Directions for questions 1 to 6: Answer the questions on the basis of the information given below.

A written exam for government jobs consisted of two objective type papers - Paper 1 and Paper 2. Paper 1 was of Mathematics and the maximum marks were 300. Each question in Paper 1 carried 2.5 marks. Paper 2 was divided into two parts - Part A (English) and Part B - General Knowledge (GK). The maximum marks for Part A and Part B were 200 and 400 respectively. Each question in this paper was of 4 marks. The composite score (out of 900) of a student was the sum of his marks in two papers. There was no negative marking in the papers. Students securing less than 25% and 35% marks in Paper 1 and Paper 2 or both respectively were disqualified. Out of the rest, the four with the highest composite score qualified the written test.

Ten students from a school appeared in the written test. The partial details of their marks in the written test are given in the table below.

Candidate	Paper 1	Paper 2	
	Mathematics (out of 300)	Part A (English-out of 200)	Part B (GK-out of 400)
A	70		
B		40	
C	135	28	92
D	85	72	
E	90	60	160
F	105		120
G	155	48	100
H		80	140
I		44	112
J	95		176

The following facts are also known.
(i) No two students had the same composite score.
(ii) B and H both scored 40% in exactly one paper. B's composite score was 20 less than H's. B qualified the written test.
(iii) A, B and D scored the same marks in GK.
(iv) J was the unique second lowest scorer in English. A did not score the lowest in English.
(v) Among the four qualified students, F had the lowest composite score.

Q 1. How many marks did B score in Paper 1?

1) 76

2) 84

3) 90

4) 80

Q 2. What was the composite score of F in Paper 1 and Paper 2?

Q 3. Which of the following statements MUST be FALSE?

1) F's composite score was less than that of B.

2) Two students were definitely disqualified in Paper 2.

3) A attempted 40 correct questions in GK.

4) D's composite score was more than that of H.

Q 4. Which of the following statements MUST be TRUE?
I. J attempted more number of correct questions than B in GK.
II. B attempted less number of correct questions than H in Mathematics.
III. G attempted less total number of correct questions than J.

1) II only

2) Both II and III

3) III only

4) Both I and II

Q 5. What was the difference between the correct questions attempted by F and J in English?

Q 6. It is known that A qualified Paper 2. If I's composite score was more than A's composite score, then what could be the minimum number of correct questions attempted by I in Mathematics?

1) 51

2) 62

3) 64

4) 59

Directions for questions 7 to 10: Answer the questions on the basis of the information given below.

At a college canteen a new coffee vending machine is placed and a sales person helps people in getting their desired cup of coffee with the right concentration. The coffee dispenser has a touch screen display, with choices for coffee decoction, milk and sugar syrup along with numeric choices from 0 to 9 for the preferred quantity of each liquid to be poured. Each of the liquids are dispensed in multiples of 10 ml, for example if 5 is chosen for milk, then 50 ml of milk is dispensed. Further, it is also known that:
(i) The coffee cups available have a capacity of 150 ml. The cost price of 10 ml each of coffee decoction is Rs.3, milk is Rs.2 and sugar syrup is Re.1.
(ii) According to the safety standards of the company, in the preparation of any cup of coffee only these three liquids are mixed and nothing else is added.
(iii) Each coffee cup sold has exactly 150 ml of liquid, not less or more. Each cup of coffee contains at least 10 ml of each of the three

liquids and the quantity of coffee decoction is never less than either milk or sugar syrup.
(iv) The machine is programmed to set the selling price of each cup at 10% above the cost price.

Q 7. The preferred drink of the professors is a cup with minimum 50% coffee decoction. In how many ways can coffee be served to the professors from the vending machine?

1) 15

2) 21

3) 28

4) 18

Q 8. What is the difference between the maximum and minimum profit (in Rs.) earned by the sales of 1000 cups of coffee?

1) 1200

2) 1250

3) 1100

4) 1350

Q 9. If undergraduate students prefer at least 60 ml of milk in their cup of coffee, then what is the minimum amount of sugar syrup (in liter) that can be contained in 100 cups of coffee?

