

SYMBIOSIS NATIONAL APTITUDE TEST (SNAP) 2004

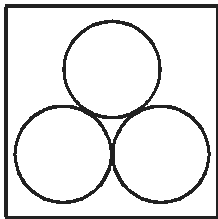
Instructions:

This test is divided into the following sections

Sections	No. of Questions	Total
	Mark-1 each	
Quantitative Aptitude	30	30
Data Sufficiency and Interpretation	40	40
Reading Comprehension	25	25
Critical Reasoning	20	20
Logical Reasoning	45	45
Total	160	160

* For every wrong answer, you will score 25% negative marks. You will be given 120 minutes to complete the test.

SECTION I QUANTITATIVE APTITUDE

1. If $a^x = b$, $b^y = c$ and $c^z = a$, then xyz is equal to:
 (a) 0 (b) -1
 (c) 1 (d) $a + b + c$
2. The equations $ax - (a + b)y = 1$ and $(a - b)x + ay = 5$ have a unique solution
 (a) For all values of a and b
 (b) Only when $a = b$
 (c) Only when $a^2 : b^2 \neq 1 : 2$
 (d) Only when $a = 0$ and $b = 0$
3. The sum of the digits of a number is subtracted from the number. The result is always
 (a) divisible by 6 (b) divisible by 9
 (c) not divisible by 6 (d) not divisible by 9
4. The diagonals of a rhombus are 10 cm and 24 cm. The perimeter of the rhombus is
 (a) 68 cm (b) 30 cm
 (c) 34 cm (d) 52 cm
5. The locus of the centres of the circles touching both the arms of an acute angle is
 (a) a concentric circle
 (b) a circle
 (c) a parallelogram
 (d) a bisector of the angle
6. Which one of the following is a negative number?
 (a) $\cos 40^\circ$ (b) $\cos (-40^\circ)$
 (c) $\cos 320^\circ$ (d) $\cos 140^\circ$
7. A right circular cone and a right circular cylinder have a circle of the same radius as their base and their heights are equal to the radius itself. If a hemisphere has the same radius, then their volumes are in the proportion of
 (a) 1 : 2 : 3 (b) 3 : 2 : 1
 (c) 2 : 1 : 3 (d) 1 : 3 : 2
8. In a survey of 100 computer professionals it was found that 48 read Byte, 39 read PC World and 44 read PC Magazine. It was also found that 17 read both Byte and PC World, 18 read both PC World and PC Magazine, 22 read both Byte and PC Magazine and the balance 20 read none of these magazines. Determine the number of professionals who read exactly one magazine.
 (a) 33 (b) 34
 (c) 35 (d) 36
9. My watch runs fast at the rate of 15 seconds per hour. If I have set my watch correctly at 10 a.m. on Tuesday, what will be the time shown by the watch at 6 p.m. on Saturday?
 (a) 6.16 p.m. (b) 6.30 p.m.
 (c) 6.26 p.m. (d) 5.34 p.m.
10. What is the measure of the acute angle between the minute hand and the hour hand of a clock at 6.54?
 (a) 114° (b) 117°
 (c) 115° (d) 118°
11. If the sum of 6 consecutive odd integers is 888, then the median of this series is
 (a) 147 (b) 148
 (c) 149 (d) 151
12. $1 = \left(\frac{3}{4}\right)\left(1 + \frac{y}{x}\right)$, then which of the following is correct?
 (a) $y = 4x$ (b) $y = \frac{x}{4}$
 (c) $y = \frac{y}{3}$ (d) $y = \frac{x}{3}$
13. In the diagram given below, each circle touches the other two and also the sides of the rectangle. If the diameter of each circle is 20 cm, what is the area of the rectangle?


Note: Figure is not drawn to scale.

(a) $800 + 400\sqrt{3}\text{cm}$

(b) $400 + 800\sqrt{3}\text{cm}$

(c) 1,600 cm

(d) Cannot be determined from the data given

14. If
- $x^2y^3z < 0$
- , which of the following must be true?

(a) $yz < 0$

(b) $y < 0$

(c) $y^2z < 0$

(d) $z < 0$

15. If T is the sum of z consecutive integers, then T must be even if z is a multiple of

(a) 5

(b) 4

(c) 3

(d) 2

16. If 1 kg of sand is added to a bin containing only cement, the resulting mix is 20% sand by weight. How much more sand must be added to the bin in order to create a mix that is 60% sand by weight?

(Note: This is an incorrect question)

(a) 4 kg

(b) 4.75 kg

(c) 3.5 kg

(d) 5.25 kg

17. In the circle given below, CD is parallel to the diameter AB. With AB having length of 24, what would be the length of the minor arc CD?

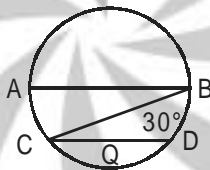
(Note: This is an incorrect question)

(a) 8π

(b) 4π

(c) $\frac{9\pi}{4}$

(d) $\frac{9\pi}{2}$



18. Jai Kumar invested Rs.1,00,000 in stocks of pharmaceutical companies three years ago. The value of his stocks rose by 10% in the first year, then rose by 5% in the second year and fell by 10% in the third year. What is the value of his stocks today?

(a) Rs.1,00,350

(b) Rs.1,03,500

(c) Rs.1,03,950

(d) Rs.1,27,050

19. During the testing of a drug, the results were found to be 85% positive in the 1st phase of 100 tests and 55% positive in the 2nd phase of tests. If the overall results were 75% positive, what was the total number of tests conducted in the 1st and 2nd phases?

(a) 160

(b) 156

(c) 150

(d) 220

20. On the number line given below, the segment from 0 to 1 has been divided into fifths, as indicated by the small lines and also sevenths, as indicated by the large lines. What is the least possible distance between any two marks on the line?



