

## IIFT 2006 Set B (DI)

### Section IV (Part i)

**Directions for questions 80 to 85:** Study the 10 statements given below and answer the questions.

1. Six businessmen from six different nations are staying in different rooms in succession in the same row in a hotel.
  2. Each of them owns a different number of cars and has donated to different number of institutions during the last year.
  3. The businessman in Room no. 102 owns twice as many as the number of cars owned by the businessmen who has donated to 8 institutions in the last year.
  4. The businessman from Uruguay and the businessman in Room no. 106 together own 40 cars in total.
  5. The businessman from Argentina owns 8 cars less than the businessman from England but donated to 10 more institutions in the last year.
  6. Four times the number of cars owned by the businessman in Room no. 104 is lesser than the number of institutions to which he has donated in the last year.
  7. The businessman in Room No. 103 owns 12 cars and donated to 8 institutions in the last year.
  8. The businessman who owns 16 cars donated to 24 institutions in the last year.
  9. The businessman in Room no. 105 owns 8 cars and donated to 2 institutions less than those donated by the businessman from Canada in the last year.
  10. The Brazilian businessman is staying two rooms ahead of the English businessman who is staying two rooms ahead of the Canadian businessman.
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80. In which room is Brazilians businessman staying?  
a. Room no. 102      b. Room no. 103      c. Room no. 104      d. Room no. 105
  81. What is the number of institutions to which the Argentinean businessman donated in the last year?  
a. 8                      b. 3                      c. 18                      d. 24
  82. The businessman of which country is staying in Room no. 106?  
a. Argentina              b. Canada              c. Uruguay              d. Germany
  83. The businessman of which country has donated to 24 institutions in the last year?  
a. Argentina              b. Uruguay              c. Canada              d. Germany
  84. The businessman of which country owns the highest number of cars?  
a. Argentina              b. Uruguay              c. Germany              d. Brazil
  85. How many cars are owned by the English businessman?  
a. 8                      b. 12                      c. 4                      d. 20



**Direction for questions 86 to 89:** Study the information given below and answer the questions.

A word arrangement machine, when given a particular input, rearranges it using a particular rule. The following is the illustration and the steps of the arrangement.

INPUT: lemon apple choco college girl dreams rooms book calf  
STEP1: choco apple lemon college girl dream calf book room  
STEP2: lemon apple choco dream girl college room book calf  
STEP3: calf lemon apple book choco college room girl dream  
STEP4: apple calf lemon book choco college dream room girl  
STEP5: lemon calf apple college choco book girl room dream  
STEP 6 : dream lemon calf room apple book girl choco college

86. Mark all the options which will not be Step 10 for the given input
- a. Calf lemon dream room apple book college choco girl
  - b. apple calf lemon book choco college dream room girl
  - c. lemon college dream choco calf room book girl apple
  - d. dream college lemon room calf choco apple girl book
87. Indicate all the step numbers for which the following will not be an output  
dream lemon calf book apple room girl choco college
- a. Step 7
  - b. Step 8
  - c. Step 9
  - d. Step 12
88. Mark all the arrangements that do not fall between step numbers 11 and 15
- a. choco book dream calf college lemon apple girl room
  - b. book dream college girl lemon calf apple room choco
  - c. book dream college room lemon girl apple calf choco
  - d. college dream book girl lemon calf choco room apple
89. Mark two arrangement which will fall as consecutive steps at any time.
- a. calf lemon dream room apple book college choco girl
  - b. choco book dream calf college lemon apple girl room
  - c. book dream college girl lemon room apple calf choco
  - d. college dream book girl lemon room choco calf apple



**Direction for Question 90:** Read the information given below and answer the question.

A school in Bhopal decided to stage a historical drama, involving a battle between two ancient kingdoms. As a part of the battle, four students, namely - Aslam, Bimal, Chris and Dilip dressed as soldiers, marched through the stage at one point. When the make-up man dressed these four students, he put a helmet on each one's head, without any one realizing the colour of their respective helmets. The make-up man selected the helmets for these four students from 3 gold-plated helmets, 2 silverplated helmets and one copper-plated helmet at the make-up room. Now, when Aslam, Bimal, Chris and Dilip marched in that order, Aslam being the first person in the queue could not see the helmet on the heads of the other three. Bimal saw the colour of helmet on Aslam's head; Chris saw the same on Aslam's head and Bimal's head and Dilip saw the helmets on the heads of all others. After the drama, a classmate of them asked whether they were aware of the colour of the helmet on their own head, starting from Dilip. No one could answer the question.

90. Mark all the incorrect statements
- Dilip did not observe the helmets on the heads of the other three actors, two of which were silver-plated and one copper-plated.
  - Bimal did not observe Aslam wearing either silver-plated or copper-plated helmet.
  - Chris did not observe the helmets worn by Aslam and Bimal, one of which could be silver-plated and the other copper-plated or both could be silverplated helmets.
  - None of the above.

