REASONING TEST PAPER 1

Directions for questions 1 to 25

Each question is based on a passage. Select the best answer choice given

Passage1

A Company manufactures chairs. In 1994 its installed capacity was 3 lacs. Now it doubled in 1998 and remained the same in 1999. Through 1995-1997 it was 2/3 the capacity of 1998. Capacity utilization is inversely proportional to capacity. In all years except 1994 capacity utilization was below 100% though production increased steadily over the years. In 1994 it was 110%, 1995-85%, 1996-90%, 1997-91% and 1998-76%. In 1999 it was the same as 1996 levels.

The selling price was Rs4 per unit in 1994 increased at 10% per annum till 1996. In 1997 it was Rs5 per unit and thereafter it rose 20% per annum. Unit sales are 90% of production in 1994 and 1995 and 95% in 1997,1998,1999.

1996 was a boom year in which the company sold all that it produced in that year plus the inventory of the last 2 years (assume opening inventory to be zero in 1994). The company has been facing heavy competition and market share by value has been declining from 25% in 1994-95, it was 60% of that in 1998-99. 1996 & 1997 shares were equal to the average share of these 6 years. The company spends 4.33% of its sales revenue every year on advertising.

1.	What was the prod	uction in 1997?			
	◉ 1] 350,000	0 2] 360,000	0 3] 364,000	@ 4] 365,000	
2.	What was the tota 1] 1,900,360 	l sales revenue in 1 2] 2,066,680	996? © 3] 1,890,560	4] 2,135,500	
3.	What was the adve	ertising expenditure 2] 120,000	in 1998? ③ 3] 135,000	@ 4] 123,345	
4.	What were the unit 1] 427,000	sales in 1996? ② 2] 450,000	© 3] 360,000	@ 4] 365,000	
5.	What was the tota	l market in 1997? © 2] 86.45lac	© 31 79.69lac	41 cannot be determined	ined

Passage2

IN organizing a newspaper 4 editors are required ;the managing editor, the news editor, the sports editor and the entertainment editor. The managing editor can work only on Wednesday mornings, Thursday afternoons and Friday the whole day. The news editor can work only on Monday afternoons, Tuesday and Thursday the whole day. The sports editor can work only on Monday afternoons, Tuesday mornings and Wednesday the whole day. The entertainment editor can work all day Monday and Wednesday only.

- 6. If the managing editor cannot edit until each of the others has completed atleast a full day of work, when is the earliest the managing editor can work?
 - I]Wednesday afternoon
 2]Friday morning
 - © 3]Monday morning © 4]Thursday afternoon

7.	One of the editors must work completely alone for the whole day in order to prevent confusion and disorder. If no other editor can afford to lose his available time, then the only possible editor privileged with working alone is				
	 1]The news editor on Tuesday 2]The managing editor on Friday 3]The sports editor on Monday 4]The entertainment editor on Thursday 				
Pass	age3				
4 pec have Cheta	ople Arti, Banti, Chetan and Dolly have together got Rs100 with them. Arti and Banti together got as much money as Chetan & Dolly put together. Arti has got more money than Banti. an has half as much money as Dolly has. Arti has Rs5 more than Dolly.				
8.	Who has got the most money?				
9.	How much does Banti have?				
10.	Who has got the second biggest sum?				
11.	What is the ratio of the amount with Chetan and Dolly? I] 2:1 I] 2:1 I] 2:1 I] 2:1				
12.	Who has got the least amount of money?				
Pass	age4				
The f	following is the list of instructions to be followed				
Step1: x=0 A=2 B=3					
Step2: If X<5 then do Steps3-6 otherwise Step7					
Step3: Y=A+B replace A by B replace B by Y					
Step4: Type Y					
Step5: Increase X by 2					
Step6: Goto Step2					
Step7: Exit					
13.	 13. When X=4 what value of Y is typed? ● 1] 12 ● 2] 8 ● 3] 13 ● 4] 5 				
 14. Suppose Step5 is replace by 'Increase X by 5' then what would be the last value of Y typed? I] 5 I] 5 I] 6 I] 9 					
15.	15. After the set of instructions is over at Step 7 what is the value of X				

