Venkat, a stockbroker, invested a part of his money in the stock of four companies --- A, B, C and D. Each of these companies belonged to different industries, viz., Cement, Information Technology (IT), Auto, and Steel, in no particular order. At the time of investment, the price of each stock was Rs.100. Venkat purchased only one stock of each of these companies. He was expecting returns of 20%, 10%, 30%, and 40% from the stock of companies A, B, C and D, respectively. Returns are defined as the change in the value of the stock after one year, expressed as a percentage of the initial value. During the year, two of these companies announced extraordinarily good results. One of these two companies belonged to the Cement or the IT industry, while the other one belonged to either the Steel or the Auto industry. As a result, the returns on the stocks of these two companies were higher than the initially expected returns. For the company belonging to the Cement or the IT industry with extraordinarily good results, the returns were twice that of the initially expected returns. For the company belonging to the Steel or the Auto industry, the returns on announcement of extraordinarily good results were only one and a half times that of the initially expected returns. For the remaining two companies, which did not announce extraordinarily good results, the returns realized during the year were the same as initially expected.

**Question 1**

If Venkat earned a 38.75% return on average during the year, then which of these statement(s) would necessarily be true?

I. Company C belonged either to Auto or to Steel Industry.

II. Company D belonged either to Auto or to Steel Industry.

III. Company A announced extraordinarily good results.

IV. Company B did not announce extraordinarily good results.

**Answer:** C

**Explanation:**

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before</td>
<td>20</td>
<td>10</td>
<td>30</td>
<td>40</td>
<td>25</td>
</tr>
<tr>
<td>After</td>
<td>20</td>
<td>10</td>
<td>45</td>
<td>60</td>
<td>38.75</td>
</tr>
</tbody>
</table>

To give 38.75 % average return we can see that B didn't give extraordinary returns and C can be any of the auto/steel industry.

**Instructions**

Directions for the following three questions: Answer the questions based on the passage below.

A group of three or four has to be selected from seven persons. Among the seven are two women: Fiza and Kavita, and five men: Ram, Shyam, David, Peter and Rahim. Ram would not like to be in the group if Shyam is also selected. Shyam and Rahim want to be selected together in the group. Kavita would like to be in the group only if David is also there. David, if selected, would not like Peter in the group. Ram would like to be in the group only if Peter is also there. David insists that Fiza be selected in case he is there in the group.

**Question 2**

Which of the following is a feasible group in four?

A  Ram, Peter, Fiza and Rahim

B  Shyam, Rahim, Kavita and David
C. Shyam, Rahim, Fiza and David

D. Fiza, David, Ram and Peter

Answer: C

Explanation:
David and Peter cannot be selected together. So, option d) is not possible.
David and Fiza have to be selected together. So, option b) is ruled out.
Shyam and Rahim have to be selected together. So, option a) is also ruled out.
Option c) is the correct answer

Instructions
For the following questions answer them individually

Question 3
In a family gathering there are 2 males who are grandfathers and 4 males who are fathers. In the same gathering there are 2 females who are grandmothers and 4 females who are mothers. There is at least one grandson or a granddaughter present in this gathering. There are 2 husband-wife pairs in this group. These can either be a grandfather and a grandmother, or a father and a mother. The single grandfather (whose wife is not present) has 2 grandsons and a son present. The single grandmother (whose husband is not present) has 2 granddaughters and a daughter present. A grandfather or a grandmother present with their spouses does not have any grandson or granddaughter present. What is the minimum number of people present in this gathering?

A. 10
B. 12
C. 14
D. 16

Answer: B

Explanation:
The bare minimum requirement for the single grandfather and grandmother are as follows:

```
GF1  GM1
   /   /
  F1  M1
 /   /  
GS1 GS2 GD1 GD2
```

GF implies Grandfather, GM Grandmother, F Father, M Mother, GS Grandson and GD Granddaughter. The family trees above account for 2 fathers, 2 mothers, 1 GF and 1 GM. Hence, we need 1 more GF, 1 GM, 2 fathers and 2 mothers and two married couples.