(a) $\frac{1}{70}$

(b) $\frac{1}{35}$

(c) $\frac{2}{35}$

(d) $\frac{1}{7}$

21. Mohit was 24 years old when his son Akshit was born. If Mohit is now 3 times as old as Akshit, how many years ago was he 4 times as old as Akshit?

(a) 4

(b) 6

(c) 8

(d) 12

22. How many prime numbers less than 1,000 are divisible by 7?

(a) 0

(b) 1

(c) More than 1 but less than 142

(d) More than 142

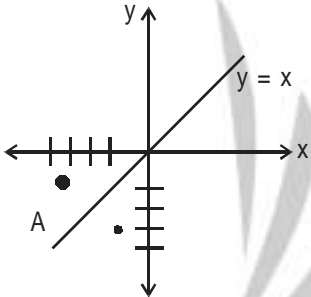
23. An hour after Ashish started from his college towards Tanvi's home, a distance of 53 km, Tanvi started from her home on the same road towards Ashish's college. If Ashish's speed was 4 km per hour and Tanvi's was 3 km per hour, how many kilometres from Tanvi's home did the two meet?

(a) 24

(b) 22

(c) 21

(d) 19.5

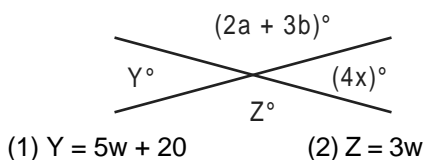
24. A certain population of bacteria quadruples every 15 min. If the starting population of the bacteria is 10^4 , what will be the population after 1 hour?
 (a) $4(10^4)$ (b) $4^4(10^4)$
 (c) $104(10^4)$ (d) $(10^4)^4$
25. A factory has 3 stamping machines which can finish a lot in 4, 5 and 6 hours, respectively. Due to some power problems in the city on Thursdays, only 2 of these machines can work simultaneously at any given point in time. What is the largest part of the job that can be finished in one hour on a Thursday?
 (a) $\frac{11}{30}$ (b) $\frac{11}{15}$
 (c) $\frac{9}{20}$ (d) $\frac{5}{6}$
26. In the figure given below, line $y = x$ is the perpendicular bisector of line segment AB (not shown in the figure) and the x-axis is the perpendicular bisector of the line segment BC (not shown in the figure). If the coordinates of point A are $(-4, -3)$, what are the coordinates of point C?
- 
- (a) $(-3, -4)$ (b) $(-4, 3)$
 (c) $(4, 3)$ (d) $(-3, 4)$
27. Amit's office is 12 km from his house. In the evenings he picks up his wife from her office, which is 6 km from his office and then travels 4 km to his gym. If he is then x km from his house, what is the range of values for x ?
 (a) $4 \leq x \leq 12$ (b) $2 \leq x \leq 18$
 (c) $4 \leq x \leq 22$ (d) $2 \leq x \leq 22$
28. What is the total of the figures in the table below:
- | | | | | | |
|----|-----|-----|-----|-----|-----|
| -4 | -8 | -12 | -16 | -20 | -24 |
| 5 | 10 | 15 | 20 | 25 | 30 |
| -6 | -12 | -18 | -24 | -30 | -36 |
| 7 | 14 | 21 | 28 | 35 | 42 |
| -8 | -16 | -24 | -32 | -40 | -48 |
- (a) 126 (b) -252
 (c) -378 (d) -126
29. The cashier at a jeweler's shop reversed the digits in his mind while giving back the change to a customer. Hence, he gave the customer an incorrect amount back. While closing the cash register at the end of the day, the cashier found a deficit of Rs 54. If the deficit is attributed to the mistake mentioned, which of the following is the correct amount of change to be given to the customer?
 (a) 45 (b) 71
 (c) 83 (d) 17
30. A fair coin is tossed 5 times and comes up heads four times out of five. If the coin is tossed a sixth time under the same conditions, the probability of it turning up heads is
 (a) 80% (b) 125%
 (c) 50% (d) 20%

SECTION II DATA SUFFICIENCY AND INTERPRETATION

Directions (Qs. 31 to 44): Each of the following problems comprises a question followed by two statements labeled (1) and (2). Use these statements and generic mathematical knowledge (mathematical facts and other knowledge like number of hours in a day) to decide whether the statements are sufficient to answer the question. Then mark your answers according to the following:

- (a) If you can get the answer from (1) ALONE but not from (2) alone.
 (b) If you can get the answer from (2) ALONE but not from (1) alone.
 (c) If you can get the answer from BOTH (1) and (2) TOGETHER but not from (1) alone or (2) alone.
 (d) If you CANNOT get the answer from (1) and (2) TOGETHER and need more data.
31. How many philosophy books does Amar have in his personal library?
 (1) Amar has four times as many philosophy books as physics books.
 (2) Amar has 36 more philosophy books than physics books.
32. Is A an integer?
 (1) $A > 0$
 (2) $12^2 + 5^2 = A^2$

33. If two straight lines intersect as shown below, what is the value of x in degrees?



34. Is X an odd integer?

- (1) $\frac{X}{3}$ is an odd integer (2) $3X$ is an odd integer

35. The latest hair-oil brand of a multinational FMCG company contains coconut oil, oleic acid and perfume. How much of coconut oil is present in its 500 ml bottle?

- (1) The content of coconut oil is equal to the content of oleic acid.

- (2) By content, the mix is $\frac{1}{6}$ perfume and $\frac{5}{12}$ oleic acid.

36. Profits of an Indian multinational over a 4-year period averaged Rs.22 crore. If the company made profits in all 4 years, in which of the years were the profits greatest?

- (1) In the 4th year, the profits of the company were thrice the average of its profits for the first 3 years.

- (2) Profits of the company were twice as great in the 2nd year and thrice as great in the 3rd year as in the 1st year.