**Direction for Question 91:** Read the information given below and answer the question.

My father had given Rs. 50 lakh worth of property to me in his will but with a strange condition. To own the property, I need to spend Rs. 2,000 on a commodity bundle which consists of 5 products. Every unit of product 1 costs Rs. 115, of product 2 costs Rs. 90, of product 3 costs Rs. 70, of product 4 costs Rs. 40 and product 5 cost Rs. 45. For every unit of product 4 that I purchase, I must also buy only two units of product 2. For every unit of product 1, I must buy one unit of product 3. For every unit of product 5, I must also buy two units of product 4 and one unit of product 2. For every unit of any product purchased, I earn 1000 points and for every rupee not spent, I face a penalty of 500 points. I will get the property only if my points are positive, otherwise the money in the will goes to charity.

91. Mark all the correct statements.
- I can claim the property with current conditions.
  - I can claim the property if every unit of product 3 costs Rs. 60, other prices remaining unchanged.
  - I can claim the property if unit price of product 4 increases by Rs. 5, other prices remaining unchanged.
  - I can claim the property if unit price of product 4 decreases by Rs. 5, other prices remaining unchanged.

**Section IV (Part ii)**

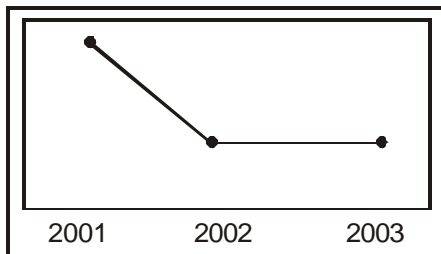
**Direction for Questions 92 - 96:** Questions are based on the table below. Unless otherwise stated, all changes (increases, decreases) indicated in the questions must be calculated over the immediately preceding year.

Sector / Companies	Sales			Salaries & wages			R & D			Profit / Loss		
	2001	2002	2003	2001	2002	2003	2001	2002	2003	2001	2002	2003
<b>Textile (Total)</b>	<b>53145</b>	<b>50184</b>	<b>52616</b>	<b>4296</b>	<b>4360</b>	<b>4315</b>	<b>26</b>	<b>36</b>	<b>39</b>	<b>-3770</b>	<b>-3437</b>	<b>-2441</b>
Indo Rama Synthetics Ltd.	2000	1953	2224	48	50	33	0	0	0	19	41	138
Arvind Mills Ltd.	1970	740	1552	136	46	102	0	0	0	-499	20	129
Raymond Ltd.	1477	992	1035	160	167	168	0	0	1	332	88	90
Century Enk Ltd.	960	892	946	32	34	35	0	0	1	70	35	58
<b>Pharmaceuticals (Total)</b>	<b>25245</b>	<b>30273</b>	<b>34731</b>	<b>2009</b>	<b>2291</b>	<b>2716</b>	<b>538</b>	<b>820</b>	<b>993</b>	<b>1758</b>	<b>2586</b>	<b>3069</b>
Ranbaxy Laboratories Ltd.	2363	3461	4243	167	197	255	77	192	276	262	478	795
Dr. Reddy's Laboratories Ltd.	991	1712	1705	83	121	137	42	102	163	144	460	392
Cipla Ltd.	1064	1401	1573	50	63	73	41	47	0	179	208	248
Glaxosmithkline Ltd.	1143	1197	1242	139	139	139	4	4	4	49	98	172
<b>Electronics (Total)</b>	<b>26944</b>	<b>29323</b>	<b>30022</b>	<b>2164</b>	<b>2218</b>	<b>2323</b>	<b>200</b>	<b>263</b>	<b>247</b>	<b>830</b>	<b>692</b>	<b>-287</b>
Wipro Ltd.	3137	3487	4048	422	508	642	0	15	28	657	866	813
Infosys Technologies Ltd.	1901	2604	3623	718	1119	1678	17	15	14	629	808	958
Videocon International Ltd.	3244	4974	3602	43	63	53	0	0	0	155	156	-100
Bharat Electronics Ltd.	1722	1947	2517	394	364	368	89	90	109	155	200	261
<b>Iron and Steel (Total)</b>	<b>54396</b>	<b>55582</b>	<b>70341</b>	<b>5367</b>	<b>5643</b>	<b>6377</b>	<b>73</b>	<b>64</b>	<b>74</b>	<b>-2983</b>	<b>-4604</b>	<b>310</b>
Steel Authority of India Ltd.	17320	16624	20665	3135	3255	3728	52	50	55	-729	-1707	-304
Tata Steel Ltd.	8491	8277	10517	922	1098	1218	10	8	16	553	205	1012
Rashtriya Ispat Nigam Ltd.	3585	4200	5185	408	375	406	0	6	0	-291	-75	521
Ispat Industries Ltd.	3217	2812	4658	45	40	55	9	0	0	-312	-443	83

