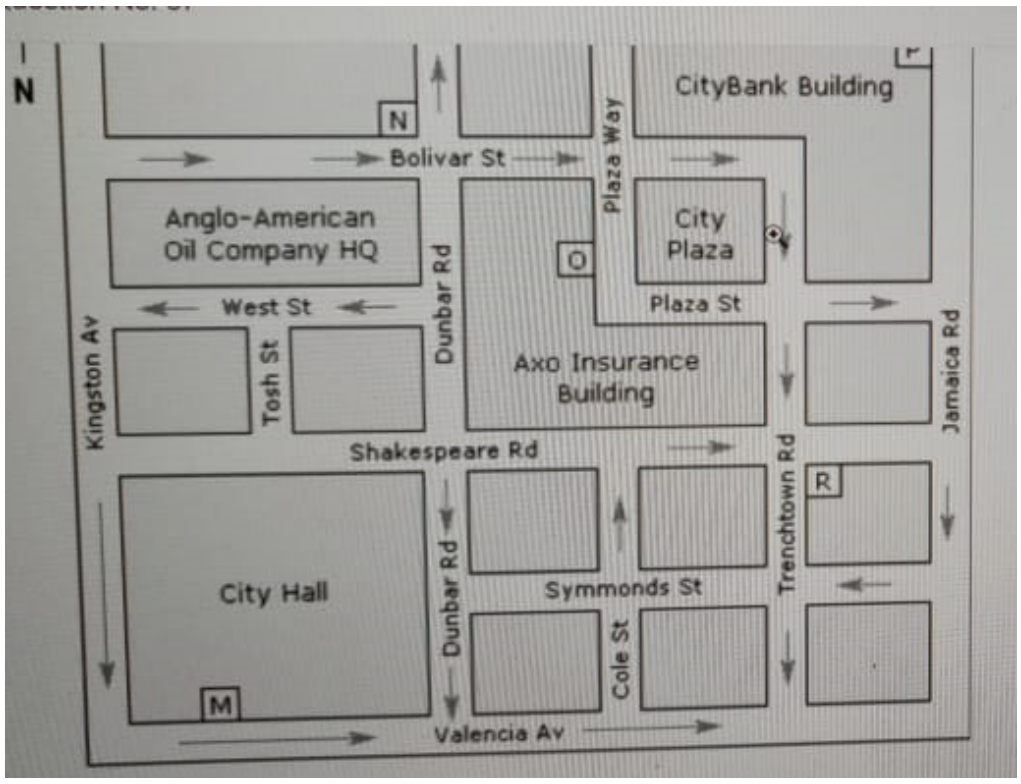
a.SON

b.NEPHEW

c.DATA INADEQUATE

d.None of these

Q2.



a.NORTH

b.SOUTH

C.EAST

d.WEST

Q3. If P denotes „multiplied by", T denotes „subracted from", M denotes „added to", and B denotes „divided by", then 28 B 7 P 8 T 6 M 4 = ?

A. - 3 / 2

B. 30

C. 32

D. 34

Q4. if 'SKY' is STAR is STAR is CLOUD is CLOUD is EARTH is TREE and TREE is BOOK then where do the birds fly

a.CLOUD

b.SKY

C.STAR

d.BOOK

Q5. REQUEST IS Written as S2R52TU ,then how will ACID be written

a.1394

b.B3J4

C.1C94

d.None of these

Q6. IF + means –
X Means /
/ means +
- Mean x

24x6-3/4+7 =?

a.9

b.81

c.121

d.99

Q7. Amit is 40m south of Ravi . If Satish is 40m South East of Ravi . Then Satish is in which direction of Amit?

east

west

north – east

south

Q8. Choose the alternative which closely resembles the mirror Image el the given ANS43Q12

ANS43Q12

(1) (2)

(3) (4)

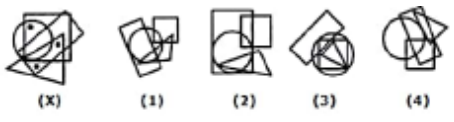
a.1

b.2

c.3

d.4

Q9.



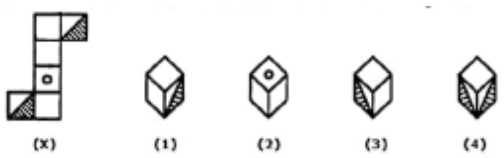
a.1

b.2

c.3

d.4

Q10. Choose the box that is similar to the box formed from the given sheet of paper(x):



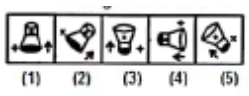
a.1I and 3 only

b. I and 4 Only

c. 2 and 4 only

d.3and 4 only

Q11. Choose the figure which different from the rest



a.1

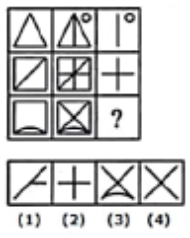
b.2

c.3

d.4

e.5

Q12. Select a suitable fi3ure homily law that would complex Ma figure mania. Find out do alarm Nunn (1), (2). (3) and (4) complete the figure matrix?