37.
$$\begin{array}{r} X5 \\ + 2Y \\ \hline AB \end{array}$$

In the operation of 'addition' shown above, X , Y , A and B represent non-zero digits. What is the number represented by AB ?

- (1) $X = 3Y$ (2) $10A + B = 87$

38. What is the number of 360-degree rotations that a bicycle wheel makes while rolling 1,000 m in a straight line without slipping?

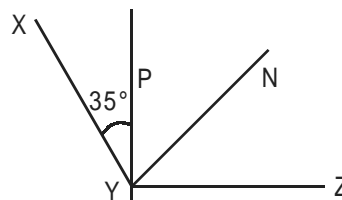
- (1) The wheel made 20 rotations (360-degrees) per minute.

- (2) The radius of the bicycle wheel is 0.3 m.

39. If $ab = -12$, then what is the value of $ab(a + b)$?

- (1) $ab^2 = 36$ (2) $a - b = 7$

40. In the figure given below, what is XYZ ?



- (1) $N4$ bisects $\angle PYZ$

- (2) $\angle XYP$ is 35°

41. In a marketing research survey for a new service launched by a cellular services provider, did more than 60% respondents 'Recommend' the service?

- (1) 60% of the female respondents 'Liked' the service and exactly $\frac{1}{3}$ rd of these would 'Recommend' the service.

- (2) Exactly 20 male respondents would 'Recommend' the services and they would make approximately 30% of the population surveyed.

42. What was the ratio of administrative staff to the production staff in factory X last year?

- (1) Last year, if the number of administrative staff had been 12% higher, and if the number of production staff had been 20% higher, then the number of administrative staff had been 80% of production staff.

- (2) Last year, the number of production staff was 40 more than the number of administrative staff.

43. In which year was Sheetal born?

- (1) Shalini, who is 3.5 years elder to Sheetal, was born in 1975.

- (2) Shefali, who is 2.5 years younger to Sheetal, is now in high school.

44. Is 2^x greater than 100?

- (1) $2^{\sqrt{x}} = 4$

- (2) $\frac{1}{4^x} < 0.01$

45. The following chart shows the business mix of different Business Units (BU) of an IT organisation:

Business Unit	Income in JFM quarter, 2003 (in Rs Crore)	% change from JFM quarter 2002
Hardware services	72.4	45
Security services	54.7	- 2
Software services	112.3	298
Consulting services	48.9	- 27

Which BU had the greatest income in JFM quarter, 2002?

(a) Hardware Services (b) Security Services (c) Software Services (d) Consulting Services

Directions (Qs. 46 to 55): Read the data given in the case below and answer the questions by choosing the correct or most approximate choice in the context of the data.

Case: Statistical Computing Machines and Heuristic Research Labs (SCMHRL) has been in the business of building statistical computing solutions since 1992. The primary product range of SCMHL includes personal computers with high-end numerical co-processors and statistical software solutions. The hardware part of the business has been facing stiff competition in the recent past with run-of-the-mill personal computers showing a tremendous increase in computing power. Table A shows the sales figures of SCMHL over the past 10 years. The rapid development of newer generations of processors and the rapidly falling prices had helped to expand the market size for SCMHL. Smaller and smaller corporations could now afford to deploy SCMHL solutions. SCMHL had responded to this change in the market scenario by lowering the prices of not only its hardware components but also its software packages.

The hardware side of the business was primarily an assembly line for off-the-shelf components to be built into a computer. The software side on the other hand was a more complex set-up. In 1998, SCMHL decided to move from a customized-solutions approach to a product approach. The product was packaged as core software retailing for Rs 1,50,000 with add-on modules that could be purchased later. The table below lists the pricing for SCMHL's core software product suite. SCMHL priced its software products at an average gross profit of 33.33% on sales.

Until 2001, each software unit was sold together with a hardware unit. Thus, the numbers of software and hardware units sold were identical each year until 2001. In 2002, SCMHL was reviewing this strategy of bundling the two together in the face of falling sales. The average prices of hardware products manufactured over the years and the gross profit margin there on are listed in the table below:

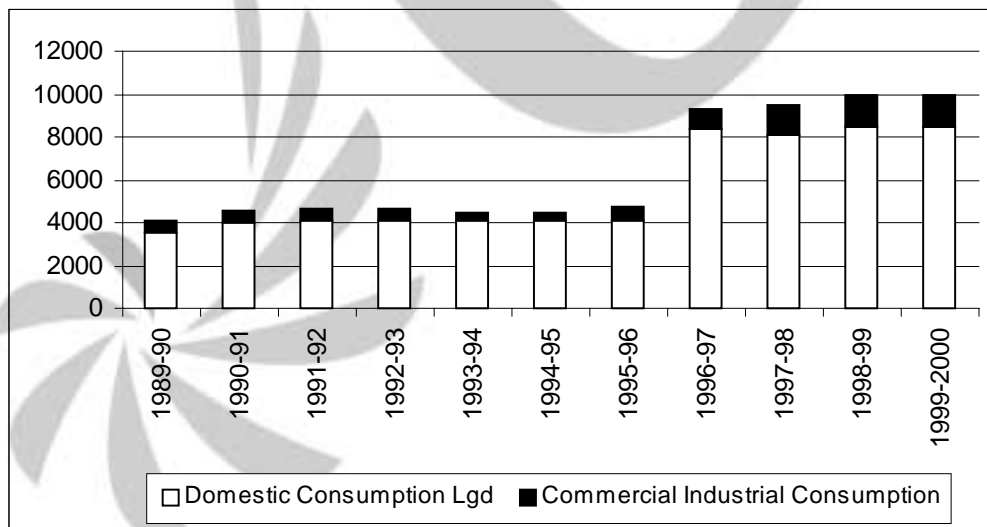
Year	Total Revenue (Rs)	Software Price (Rs)	Hardware Price (Rs)	Hardware GP (%of Sales)	Other Expenses
1992	43,20,000	1,40,000	2,20,000	22%	3,80,000
1993	57,60,000	1,50,000	1,70,000	18%	4,96,000
1994	81,00,000	1,80,000	1,20,000	16%	10,00,000
1995	98,80,000	1,80,000	80,000	14%	16,80,000
1996	1,28,00,000	2,25,000	75,000	12%	18,40,000
1997	1,20,00,000	2,00,000	50,000	10%	28,70,000
1998	1,26,00,000	1,50,000	50,000	8%	37,00,000
1999	75,60,000	1,65,000	45,000	6%	40,00,000
2000	79,80,000	1,65,000	45,000	4%	33,00,000
2001	44,00,000	1,65,000	35,000	3%	26,00,000