92. Mark all the correct statements
- Wipro's share in total sales of the electronics sector was lower than the share of Tata Steel in total sales of the iron & steel sector in each given year.
  - From the group consisting of the textiles and the iron & steel sector, there were 5 companies whose salaries & wages as percent of total salaries & wages of their respective sectors increased in 2003 as compared to 2001.
  - Tata Steel's R & D expenditure in each given year as percent of sales was lower than that of iron and steel sector as a whole.
  - From the group consisting of the pharmaceuticals and the electronics sectors, there were 5 companies which experienced a decline in the growth rate of sales in 2003.



93. Mark all the correct statements
- Total salaries & wages over 2001-2003 as percent of total sales of the same period had been the highest for the iron & steel sector.
  - In the year 2003, if all the companies were ranked in descending order in terms of salaries & wages as percent of sales, Videocon International would have been ranked the lowest.
  - In the year 2002, if all companies were ranked in descending order in terms of R & D as percent of sales, Bharat Electronics Limited would have been ranked third.
  - Of all companies that made profits in each year during 2001-2003, wipro registered the highest growth in profits for the period.
94. Mark all the incorrect statements
- Salaries & wages of each company in the iron & steel sector were up to 13 times its losses reported in each of the loss-marking years.
  - Total salaries & wages over 2001-2003 as percent of total sales of the same period for the pharmaceuticals sector had been the minimum.
  - Total salaries & wages over 2001-2003 as percent of total sales of the same period for only two companies exceeded 20 percent.
  - Total profits / Total Sales for all the four sectors taken together was higher in 2002 than in 2001.
95. Mark all the correct statements
- Tata Steel experienced the highest percent decline in R & D expenditure in any single year during the given period.
  - Of all companies which incurred R & D expenditure every year during 2001-2003, total R & D expenditure / total sales was the highest for Dr. Reddy's Laboratories Ltd.
  - During 2001-2003, in terms of sales growth the best performer in the pharmaceuticals sector fared better than the best performer in the iron & steel sector.
  - Videocon International Ltd experienced the second largest percent decline in salaries & wages in any single year during the given period.
96. Mark all the situations described in the options below, which when plotted, closely resemble the figure

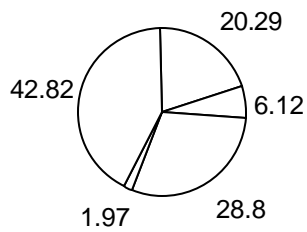


- Raymond Limited's share in the total sales of the textiles sector.
- Tata Steel's share in the total sales of the iron & steel sector.
- Glaxosmithkline Ltd's salaries & wages as percent of sales.
- Rymond Limited's profit as percent of sales.

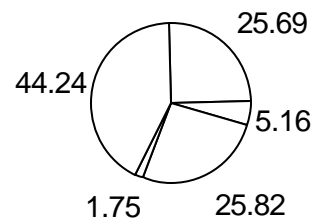
**Direction for Question 97 - 100:** The graphs below give vote share and distribution of seats of different parties in election years during the period 1996-2002. Study the graphs and answer the questions, taking into account the following:

- i. Independents may be considered as a separate party
- ii. Unless otherwise stated, all changes, jumps, gains or losses should be calculated over the immediately preceding election year
- iii. For forming government, the party / alliance should obtain majority seats (more than 50%)