1) 2

2) 3

3) 4

4) 1

Q 10. On a particular day the coffee dispenser is filled with 20 liters each of milk and coffee decoction. What is the maximum number of cups of coffee dispensed such that there is no wastage? (Assume that any quantity of sugar syrup can be provided.)

1) 250

2) 200

3) 400

4) 500

Directions for questions 11 to 16: Answer the questions on the basis of the information given below.

In a hospital five doctors – A, B, C, D and E are on duty from Monday to Thursday on different time slots starting from 9 AM to 5 PM. Each slot is of 1 hour. Every person gets an appointment as per available time slots. Five persons – Adam, Bush, Cole, Dev, and Eshan – have their appointments fixed for four days. They all have a preference for a doctor but none of them except Eshan gets to meet the doctor of their choice. Visiting fees (in Rs.) of A, B, C, D and E is 100, 200, 300, 400 and 500 respectively. The below table shows the available doctor for each time slot for four days.

Time Slot	Monday	Tuesday	Wednesday	Thursday
9 to 10	B	A	C	E
10 to 11	A	D	B	D
11 to 12	B	E	B	B
12 to 1	C	B	D	A
1 to 2	E	C	D	C
2 to 3	D	A	A	D
3 to 4	C	E	E	A
4 to 5	D	B	C	B

Additional information known to us:
(i) These five persons visit the hospital twice in a day hoping to meet the doctor of their choice. Each person never visits on the time-slot they visited before. Adam prefers doctor C, Bush prefers doctor B, Cole prefers doctor D, Dev prefers doctor A and Eshan prefers doctor E.
(ii) Adam visited A exactly 4 times but not from 9 AM to 10 AM.
(iii) Bush visited D exactly 5 times but never on Thursday.
(iv) Cole visited B exactly 4 times but not from 11 AM to 12 Noon.
(v) Dev visited C exactly 5 times but not on Tuesday.
(vi) Eshan visited E exactly 3 times but not from 1 PM to 2 PM. Also, Eshan never get to visit doctors B and D.

Q 11. Which of the following is the list of doctors whom Dev visit other than doctor C?

1) B, E, D

2) D, E

3) B, E

4) B, D

Q 12. On which of the following days, all of them could have visited the same doctor in the same time slot?

1) Tuesday

2) Wednesday

3) Thursday

4) Cannot be determined

Q 13. How many different doctors does Cole visited?

1) 1

2) 2

3) 3

4) 4

Q 14. On how many time slots, on all four days, did Eshan visited the same doctor as either Adam or Dev?

1) 4

2) 5

3) 6

4) Either (2) or (3)

Q 15. Total how much visiting fees (in Rs.) is paid by Bush?

Q 16. It has been observed that all five persons paid minimum possible visiting fees, then arrange them in the order of ascending amount of visiting fees.

1) Adam, Dev, Cole, Eshan, Bush

2) Cole, Adam, Dev, Eshan, Bush

3) Adam, Cole, Eshan, Dev, Bush

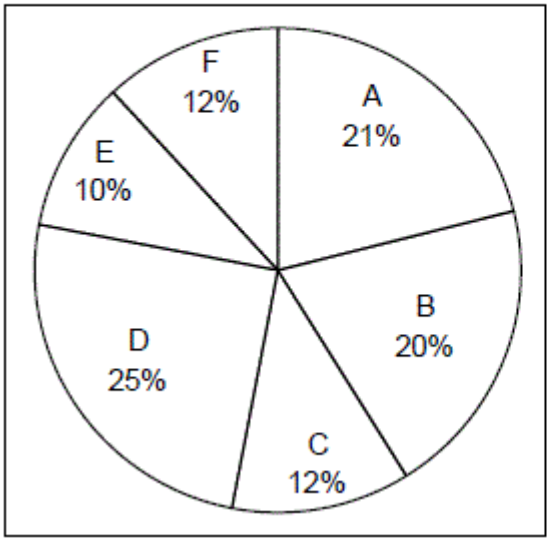
4) Adam, Cole, Dev, Eshan, Bush

Directions for questions 17 to 22: Answer the questions on the basis of the information given below.