46. The total number of units sold was growing until the year

(a) 1995 (b) 1997 (c) 1998 (d) 2000

47. The number of units sold in 1998 was
(a) 48 (b) 64
(c) 63 (d) 42
48. The total gross profit (before deducting other expenses) in 1996 was approximately
(a) Rs 3 million (b) Rs 1.5 million
(c) Rs 2.5 million (d) Rs 2 million
49. The total activity started making a loss in the year
(a) 1996
(b) 1998
(c) 2000
(d) None of the above-it has always been profitable
50. The total gross profit earned by the software units sold in the year 2000 was approximately
(a) Rs 1 million (b) Rs 2 million
(c) Rs 3 million (d) None of the above
51. The gross profit per unit of hardware sold in 1992 was approximately
(a) Rs 50,000 (b) Rs 40,000
(c) Rs 30,000 (d) Rs 20,000
52. The percentage gross profit per piece of the hardware was closest to the percentage gross profit per unit of the software in the year
(a) 1992 (b) 1994
(c) 1998 (d) 2000
53. In the year in which the other expenses were maximum, the number of units sold
(a) was also the maximum.
(b) was the minimum across the 10-year period.
(c) was stable as compared to the previous year.
(d) was less than the maximum across the 10-year period.
54. The total gross profit from hardware was maximum in the year
(a) 1992 (b) 1995
(c) 1997 (d) 2000
55. The percentage gross profit on each unit of hardware went below 5% for the first time in
(a) 1996 (b) 1998
(c) 1999 (d) 2000

Directions (Qs. 56 to 60): The graph and table below show data regarding industrial and commercial water consumption in Delhi. Answer the questions by choosing the best answer from among the alternatives given below:



Year	Number of Connections Metered	Unmetered	Domestic Consumption Lgd	Commercial Industrial Consumption Lgd	Total Consumption Lgd	Per Consumption of water (Galions/Day)
1989-90	6,37,914	2,06,850	3,534	523	4,057	45.57
1990-91	6,78,461	2,26,960	4,013	527	4,540	49.03
1991-92	7,00,923	2,45,451	4,049	556	4,605	47.66
1992-93	7,45,029	2,53,977	4,082	567	4,649	46.66
1993-94	8,04,180	2,94,174	4,087	424	4,511	43.74
1994-95	8,26,624	3,11,262	4,057	433	4,490	42.04
1995-96	8,53,807	3,15,687	4,114	627	4,741	43.76
1996-97	9,15,974	2,84,917	8,377	935	9,312	80.24
1997-98	9,34,170	2,90,217	8,120	1,408	9,528	94.11
1998-99	9,55,721	2,97,182	8,441	1,490	9,931	94.09
1999-2000	9,93,939	3,00,100	8,451	1,491	9,942	91.15

56. Which year shows the steepest increase in commercial consumption?
 (a) 1996–97 (b) 1997–98 (c) 1995–96 (d) 1991–92
57. What is the percentage increase in per capita consumption of water in the period 1989–2000?
 (a) 200% (b) 50% (c) 0% (d) 100%
58. Across the years, what percentage does domestic consumption account for out of the total?
 (a) 25% (b) 90% (c) 80% (d) 88%
59. In which year did the total connections (metered and unmetered) cross the 1.2 million mark first time?
 (a) 1996–97 (b) 1999–2000 (c) 1998–99 (d) 1995–96
60. In 1995–96 (v/s 1994–95) the percentage increase in metered and non-metered connections was:
 (a) 3% and 6% (b) 6% and 3% (c) 1% and 3% (d) 3% and 1%

Directions (Qs. 61 to 65): The table below shows the population, area, density, literacy and public expenditure on education data of Delhi state.

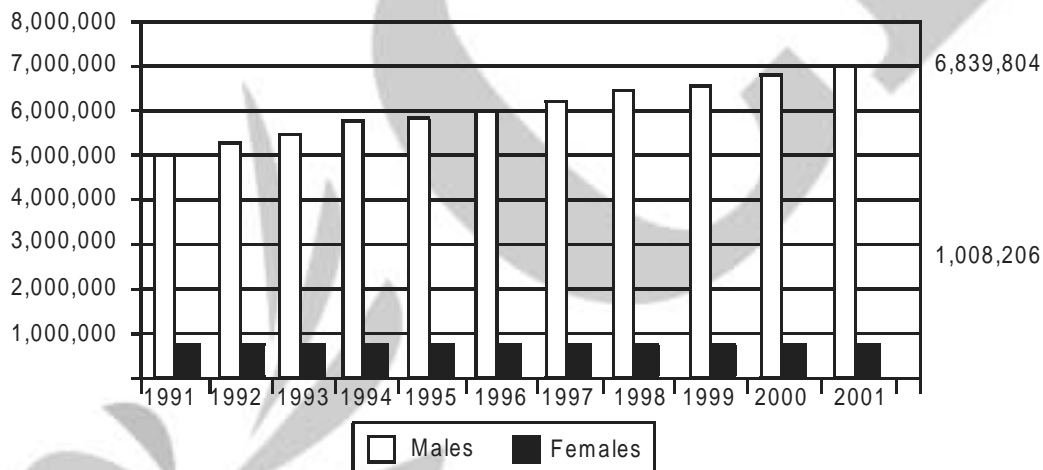
Table Population, Area, Density, Literacy and Public Expenditure on Education Particulars Population Area Percent Publics