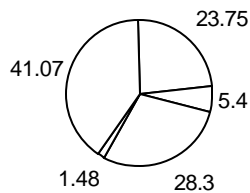
**Vote Share - 1996**



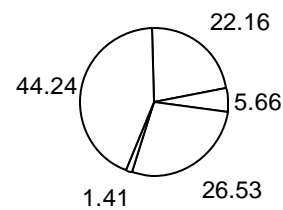
**Vote Share - 1998**



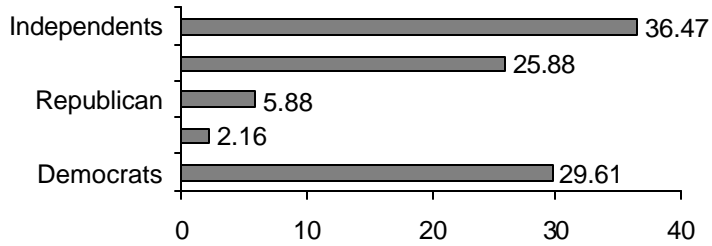
**Vote Share - 2000**



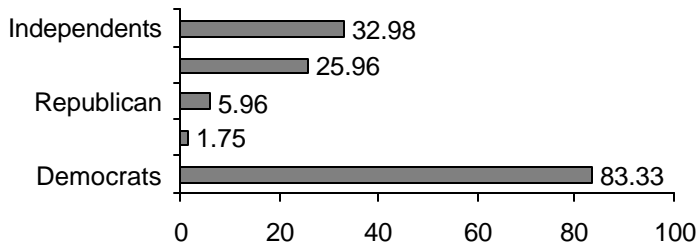
**Vote Share - 2002**



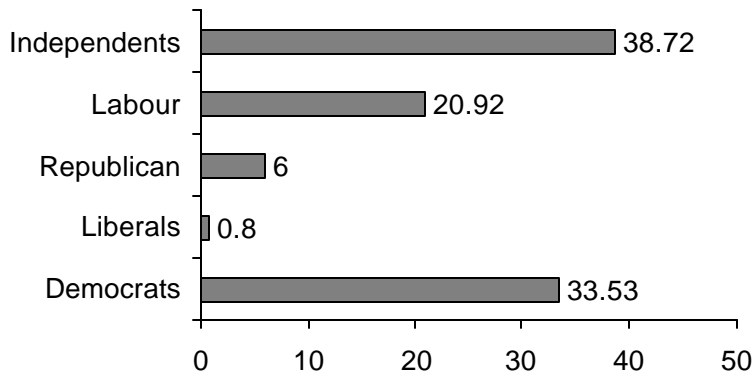
**Distribution of Seasts - 1996 Total No  
of Seats = 510I**



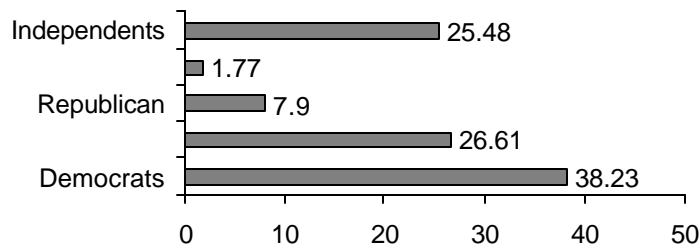
**Distribution of Seasts - 1998 Total No  
of Seats = 570**



**Distribution of Seasts - 2000 Total No of  
Seats = 50I**



**Distribution of Seats - 2002 Total No of  
Seats = 620**

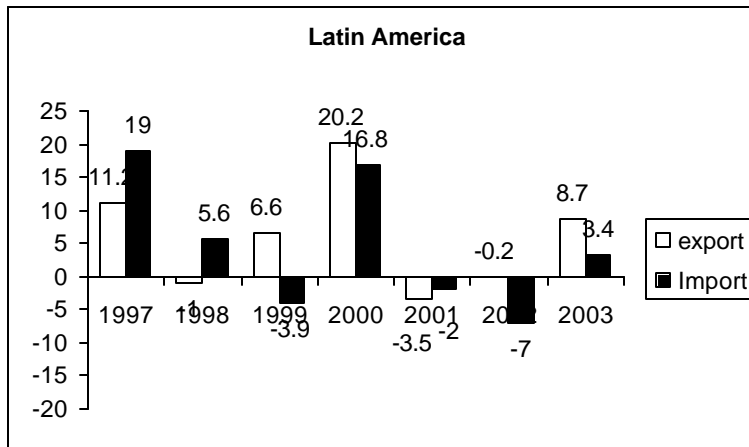
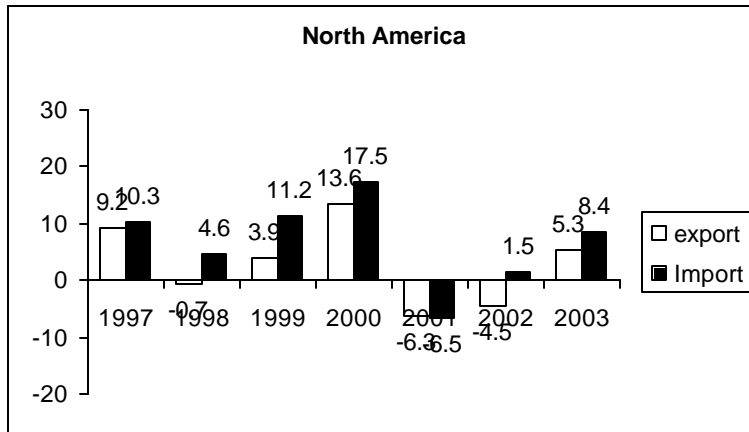