The World Health Organization arranged for the supply of food grains to six nations – A, B, C, D, E and F – during a period of severe drought. The two pie charts given below show the percentage distribution of monthly demand and supply of food grains in these six nations. The total monthly demand is 18 lakh tonnes whereas the total monthly supply is 16.67% more than the total monthly demand.

Surplus = Supply – Demand

Demand



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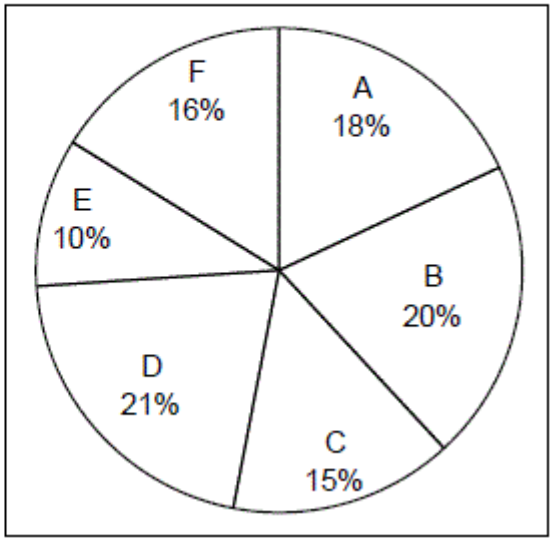

Q 17. What is the difference between the demand and supply of food grains in Nation A?

Q 18. How many nations got less than their required quantity of food grains?

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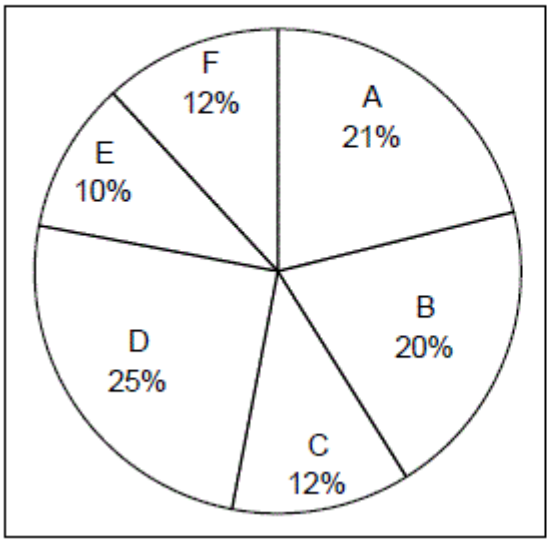

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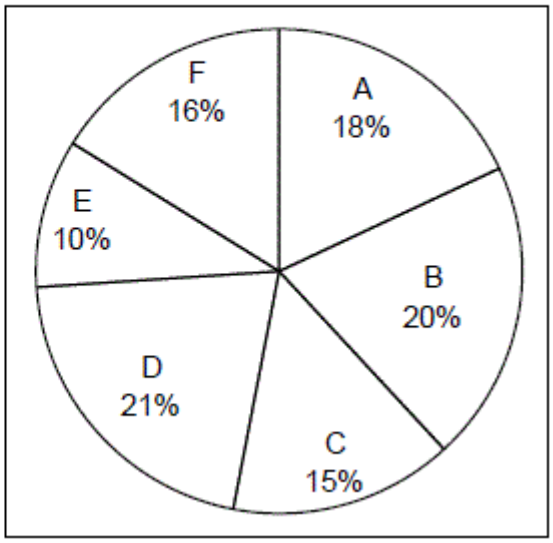

Q 19. If the government of Nation F calculates the average demand of food grains per person to be 8 kg per month, then what is the total population of Nation F?

1) 3.1 crores

2) 2.7 crores

3) 2.4 crores

4) 1.8 crores

Q 20. If the existing supply was equally divided among all the six nations, then how many nations witnessed a surplus of food grains?

1) 2

2) 4

3) 3

4) 1