Particulars	Population ('000s) (1995)	Area (Sq Km)	Percentage of adult illiterate population 1996	Public expenditure on education as %age of GNP (1996)
World	5,767,443	135,604,354	N.A.	N.A.
Afghanistan	20,883	652,090	68.5	N.A.
Bangladesh	120,073	143,998	61.9	2.9
China	1,232,083	9,596,961	18.5	2.3
India	944,580	3,287,590	48	3.4
Indonesia	200,453	1,904,569	16.2	-
Japan	125,351	377,801	N.A.	3.6
Myanmar	45,922	676,578	16.9	N.A.
Nepal	22,021	140,797	72.5	3.1
Pakistan	139,973	796,095	62.2	3
Sri Lanka	18,100	65,610	9.8	3.4
Thailand	58,703	513,115	6.2	4.1

61. The density of population in India exceeds China's population density by:
 (a) > 2 times (b) 1.5 times (c) 1.25 times (d) 0.9 times
62. These 11 countries together account for what percentage of the world's population?
 (a) > 60% (b) < 30% (c) 50.40% (d) 50.70%
63. The total number of illiterates in India is more than the total population of which of the above countries?
 (a) Thailand
 (b) Nepal, Sri Lanka and Bangladesh
 (c) Japan, Nepal, Sri Lanka and Bangladesh
 (d) Japan, Nepal, Sri Lanka, Bangladesh and Thailand
64. If the GNP of Nepal was USD 1 billion, what was the per capital expenditure on education in 1995?
 (a) \$ 1.36 (b) \$ 13.62 (c) \$ 136.23 (d) \$ 30
65. On an average how many people live in every square kilometer across the world?
 (a) 5.70 (b) 10.3 (c) 71.2 (d) 42.2

Directions (Qs. 66 to 70): The graph and table below show data regarding the education of migrants in India. Answer the questions by choosing the correct or most approximate answer from the choices given below.

EDUCATION OF MIGRANTS IN INDIA



Particulars	Urban	
	Male	Female
Data of 1991		
Graduation and above	669,897	37,823
Illiterate	938,085	323,679
Literate but below matric	1,752,647	208,455
Matric but below graduate	1,406,250	109,642
Technical degree	156,234	17,041
Technical diploma	117,194	11,227
Total migrants	5,040,307	707,867

66. What proportion of female migrants have studied up to matriculation or less?
 (a) 50% (b) 75%
 (c) 25% (d) 90%
67. Of the total migrant population just 5% have
 (a) technical degree/diploma
 (b) graduation degree
 (c) passed matriculation
 (d) not studied at all
68. The 2001 census shows that 20% of the total migrants are graduates and above. What is the percentage increase in graduate and above migrants over 1991?
 (a) No change (b) < 25%
 (c) 50 to 75% (d) > 100%
69. What percentage of the total migrants are females?
 (a) 88% (b) 12%
 (c) 9% (d) 91%
70. What is the decadal growth rate of total migrants in the period 1991–2000?
 (a) 2.1% (b) 2.8%
 (c) 3.0% (d) 3.2%

SECTION III READING COMPREHENSION

Directions (Qs. 71 to 75): Read the passage carefully and answer the questions that follow by choosing the most appropriate option in the context of the passage.

Passage 1

I have little use of the past and future and rarely think about it at any moment of time. This awareness came after thirty years of my living in anxiety and agony to such an extent that 'I never wanted to live with myself.' This was the thought that kept repeating itself in my mind. Then suddenly I became aware of what a peculiar thought it was. "Am I one or two? If I cannot live with myself, there must be two of me: "I" and the "self" that I cannot live with. 'May be' I thought, 'only one of them is real.' And, I was stunned with this realisation. My internal journey to discover my 'real' self began...and one day all my sufferings vanished and I became light like light; as if someone had taken away all my burden and sufferings in one go. I understood that the intense pressure of suffering must have forced my consciousness to withdraw from its identification with the unhappy and fearful self-the false, suffering self-which is a fiction of the mind and not real.

A time came when, for a while, I was left with nothing on the physical plane. I had no relationships, no job, no home and no socially defined roles or identification. I was a nobody. I spent almost two years sitting on park benches in a state of the most intense joy. I realised that I had this with me even during those 30 years of agony, suffering and misery. However, I could not feel it although I was carrying it with me because my mind was too much noisy. I was in it, lost in it, and became the noise itself that I could not even be aware that a self other than that miserable self ever existed.

To explain, let me quote a parable. A beggar had been sitting by the side of a road for years. He used to ask 'spare some change?' to passersby. One day, a stranger not being able to give anything material replied, 'I have nothing to give you.' He asked, 'How long you are sitting here?' The beggar replied, 'Over thirty years.' 'What is that you are sitting on?' asked the stranger. 'Nothing, just an old box abandoned by somebody and I have been sitting on it as long as I can remember,' said the beggar. 'Ever looked inside?' asked the stranger. 'What is the point, there is nothing in there and why waste time,' replied the beggar. 'Have a look inside,' insisted the stranger. The beggar for the first time, just to satisfy the insistent stranger opened the box. To his astonishment, disbelief and elation, he found that the box was filled with gold. Are we not like that beggar? Unaware of being on it or carrying it, searching for it outside? Or, seeking some one to provide it-the happiness? Not getting what one seeks one is unhappy. Getting something one does not want or dislikes, one is unhappy. Craving for pleasures from outside objects or an outsider to provide it and avoiding pains seeking external balms, one perpetuates suffering.

It is like a child sitting in the middle of a beautiful garden crying for plastic toys to be provided by someone and suffer accusing or excusing if the toys are not made available to him. This is a fictitious self created by the mind. If one wants to be joyful, one has to get out of the clutches of that mind.