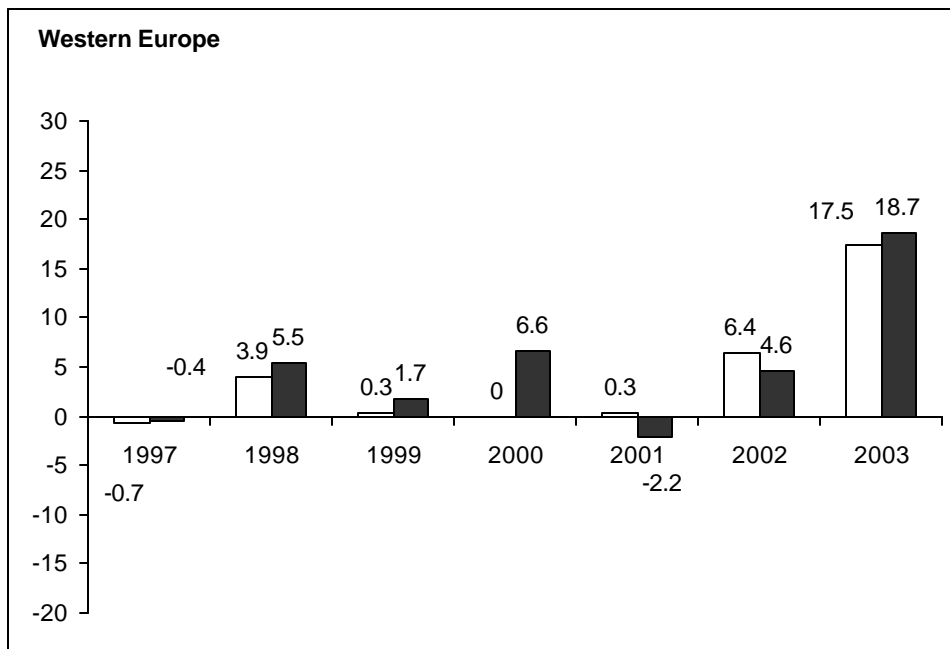
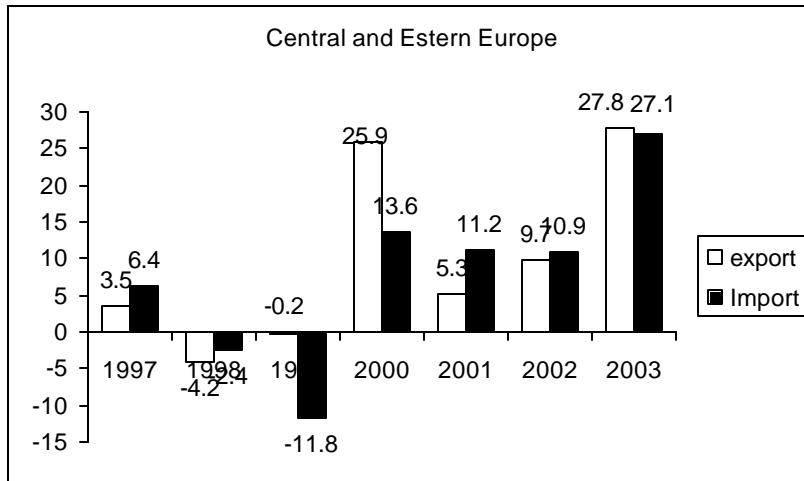
97. Mark all the correct statements
- Democrats and Labour together improved their vote share by a larger margin in 1998 over 1996 as compared to the one in 2002 over 1996.
  - The number of seats lost by Democrats in 2002 elections was less than the number of seats gained by Republicans in the same year.
  - In 2002, the Independents gained the most both in terms of vote share and number of seats obtained.
  - If 70% of Independents had joined Labour, they could have formed government in 2002 but not in 1996.
98. Mark all the incorrect statements
- In 2002, the percent increase in the number of seats of Liberals and Labour together over 1998 was more than 5 time increase in the vote share obtained by these parties during the same period.
  - In the 2000 elections, in terms of vote share, Labour was the major beneficiary of Democrat's loss.
  - In terms of vote share, it was in the 2000 elections that most number of parties faced a decline in their individual vote shares.
  - The highest jump in the percentage of seats obtained by any party in any election year over the immediately preceding election year has been smaller than the highest jump in the vote share of any party in any election year.