The bare minimum tree that would provide this structure is as follows:

```
GF2 = GM2
   /   /  
F3   M3
```

Using these three structures, we have fit all of our requirements. Thus, if GF1, GF2 and GM1 are siblings with the following family trees present, we would have the required number of people in attendance. Hence, the minimum is 12 people.

Take a free SNAP mock test

Instructions
Directions for the next 2 questions: There are three bottles of water, A, B, C, whose capacities are 5 litres, 3 litres, and 2 litres respectively. For transferring water from one bottle to another and to drain out the bottles, there exists a
Initially, A is full with water, and B and C are empty.

**Question 4**

After executing a sequence of three instructions, bottle A contains one litre of water. The first and the third of these instructions are shown below:

- First instruction: **FILL (C, A)**
- Third instruction: **FILL (C, A)**

Then which of the following statements about the instruction is true?

A. The second instruction is **FILL (B, A)**

B. The second instruction is **EMPTY (C, B)**

C. The second instruction transfers water from B to C

D. The second instruction involves using the water in bottle **A**

**Answer:** B

**Explanation:**

After first instruction: \(\text{A} = 5 - 2 = 3\text{L} \quad \text{C} = 2\text{L}\). In the third instruction, A yields 2L to C. It means the capacity of A before third operation was 3L. It means that C's water was either drained or transferred to B. Option B is correct.

**Instructions**

For the following questions answer them individually

**Question 5**

There is a vertical stack of books marked 1, 2 and 3 on Table-A, with 1 at the bottom and 3 on top. These are to be placed vertically on Table-B with 1 at the bottom and 2 on the top, by making a series of moves from one table to the other. During a move, the topmost book, or the topmost two books, or all the three, can be moved from one of the tables to the other. If there are any books on the other table, the stack being transferred should be placed, on top of the existing books, without changing the order of books in the stack that is being moved in that move. If there are no books on the other table, the stack is simply placed on the other table without disturbing the order of books in it. What is the minimum number of moves in which the above task can be accomplished?

A. One

B. Two

C. Three

D. Four

**Answer:** D

**Explanation:**

Downloaded from cracku.in
For min steps 1st move would be to place book 3 from A to B
2nd move would be to place book 2 from A to B,
3rd move would be to place book 2 and 3 from B to A.
Last move would be to place books 2,3,1 from table A to Table B.
So 4 moves are atleast needed.

Question 6

In a hospital there were 200 diabetes, 150 hyperglycaemia and 150 gastro-enteritis patients. Of these, 80 patients were treated for both diabetices and hyperglycaemia. Sixty patients were treated for gastro-enteritis and hyperglycaemia, while 70 were treated for diabetes and gastroenteritis. Some of these patients have all the three diseases. Dr. Dennis treats patients with only gastro-enteritis. Dr. Paul is a generalist. Therefore, he can treat patients with multiple diseases. Patients always prefer a specialist for their disease. If Dr. Dennis had 80 patients, then the other three doctors can be arranged in terms of the number of patients treated as:

A  Paul > Gerard > Hormis
B  Paul > Hormis > Gerard
C  Gerard > Paul > Hormis
D  Cannot be determined

Answer: D

Explanation:
We dont know out of other 2 doctors which doctor is specialist in which disease.
So it is not possible to find out the exact order.

Question 7

Choose the set in which the statements are most logically related.
A. All candid men are persons who acknowledge merit in a rival.
B. Some learned men are very candid.
C. Some learned men are not persons who acknowledge merit in a rival.
D. Some learned men are persons who are very candid.
E. Some learned men are not candid.
F. Some persons who recognize merit in a rival are learned.

A  ABE
B  ACF
C  ADE
D  BAF

Answer: D

Explanation:
In option A, E is not a valid conclusion from A and B.
In option B, F cannot be inferred from A and C.
In option C, E cannot be concluded from A and D.
In option D, If some learned men are candid but all candid men recognize merit in a rival, it can be concluded that some men recognize merit in a rival are learned.
Hence, option D is the correct answer.

**Instructions**

There are 5 cities, A, B, C, D and E connected by 7 roads as shown in the figure below:

![City Diagram]

Design a route such that you start from any city of your choice and walk on each of the 7 roads once and only once, not necessarily returning to the city from which you started.