Mind is a superb instrument if you take control of it and use it at your will. The problem with man is that he allows him to be used by the mind. In fact, you do not use your mind. The mind uses you. Instead of the owner using the instrument, the instrument uses the owner. And the owner believes that the instrument is himself. Thus, the instrument taking over the owner is complete. Further, if you watch

your mind you can see that the mind exists only in the past or future and never in the present. That is, the mind is the replay of the recorded past or the fear of the future. It never exists in the 'Now'. If you analyse further you will realise that even the past never existed except in the perceptual creation of the mind. Nor, the future exists. Whatever happened in the past, the past as we refer to it, has happened in the 'Now' then. Similarly, whatever will happen in the future will happen in the 'Now' then. This is the ultimate reality. However, the mind creates a fictitious past by way of thoughts of the past and a fictitious future by way of thoughts of the future. This string of thoughts, perpetuating itself, becomes an automation with no breaks or intervals. Thoughts appear without your being aware of them. You get into it and allow yourself to be taken over. And you believe you are the thoughts. And, you say, 'I think therefore I am.' This is delusion. Unaware of this truth, you dwell in and identify with the incessant, compulsive and involuntary thoughts of the past and illusory future. The instrument of mind causes this delusion and illusion. And, as mind perpetuates the bad past and a fearful future, you suffer carrying the burden of the past and worries of the future. That is, you live in the past and/or in the future. And, you believe this is your self. But believing to be true is not the same as knowing and experiencing the truth. Believing the thoughts to be oneself and being taken over by its continuous flow, one misses the stillness, the silence and the space of the present 'Now' as one believes that the thoughts are natural and suffering is normal as everyone is suffering. And, this now becomes a means to achieving a pleasant, happy and joyful future. That is, happiness and life are at a distance, at a future time out there and not here and now. In reality it is not so. Life-the joyfulness is here and now. I realised this only when I could experience the 'stillness' and the eternal 'silence' in me being in the 'Now', refusing to be in the past or future.

It is like the silence between two musical notes. The sound of music will have no meaning without silence. In fact, silence is eternal and musical sounds perishable. It is like the space in a room; the furniture cannot be there without the space but no one sees the space but only the furniture. Because one cannot see the space, it does not mean the space does not exist. In reality the space is the permanent and the furniture the perishable and the impermanent. For an ordinary eye the space is "nothing" and the furniture a 'thing.' But if you look closer you will find that in this beginningless and endless vast space of 'nothing' exists everything. It encompasses the entire universe—the solar systems, the galaxies, and everything. Without silence no sound can exist, without the stillness no movement can take place and without that nothingness no thing can exist. This is equally true of man and mind also. Man gets into the movements of mind and not into the moment, which is now. There is no beginning or end for silence, stillness and space. It is there. It has no past

or future. It is beyond analysis, measurements, understanding and explanation. Knowing it and experiencing being there is the realm of eternal peace, joy and bliss. Here, the noisy mind disappears, and the real 'I' emerges. To put it accurately, the real 'self' is reclaimed—the 'self' which exists in the 'now and here' with no past and no future. Here, 'I' uses the instrument called mind the way 'I' wants to use it and 'I' directs my thinking rather than the mental automation taking over me. The belief that joyfulness or happiness is when I achieve this and that or when I get rid of this and that or after that out there, etc., are mere mental fiction as time—the psychological time—has no past or future. It has only 'Now'. Not knowing this truth, dwelling in the fictitious past and future is 'suffering' and is a disease. In short, mind is the disease. Liberation from that mind by taming and overpowering it to be used rightly and at will and choice is called self-mastery by *atma-vidhya* or self-knowledge. It awakens one to one's divinity. Respect, reverence and compassion to all beings and a 'help ever, hurt never' principle of life will start flowing from you in relation to the world. Personally, it will be the end of all suffering as you have freed yourself from the mind's games and noises and reclaimed the original land of eternal silence, stillness, and serenity. At least this is my experience. And, the 'self which I never wanted to live with' is no more with me. I am free.

71. "I never wanted to live with myself, means
 - (a) there are two persons in one self.
 - (b) there are two perceptual selves in one person.
 - (c) there is a real self and an unreal self in all persons.
 - (d) there is a natural unknown self and a suffering known self in most of persons.
72. When the author says that he has little use of the past or future, what he means is that
 - (a) he does not care what his past was and what his future would be.
 - (b) the memories and experiences of the past and thoughts of the future do not affect his present life.
 - (c) the memories and experiences of the past and thoughts of the future are irrelevant to living in the moment.
 - (d) the past and future do not exist in his life.
73. The author's awareness and experience of his 'real self' happened
 - (a) when his consciousness withdrew from him.
 - (b) when he realised that he is not the mind and the mind is separate from his 'being'.
 - (c) when he came out of all identifications of being happy, miserable, suffering etc.
 - (d) None of the above.

74. When the author had nothing on the physical plane he was in a state of intense joy because
- he could free himself from the mental noises and realise the serenity within.
 - for thirty years he was suffering despite having everything; and now it is only natural that he enjoys the nothingness.
 - he renounced everything and accepted the reality as it is.
 - he had no identified roles or responsibilities to carry as a burden.
75. The moral of the beggar's story is
- one has to seek and put in efforts 'to find' and to be blessed.
 - ignorance finally leads to bliss.
 - do not give up, you shall ultimately find your place.
 - one needs someone to show the path.

Directions (Qs. 76 to 80): Read the passage and answer the questions that follow by choosing the most appropriate options in the context of the passage.

Passage 2

In 1854, the 'Great White Chief' in Washington made an offer for a large area of land of the Red Indians and promised a reservation for the Indian people, and the Chief of Seattle replies:

How can you buy or sell the sky, the warmth of the land? The idea is strange to us. If we don't own the freshness of the air and sparkle of the water, how can you buy them?