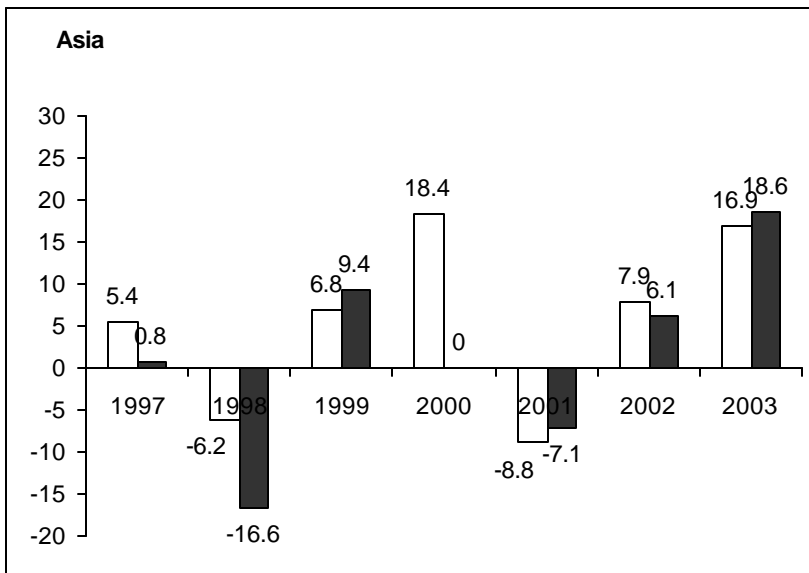
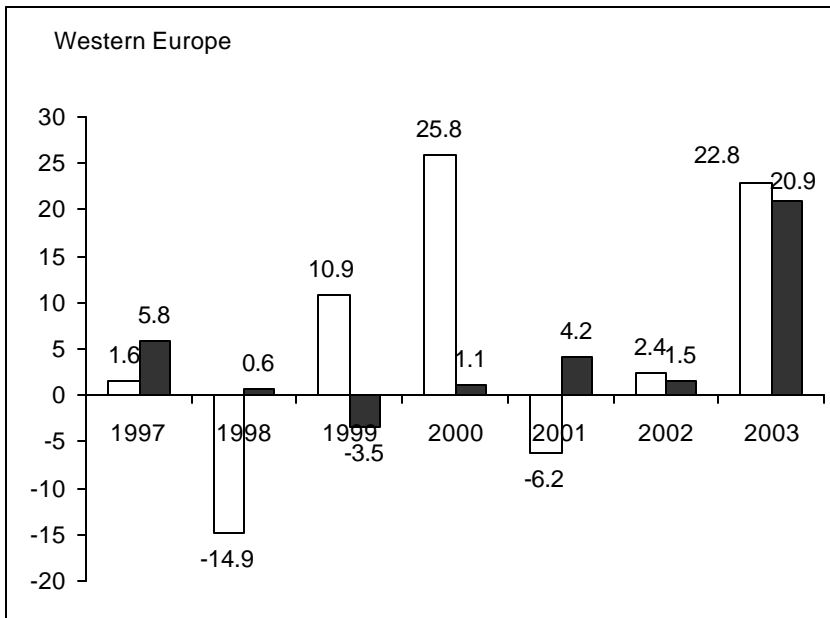
99. Mark all the correct statements
- a. In terms of vote share, Labour and Liberal parties taken together lost 3.2 percent in 1998 but gained a total of 16 seats in the same period.
  - b. Democrats, Republicans and 35% of the Independents could have formed the government in two election years.
  - c. No. party increased its vote share in every succeeding election.
  - d. In the 2000 elections, as compared to the 1996 elections, Republicans and Democrats taken together, gained more in terms of vote share than in terms of percentage of seats.
100. Mark all the incorrect statements
- a. In the year 2002, in terms of percentage of seats obtained, Democrats and Labour together lost the maximum.
  - b. Liberals and Republicans taken together lost both in terms of vote share and the number of seats obtained in the year 2000.
  - c. In the 2000 elections, all parties lost in terms of number of seats.
  - d. The highest gain in the number of seats for Labour was in the year 2002.

**Directions for questions no. 101 and 102:** The graphs below relate to export and import rates for dix regions for the peirod 1997-2003. Study the graphs and answer the questions.