**Question 8**

*For a route that satisfies the above restrictions, which of the following statements is true?*

- **A** There is no route that satisfies the above restriction.
- **B** A route can either start at C or end at C, but not both.
- **C** D can be only an intermediate city in the route.
- **D** The route has to necessarily end at E.

**Answer:** B

**Explanation:**

We can start from either city C or D.

- C - A - B - D - C - B - E - D
- D - B - A - C - B - E - D - C

We cannot start from any other city.

So, we can either start from C or end at C but not both.

**Instructions**

Direction for the following four questions: Answer the questions based on the following information. Mr Bankatlal acted as a judge for the beauty contest. There were four participants, viz. Ms Andhra Pradesh, Ms Uttar Pradesh, Ms West Bengal and Ms Maharashtra. Mrs Bankatlal, who was very anxious about the result, asked him about it as soon as he was back home. Mr Bankatlal just told that the one who was wearing the yellow saree won the contest. When Mrs Bankatlal pressed for further details, he elaborated as follows: All of them were sitting in a row. All of them wore sarees of different colours, viz. green, yellow, white, red. There was only one runner-up and she was sitting beside Ms Maharashtra. The runner-up was wearing the green saree. Ms West Bengal was not sitting at the ends and was not the runner up. The winner and the runner-up are not sitting adjacent to each other. Ms Maharashtra was wearing white saree. Ms Andhra Pradesh was not wearing the green saree. Participants wearing yellow saree and white saree were at the ends.
Question 9
Ms. West Bengal was sitting adjacent to
A  Ms Andhra Pradesh and Ms Maharashtra
B  Ms Uttar Pradesh and Ms Maharashtra
C  Ms Andhra Pradesh and Ms Uttar Pradesh
D  Ms Uttar Pradesh
Answer: C
Explanation:
Since the people wearing yellow saree and the white saree were at the ends, Ms West Bengal was not sitting at one of the ends and was not a runner up, the arrangement is as shown below:

<table>
<thead>
<tr>
<th>YELLOW (1)</th>
<th>RED</th>
<th>GREEN (2)</th>
<th>WHITE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANDHRA PRADESH</td>
<td>WEST BENGAL</td>
<td>UTTAR PRADESH</td>
<td>MAHARASHTRA</td>
</tr>
</tbody>
</table>

Closest to actual SNAP
5 National level SNAP mocks
Detailed mock analysis and solutions with percentile
Access till Jan 10 2020

Instructions
DIRECTIONS for the following questions: These questions are based on the situation given below: A young girl Roopa leaves home with x flowers, goes to the bank of a nearby river. On the bank of the river, there are four places of worship, standing in a row. She dips all the x flowers into the river. The number of flowers doubles. Then she enters the first place of worship, offers y flowers to the deity. She dips the remaining flowers into the river, and again the number of flowers doubles. She goes to the second place of worship, offers y flowers to the deity. She dips the remaining flowers into the river, and again the number of flowers doubles. She goes to the third place of worship, offers y flowers to the deity. She dips the remaining flowers into the river, and again the number of flowers doubles. She goes to the fourth place of worship, offers y flowers to the deity. Now she is left with no flowers in hand.

Question 10
The minimum number of flowers with which Roopa leaves home is:
A  16
B  15
C  0
D  Cannot be determined
Answer: B
Explanation:
Number of flowers after the first dipping = 2x
Number of flowers after the second dipping = 2(2x-y) = 4x-2y
Number of flowers after the third dipping = 2(4x-2y-y) = 8x-6y
Number of flowers after the fourth dipping = 2(8x-6y-y) = 16x-14y
16x-14y = y
y = 16x/15
Minimum value of $y = 16$ when $x = 15$

Take a free SNAP mock test

SNAP Previous Papers (Download PDF)

Closest to actual SNAP
5 National level SNAP mocks
Detailed mock analysis and solutions with percentile
Access till Jan 10 2020

IIFT previous papers (download pdf)

Know the CAT Percentile Required for IIM Calls

XAT previous papers (download pdf)

CAT Percentile Predictor

Free CAT Study Material

XAT Previous Papers

XAT Free Mock Test

Downloaded from cracku.in