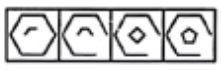
a.1

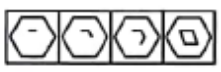
b.2

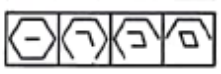
c.3

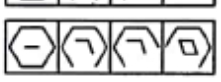
d.4

Q13. Choose the set the given rule.

(1) 

(2) 

(3) 

(4) 

a.1

b.2

c.3

d.4

Q14. 

a. 124

b.345

c .123

d. 125

Q15. which number comes in the place of question mark?

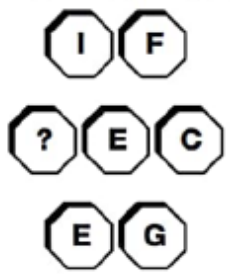
a.6

b.8

c.9

d.2

Q16. which letter replace the question mark?



a.A

b.B

c.C

d.D

Q17. Which playing the replace question mark

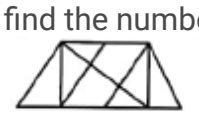
a. 9 clubs

b.2 of clubs

c.7 of clubs

d.6 of clubs

Q18. find the number of triangles in the given image.



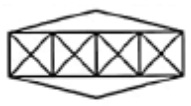
a.8

b.10

c.12

d.14

Q19. Count the number of the of triangles and squares In Ire Oval Iwo



a.36 triangles ,7 squares

b.36 triangles ,9 squares

c.40 triangles ,7 squares

d.42 triangles ,9 squares

Q20. what is the maximum of colours required to fill the spaces In the given diagram without any two adjacent spaces having the same colour?

a.6

b.5

c.4

d.3

Section 4 - Coding

Section Summary

- No. of Questions: 20
- Duration: 20 min

Additional Instructions:

None

Q1. Which of the following fopen statements are illegal?

fp = fopen(“abc.txt”, “r”);

fp = fopen(“/home/user1/abc.txt”, “w”);

fp = fopen(“abc”, “w”);

None of the mentioned.

Q2. Which of the following statements about stdout and stderr are true?

Same

Both connected to screen always.

Both connected to screen by default.

stdout is line buffered but stderr is unbuffered.

Q3. What is the output of this C code?

```
  int main()
{
      int c = 2 ^ 3;
   printf("%d\n", c);
}
```

1

8

9

0

Q4. What is the output of this C code?

```
  void main()
{
      int x = 97;
      int y = sizeof(x++);
   printf("x is %d", x);
}
```

x is 97

x is 98

x is 99

Run time error

Q5. Which of the following storage class supports char data type?

register

static

auto

All of the mentioned

Q6. What is the output of this C code?

```
  void main()
{
      int a = -5;
      int k = (a++, ++a);
   printf("%d\n", k);
}
```

-3

-5

4

Undefined

Q7. What is the output of this C code?

```
  int main()
{
      int x = -2;
   x = x >> 1;
   printf("%d\n", x);
}
```

- 1
- -1
- 2 ^ 31 – 1 considering int to be 4 bytes
- Either (b) or (c)

Q8. 1.Comment on the output of this C code?

```
 int main()
 {
    int a[5] = {1, 2, 3, 4, 5};
    int i;
    for (i = 0; i < 5; i++)
       if ((char)a[i] == '5')
          printf("%d\n", a[i]);
       else
          printf("FAIL\n");
 }
```

- The compiler will flag an error
- Program will compile and print the output 5
- Program will compile and print the ASCII value of 5
- **D.** Program will compile and print FAIL for 5 times

Q9. stdout, stdin and stderr are?

- File pointer
- File desciptors
- Streams
- Structure

Q10. Automatic variables are allocated space in the form of a:

stack

queue

priority queue

random

Q11. What is the output of the following naive method used to find the maximum sub-array sum?

```
#include
int main()
{
int arr[1000] = {-2, -5, 6, -2, 3, -1, 0,-5, 6}, len = 9;
int cur_max, tmp_max, strt_idx, sub_arr_idx;
cur_max = arr[0];
for(strt_idx = 0; strt_idx < len; strt_idx++)
{
tmp_max = 0;
for(sub_arr_idx = strt_idx; sub_arr_idx < len; sub_arr_idx++)
{
tmp_max += arr[sub_arr_idx];
if(tmp_max > cur_max)
cur_max = tmp_max;
}
}
printf("%d",cur_max);
return 0;
}
```

6

9

7

None of the mentioned

Q12. Suppose we are sorting an array of eight integers using heapsort, and we have just finished some heapify (either maxheapify or minheapify) operations. The array now looks like this: 16 14 15 10 12 27 28 How many heapify operations have been performed on root of heap?