**Annual percentage change in world merchandisc trade by region, 1996-03 Exports and Imports.**







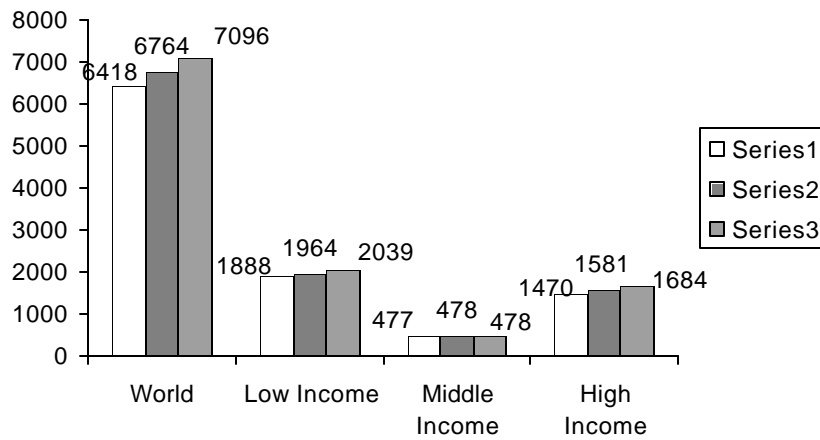
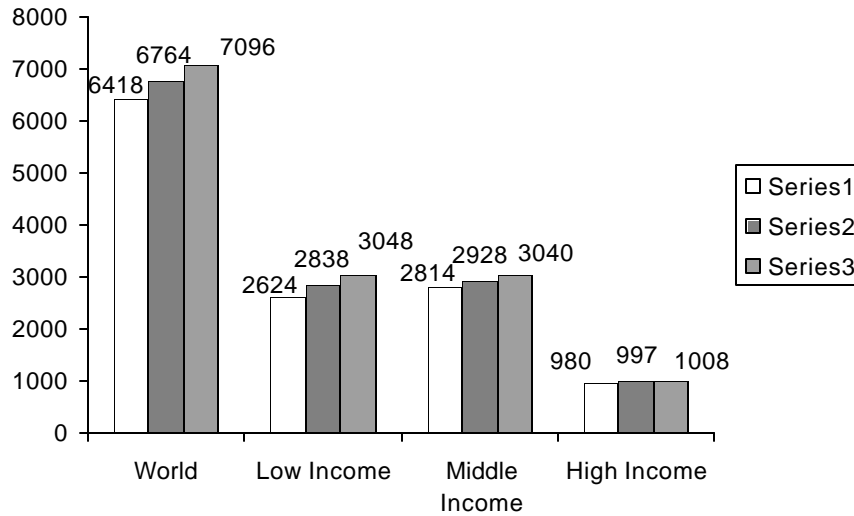
101. Mark all the correct statements

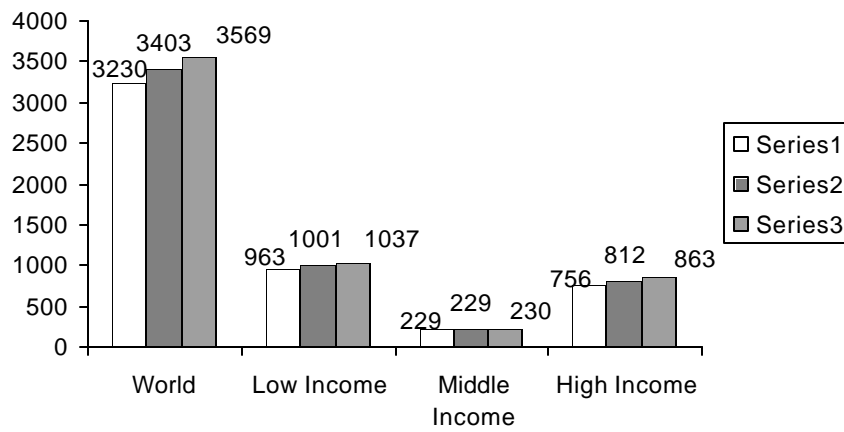
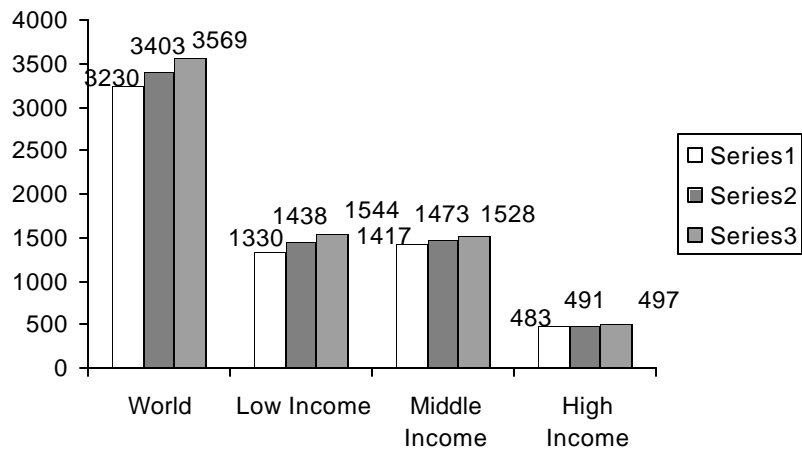
- a. In 1999, if the regions were ranked in descending order based on the gap between the annual percentage change in exports and imports, Central and Eastern Europe would be ranked second.
- b. The unweighted average annual percentage change in exports of the six regions was the highest during 2003.
- c. In 2001, if the regions were ranked in ascending order based on the gap between the annual percentage change in exports and imports, Asia would be ranked second.
- d. The unweighted average annual percentage change in imports of the six regions was the lowest during 1998.