Every part of this earth is sacred to my people. Every shining pine needle, every sandy shore, every mist in the dark woods, every clearing and humming insect is holy in the memory and experience of my people. The sap which courses through the trees carries the memories of the red man. The whiteman's dead forget the country of their birth when they go to walk among the stars. Our dead never forget this beautiful earth, for it is the mother of the red man. We are part of the earth and it is part of us. The perfumed flowers are our sisters; the deer, the horse, the great eagle, these are our brothers. The rocky crests, the juices in the meadows, body heat of the pony, and man—all belong to the same family. So, when the great Chief in Washington sends word that he wishes to buy land, he asks much of us. The great Chief sends word he will reserve us a place so that we can live comfortably to ourselves. He will be our father and we will be his children. So, we will consider your offer to buy our land. But it will not be easy.

For this land is sacred to us. This shining water that moves in the streams and rivers is not just water but the blood of

our ancestors. If we sell you land, you must remember that it is sacred, and you must teach your children that it is sacred and that each ghostly reflection in the clear water of the lakes tells of events and memories in the life of my people. The water murmur is the voice of my father's father.

The rivers are our brothers, they quench our thirst. The rivers carry our canoes, and feed our children. If we sell you our land, you must remember, and teach your children, that the rivers are our brothers, and yours, and you must henceforth give the rivers the kindness you would give any brother. We know that the whiteman does not understand our ways. One portion of land is the same to him as the next, for he is a stranger who comes in the night and takes from the land whatever he needs. The earth is not his brother, but his enemy, and when he has conquered it, he moves on. He leaves his father's graves behind, and he does not care. He kidnaps the earth from his children, and he does not care. His father's grave and his children's birthright are forgotten. He treats his mother, the earth, and his brother, the sky, as things to be bought, plundered, sold like sheep or bright beads. His appetite will devour the earth and leave behind only a desert.

I do not know. Our ways are different from your ways. The sight of your cities pains the eyes of the red man. But perhaps it is because the red man is a savage and does not understand. There is no quiet place in the whiteman's cities. No place to hear the unfurling of leaves in spring, or the rustle of an insect's wings. But perhaps it is because I am a savage and do not understand. The clatter only seems to insult the ears. And what is there to life if a man cannot hear the lonely cry of the whippoorwill or the arguments of the frogs around a pond at night? I am a red man and do not understand. The Indian prefers the soft sound of the wind darting over the face of a pond, and the smell of the wind itself, cleaned by a midday rain, or scented with pinion pine.

The air is precious to the red man, for all things share the same breath—the beast, the tree, the man, they all share the same breath. The white man does not seem to notice the air he breathes. Like a man dying for many days, he is numb to the stench. But if we sell you our land, you must remember that the air is precious to us, that the air shares its spirit with all the life it supports. The wind that gave our grandfather his first breath also receives his last sigh. And, if we sell you our land, you must keep it apart and sacred, as a place where even the white man can go to taste the wind that is sweetened by the meadow's flowers. So, we will consider your offer to buy our land. If we decide to accept, I will make one condition: The white man must treat the beast of this land as his brothers. I am a savage and I do not understand any other way. I've seen a thousand rotting buffaloes on the prairie left by the white man who shot them from a passing train. I am a savage

and I do not understand how the smoking iron horse can be more important than the buffalo that we kill only to stay alive. What is man without the beast? If all beasts were gone, man would die from a great loneliness of spirit. For whatever happens to the beast, soon happens to man. All things are connected.

You must teach your children that the ground beneath their feet is the ashes of your grandfathers. So that they will respect the land, tell your children that the earth is rich with the lives of our kin. Teach your children what we have taught our children, that the earth is our mother. Whatever befalls the earth befalls the sons of the earth. If men spit upon the ground, they spit upon themselves. This we know: The earth does not belong to man; man belongs to the earth. All things are connected, like the blood, which unites one family. Man did not weave the web of life: he is merely a strand in it. Whatever he does to the web, he does to himself. Even the white man whose God walks and talks with him as friend to friend, cannot be exempt from the common destiny. We may be brothers after all. We shall see. One thing we know, which the white man may one day discover, our God is the same God. You may think now that you own Him as you wish to own our land; but you cannot. He is the God of man, and His compassion is equal for the red man and the white. This earth is precious to Him, and to harm the earth is to heap contempt on its Creator. The whites too shall pass; perhaps sooner than all other tribes. Contaminate your bed, and you will one night suffocate in your own waste. But in your perishing you will shine brightly, fired by the strength of the God who brought you to this land and for some special purpose gave you dominion over this land and over the red man. That destiny is mystery to us, for we do not understand when the buffaloes are slaughtered, the wild horses are tamed, the secret corners of the forest heavy with scent of many men, and the view of the ripe hills blotted by talking wires.

Where is the thicket? Gone?
Where is the eagle? Gone.
The end of living and the beginning of survival.

76. The reply of the Chief of Seattle appears to
(a) be an attack on whiteman's arrogance.
(b) bring out the ignorance of the so-called civilised whites.
(c) be a defiance of the authority of the white chief.
(d) be the most profound and respectful statement on the environment.
77. By describing the shining pine needles, shores, mist, and insects, the author
(a) appears to have gone very emotional and sentimental.
(b) seems to convey that his people worship all creations.
- (c) seems to convey that all the above are integral part of human life.
(d) expresses his reverence and faith in the mutuality of all natural beings and things around for a harmonious living.
78. The passage proves that the
(a) natives are emotional.
(b) whites-the civilised ones-are very advanced.
(c) the natives are more enlightened than the educated and civilised.
(d) None of the above.
79. The passage
(a) brings out the eternal truth for consideration of the civilised.
(b) questions the wisdom of the civilised and urges them to live a primitive life.
(c) expresses the agony of the visionary.
(d) bemoans a great tragedy in the making.
80. The passage is very profound that the mist, the crest, the body heat of the pony, the sap, the murmur of the rivers, the air, the breath, the horse, the buffaloes all are strands of life on earth and are equally important and man needs to respect the mother earth.
(a) The above assertion is not fully true.
(b) The above assertion is 100% true.
(c) The above assertion is nothing but a figment of imagination.
(d) The above is philosophical and impractical to accept on the material plane.