1

2

3 or 4

5 or 6

Q13. A 3-ary max heap is like a binary max heap, but instead of 2 children, nodes have 3 children. A 3-ary heap can be represented by an array as follows: The root is stored in the first location, a[0], nodes in the next level, from left to right, is stored from a[1] to a[3]. The nodes from the second level of the tree from left to right are stored from a[4] location onward. An item x can be inserted into a 3-ary heap containing n items by placing x in the location a[n] and pushing it up the tree to satisfy the heap property. Which one of the following is a valid sequence of elements in an array representing 3-ary max heap?

1, 3, 5, 6, 8, 9

9, 6, 3, 1, 8, 5

9, 3, 6, 8, 5, 1

9, 5, 6, 8, 3, 1

Q14. The degree sequence of a simple graph is the sequence of the degrees of the nodes in the graph in decreasing order. Which of the following sequences can not be the degree sequence of any graph? I. 7, 6, 5, 4, 4, 3, 2, 1 II. 6, 6, 6, 6, 3, 3, 2, 2 III. 7, 6, 6, 4, 4, 3, 2, 2 IV. 8, 7, 7, 6, 4, 2, 1, 1

I and II

II and IV

IV only

II and IV

Q15. The most efficient algorithm for finding the number of connected components in an undirected graph on n vertices and m edges has time complexity.

θ (n)

θ(m)

θ(m + n)

θ(mn)

Q16. The following function reverse() is supposed to reverse a singly linked list. There is one line missing at the end of the function.

```
/* Link list node */
struct node
{
    int data;
    struct node* next;
};

/* head_ref is a double pointer which points to head (or start) pointer
  of linked list */
static void reverse(struct node** head_ref)
{
    struct node* prev   = NULL;
    struct node* current = *head_ref;
    struct node* next;
    while (current != NULL)
    {
        next = current->next;
        current->next = prev;
        prev = current;
        current = next;
    }
    /*ADD A STATEMENT HERE*/
}
```

What should be added in place of "/*ADD A STATEMENT HERE*/", so that the function correctly reverses a linked list.

*head_ref = prev;

*head_ref = current;

*head_ref = next;

*head_ref = NULL;

Q17. What are the time complexities of finding 8th element from beginning and 8th element from end in a singly linked list? Let n be the number of nodes in linked list, you may assume that n > 8.

O(1) and O(n)

O(1) and O(1)

O(n) and O(1)

O(n) and O(n)

Q18. A function f defined on stacks of integers satisfies the following properties. f(∅) = 0 and f (push (S, i)) = max (f(S), 0) + i for all stacks S and integers i.
If a stack S contains the integers 2, -3, 2, -1, 2 in order from bottom to top, what is f(S)?

6

4

3

2

Q19. Consider the function f defined below.

```
struct item
{
  int data;
  struct item * next;
};

int f(struct item *p)
{
  return (
          (p == NULL) ||
          (p->next == NULL) ||
          (( P->data <= p->next->data) && f(p->next))
         );
}
```

For a given linked list p, the function f returns 1 if and only if (GATE CS 2003)

the list is empty or has exactly one element

the elements in the list are sorted in non-decreasing order of data value

the elements in the list are sorted in non-increasing order of data value

not all elements in the list have the same data value.

Q20. Which of the following permutation can be obtained in the same order using a stack assuming that input is the sequence 5, 6, 7, 8, 9 in that order?