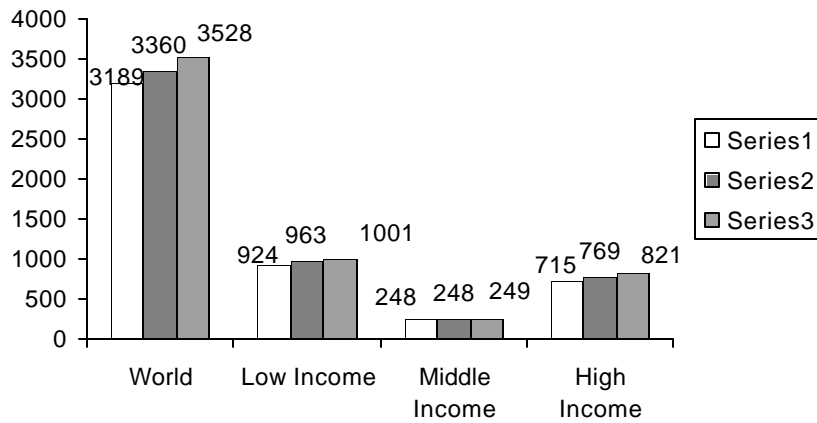
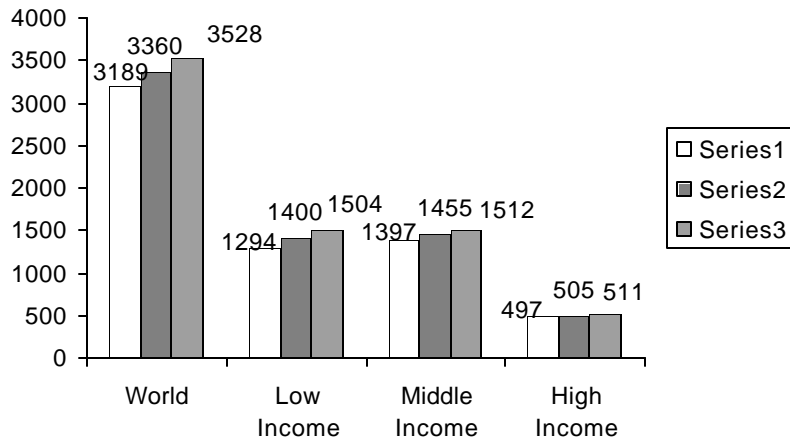
102. Mark all the correct statements

- a. During 2000-2003, North American region experienced the highest average annual percentage change in exports as compared to other regions.
- b. During 1997-2000, Western European region experienced the lowest average annual percentage change in imports as compared to other regions.
- c. Center and Eastern European region experienced the highest jump in percentage change in exports in any year during the sample period.
- d. Asian region experienced the largest slump in imports in any single year during the sample period.

Directions for Questions no. 103 to 106: Study the graph below and answer the questions.







103. Mark all correct statements

- a. The growth rate of female population in the world during the period 2005-2010 is expected to be greater than the growth rate in male population in the world during 2010-2015.
- b. The growth rate of total population in high income countries during 2005-2010 is expected to be greater than the growth rate of male population in East Asia and Pacific during 2010-2015.
- c. During 2005-2010, the growth rate of male population in low income countries is expected to be lower than the growth rate of female population in low income countries.
- d. The growth rate of total world population during 2005-2010 and 2010-2015 is expected to be greater than 5 percent.

104. Mark all incorrect statements

- a. The share of high income countries in total world population in 2005 is expected to be not lower than the share of high income countries in total female population during 2005.
- b. The share of Europe and Central Asia in the total male population in all three periods given is likely to be greater than seven percent.
- c. The share of middle income countries in total female population in 2015 is not expected to be lower than the share of low income countries in total world population in 2010.
- d. The share of South Asia in total female population in 2015 is not expected to be lower than the share of South Asia in total world population in 2010.

105. Mark all the correct statements

- a. The share of high income countries in total female population is expected to be larger than the share of these countries in total male population in each year.
- b. Population in high income countries is expected to grow at a faster rate than total world population between 2010- and 2015.
- c. The share of South Asia's female population in total world population is expected to grow at a higher rate at which the region's female population in total female population will between 2005 and 2015.
- d. The growth rate in population of middle income countries is expected to be higher during 2010-2015 as compared to that during 2005-2010, while that of the high income countries is expected to be lower taking the periods into account.

106. Mark all the incorrect statements

- a. The share of South Asia in total world population is expected to rise by a larger margin than the share of low income countries in total world population between 2005 and 2015.
- b. The share of high income countries in total population is expected to be larger than the share of high income countries in total world population in both 2010 and 2015.
- c. The average annual growth rate of female population in the East Asia & Pacific region between 2010 and 2015 is expected to be higher than the average annual growth rate of female population in South Asia during the same period.
- d. As compared to female population, male population in Europe & Central Asia is expected to grow at a higher rate at a higher rate between 2005 and 2015.