① 1] 5 ② 2] 4 ③ 3] 3 ③ 4] 7

Passage 5

Five offices in Mumbai are run by five couples

Husbands: Bala, Girish, Jai, Jayesh, Pratap

Wife: Beena, Chand, Maya, Preeti, Sangeeta

Surname: Bakshi, Joshi, Natwar, Parikh, Sahni

Office: Air India, Jet, Ashiana, Indian Court, American Court

- No husband shares a first name initial with his wife; Only one husband who is not Pratap has an identical initial for his first name and surname, but none of the wives does
- The Air India is run by Jai and his wife
- Girish and Maya are one of the couples
- Chand's husband is Mr. Natwar
- Mrs. Joshi is the owner of Jet and Preeti is the owner of American Court; neither of them is married to Jayesh
- The office run by the Sahni has the word 'Court' as part of its name
- The Ashiana is not run by Mr.Parikh whose wife is not Sangeeta
- 16. Jai's wife is

	🖲 1] Preeti	2]Chand	© 3] Maya	🔘 4] Beena	
17.	. The Sahni's run the restaurant				
	1] Ashiana	🖱 2] Air India 🛛	🔊 3] Jet	Ô 4] Indian Court	
18.	Which of the m	en has the surnar	me Natwar		
	1]Bala	🔘 2] Pratap	🔘 3] Jai	© 4] Jayesh	
19.	. Which of the following women is Mrs. Joshi				
	🖲 1] Preeti	🔊 2] Chandni	© 3] Sangeeta	🖉 4] Beena	

20. Bala's surname is

🖲 1] Parikh	🔘 2] Joshi	🔘 3] Bakshi
-------------	------------	-------------

Passage 5

Five brothers have among them a pair of twins who are neither the oldest nor the youngest. E

C 4] Sahni

is older than C but younger than B. D is younger than 3 brothers 21. The youngest is 🖲 1] A ◎ 2] B ◎ 3] C ◎ 4] D 22. One of the twin pair is ◎ 2] C ◎ 3] D ◎ 4] E 23. The eldest is ◎ 2] B ◎ 3] C ◎ 4] E 🖲 1] A 24. The one who has as many elder brothers as younger brothers is 🖲 1] A 🔘 2] B ◎ 3] E ◎ 4] none of these 25. Who is the fourth brother 🖲 1] A ◎ 2] B ◎ 3] D ◎ 4] E **Explanation to Paper I** 1. In 1997 production is 91% of capacity installed Therefore=91*400,000/100 =364,000 Hence [3] 2. Inventory for 1994 Production in '94=330,000 Sales=297,000 therefore inventory=33,000 Inventory for 1995 Production in 1995=340,000 Sales in 1995=306,000 therefore inventory=34000 Sales for 1996=360000 Total sales=360000+34000+33000=427000 units Sales revenue=427000*4.84 =2,066,680 Hence [2]

3.Production in 1998=456000 units Sales=433200 units Sales revenue=433200*6=2599200 Therefore advt. expense=2599200*4.33% =112,545 Hence [1] 4. Inventory for 1994 Production in '94=330,000 Sales=297,000 therefore inventory=33,000 Inventory for 1995 Production in 1995=340,000 Sales in 1995=306,000 therefore inventory=34000 Sales for 1996=360000 Total sales=360000+34000+33000=427000 units Hence [1] 5. Market share=80/4=20% Sales revenue=345,800*5=1729000 Therefore market =1,729,000/0.20=86.45lac Hence [2] 6. Answer is [2] 7.Answer is [1] The following table can easily explain questions 8 to 12 Names Arti Banti Amount Rs38.4 Rs11.6 13. While X=0, Y=5, A=3, B=5 While X=2, Y=8, A=5, B=8 While X=4, Y=13, A=8, B=13

Dolly

Rs33.4

Chetan

Rs16.6

Hence [3]

14. While X=0, Y=5, A=3, B=5

If X is increased by 5 further values of Y will not be calculated.

Hence [1]

15. The last value of X is 4

Hence [2]

The following table explains the questions 16 to 20

Husband	Wife	Surname		Office	
Jai	Beena	Parikh		Air India	
Girish	Maya	Sahni		Indian Court	
Jayesh	Chand	Natwar		Ashiana	
Bala	Preeti	Bakshi		American Court	
Pratap	Sangeeta	Joshi		Jet	
16. [4] 17. [4] 18. [4] 19. [3] 20. [3]					
The following table explains the questions 21 to 25					
1 2	2	3	4	5	
B E		A	D	C	

21. [3] 22. [4] 23. [2] 24. [1] 25. [3]