7, 8, 9, 5, 6

5, 9, 6, 7, 8

7, 8, 9, 6, 5

9, 8, 7, 5, 6

Answer Key & Solution

Section 1 - Quantitative Aptitude

Q1 east

Solution

No Solution

Q2 1/3

Solution

No Solution

Q3 1/9

Solution

No Solution

Q4 25

Solution

No Solution

Q5 18

Solution

No Solution

Q6 7.5m/s

Solution

No Solution

Q7 1200m

Solution

No Solution

Q8 3:1

Solution

No Solution

Q9

17.5m

Solution

No Solution

Q10

273m

Solution

No Solution

Q11

288.69 m

Solution

No Solution

Q12

Rs 156250

Solution

No Solution

Q13

Rs 1200

Solution

No Solution

Q14

20.20m

Solution

No Solution

Q15

20,12,15 days

Solution

No Solution

Q16

26/3 days

Solution

No Solution

Q17

Rs 4800

Solution

No Solution

Q18

12m

Solution

No Solution

Q19

Rs 50

Solution

No Solution

Q20

48 paise

Solution

No Solution

Section 2 - Verbal

Q1

b. the little girl said to her mother if the sun rose in the east

Solution

No Solution

Q2

b. Only assumption II is impicit

Solution

No Solution

Q3

b. controversial

Solution

No Solution

Q4

c.avoid

Solution

No Solution

Q5

C.IRON-AXE

Solution

No Solution

Q6

B. Only assumption II is implicit

Solution

No Solution

Q7

B. Refuse

Solution

No Solution

Q8

a. After, hemp drag° to the mascara. Professor Kumar was drooped al his hail

Solution

No Solution

Q9

a.Efficient

Solution

No Solution

Q10

a. misapropriate

Solution

No Solution

Q11

d.dignified

Solution

No Solution

Q12

d.active

Solution

No Solution

Q13

c. Cautions

Solution

No Solution

Q14

c.tiny

Solution

No Solution

Q15

d. enoromous

Solution

No Solution

Q16

d. people came to know that he was annoyed

Solution

No Solution

Q17

possess

Solution

No Solution

Q18

c.dotage

Solution

No Solution

Q19

a.foreign

Solution

No Solution

Q20

d.thespian:play

Solution

No Solution

Section 3 - Reasoning

Q1

a.SON

Solution

No Solution

Q2

C.EAST

Solution

No Solution

Q3

B. 30

Solution

No Solution

Q4

C.STAR

Solution

No Solution

Q5

d.None of these

Solution

No Solution

Q6

a.9

Solution

No Solution

Q7

north – east

Solution

No Solution

Q8

b.2

Solution

No Solution

Q9

c.3

Solution

No Solution

Q10

a.1I and 3 only

Solution

No Solution

Q11

d.4

Solution

No Solution

Q12

d.4

Solution

No Solution

Q13

c.3

Solution

No Solution

Q14

d. 125

Solution

No Solution

Q15

a.6

Solution

No Solution

Q16

a.A

Solution

No Solution

Q17

a. 9 clubs

Solution

No Solution

Q18

b.10

Solution

No Solution

Q19

c.40 triangles ,7 squares

Solution

No Solution

Q20

d.3

Solution

No Solution

Section 4 - Coding

Q1

None of the mentioned.

Solution

No Solution

Q2

Both connected to screen by default.

Solution

No Solution

Q3

1

Solution

No Solution

Q4

x is 97

Solution

No Solution

Q5

All of the mentioned

Solution

No Solution

Q6

-3

Solution

No Solution

Q7

-1

Solution

No Solution

Q8

D. Program will compile and print FAIL for 5 times

Solution

No Solution

Q9

File pointer

Solution

No Solution

Q10

stack

Solution

No Solution

Q11

7

Solution

No Solution

Q12

2

Solution

No Solution

Q13

9, 5, 6, 8, 3, 1

Solution

No Solution

Q14

II and IV

II and IV

Solution

No Solution

Q15 θ(m + n)

Solution

No Solution

Q16 *head_ref = prev;

Solution

*head_ref = prev;

At the end of while loop, the *prev* pointer points to the last node of original linked list. We need to change *head_ref so that the head pointer now starts pointing to the last node.

Q17 O(1) and O(n)

Solution

Finding 8th element from beginning requires 8 nodes to be traversed which takes constant time.

Finding 8th from end requires the complete list to be traversed.

Q18 3

Solution

f(S) = 0, max(f(S), 0) = 0, i = 2

f(S)new = max(f(S), 0) + i = 0 + 2 = 2

f(S) = 2, max(f(S), 0) = 2, i = -3

f(S)new = max(f(S), 0) + i = 2 – 3 = -1

f(S) = -1, max(f(S), 0) = 0, i = 2

f(S)new = max(f(S), 0) + i = 0 + 2 = 2

f(S) = 2, max(f(S), 0) = 2, i = -1

f(S)new = max(f(S), 0) + i = 2 – 1 = 1

f(S) = 1, max(f(S), 0) = 1, i = 2

f(S)new = max(f(S), 0) + i = 1 + 2 = 3

Thus, option (C) is correct.

Q19 the elements in the list are sorted in non-decreasing order of data value

Solution

The function f() works as follows

1) If linked list is empty return 1

2) Else If linked list has only one element return 1

3) Else if node->data is smaller than equal to node->next->data and same thing holds for rest of the list then return 1

4) Else return 0

Q20 7, 8, 9, 6, 5

Solution

The sequence given in option (C) is one of the only possible sequence which can be obtained.

We can obtain the sequence by performing operations in the manner:

Push 5

Push 6

Push 7

Pop 7

Push 8

Pop 8

Push 9

Pop 9

Pop 6

Pop 5.

hence the sequence will be 7,8,9,6,5.