Directions (Qs. 81 to 86): Every question given below consists of a paragraph broken into its constituent sentences in an arbitrary way indicated with a unique alphabet (A, B, C, or D). You are required to select the correct combination from the alternatives provided which reorganizes these sentences into a passage in the most logical manner so that the reorganised passage is meaningful and complete in its message.

81. (A) It is attractive to the one who is attracted by it,
as food is tasty to the one who finds it tasty.
(B) There is no such thing as attractiveness.
(C) So what is real beauty?
(D) This brings us to the consideration of the fact that nothing in these terms of value exists in an object, except what we put into them.
(a) ABCD (b) CBAD
(c) CABD (d) BCDA

82. (A) The credit and honour that go with a high grade become the end and not the means.
 (B) Perhaps, many high achievers seek the grade rather than knowledge.
 (C) This trait which makes for a good student does not necessarily make a good manager.
 (D) A good manager is a credit giver, not a credit taker.
 (a) ABDC (b) BACD
 (c) CABD (d) ADBC
83. (A) Since their satisfaction comes from the exercise of authority, they are not likely to share much of it with lower-level managers who eventually will replace them even though most high-level executives try diligently to avoid the appearance of being authoritarian.
 (B) But to expect otherwise is not realistic.
 (C) Few men who strive hard to gain and hold positions of power can be expected to be permissive, particularly if their authority is challenged.
 (D) The power drive that carries men to the top also accounts for their tendency to use authoritative rather than consultative or participative methods of management.
 (a) abcd (b) cadb
 (c) dbca (d) cdab
84. (A) The modern industrial organisation has given birth to a few giant business corporations which tend to reduce the state to a subservient position and bind it to what Professor Galbraith calls a technostructure consisting of specialists, planners and technicians.
 (B) In order to avoid the perils of such an industrial system the American economist recommends the strong assertion of 'other goals' so that the new industrial state would become responsive to the larger purposes of society.
 (C) We have to realise without equivocation that the pursuit of material prosperity alone, would lead us into a blind valley.
 (D) These 'goals' could doubtless be essentially human and spiritual in accordance with Gandhiji's ideal and programmes.
 (a) acbd (b) cbad
 (c) cabd (d) cdab
85. (A) Many relationship problems between boss and subordinate occur because the boss fails to make clear how he plans to use his authority.
 (B) Problems may also occur when the boss uses a 'democratic' facade to conceal the fact that he has already made a decision which he hopes the group will accept as its own.
 (C) If, for example, he actually intends to make a certain decision himself, but the subordinate groups get the impression that he has delegated

this authority, considerable confusion and resentment are likely to follow.

- (D) We believe that it is highly important for the manager to be honest and clear in describing what authority he is keeping and what role he is asking his subordinates to assume in showing a particular problem.

(a) abcd (b) acbd
 (c) dabc (d) dbca

86. (A) One proposal, therefore, is to introduce plea bargaining.
 (B) Reformers hope that this will reduce the prison population by about 35 per cent and prevent jails becoming universities of crime for the merely wayward.
 (C) At the moment, the weakest and poorest always go to prison for the pettiest of crimes, sent there by judges wedded to inflexible interpretation of a convoluted penal code and procedure bound juridical administration.
 (D) Judges will be given alternatives to prisons such as community service, as a punishment for the minor infractions.
 (a) abcd (b) cabd
 (c) cadb (d) cdab

Directions (Qs. 87 to 90): Every question given below consists of a sentence the constituent words/phrases of which are arranged in an arbitrary way. Each separated phrase/ set of words is indicated by a unique alphabet. You are required to select from the alternatives provided that option, which reorganises the phrases/set of words back into the original sentence.

87. (A) surprising many in the audience by its shortness and leaving many others quite unimpressed
 (B) he spoke in his high, penetrating voice
 (C) and in a little over two minutes
 (D) delivered this speech
 (a) ABCD (b) BACD
 (c) BCDA (d) ABDC
88. (A) the world will little note,
 (B) what we say here,
 (C) nor long remember
 (D) but it can never forget what they did here
 (a) ACBD (b) BACD
 (c) ABCD (d) ADCB
89. (A) primarily this is because
 (B) the rulers of the exchange of mankind's goods have failed,
 (C) through their own stubbornness and their own incompetence,
 (D) have admitted their failure, and abdicated
 (a) BACD (b) ABCD
 (c) DCAB (d) ACDB

90. (A) a corporation must identify its best and worst performers
 (B) then nurture the former and rehabilitate and/or discard the latter
 (C) that in order to develop and thrive
 (D) it is a workforce-management tool based on the premise
 (a) DBCA (b) DCAB
 (c) DABC (d) ABCD

Directions (Qs. 91 to 95): In the following passage some words have been left out, which have been numbered. Below the passage are four options for each blank. Choose the correct word to fill the blank. First, read the passage over and understand what it is about. Then, fill in the blanks with the alternatives chosen.

This finding is very exciting...(91)...it means there is a certain potential for developing an... (92)...vaccine. The amounts of virus that are usually transmitted with semen and blood are quite small, much smaller than in...(93)...

case of the hepatitis B virus,...(94)...example. If a vaccine can make the body produce...(95)...small amounts of antibodies, you will not get infected with the real virus when you meet it.

91. (a) although (b) ordinarily
 (c) though (d) because
92. (a) effective (b) intensive
 (c) enduring (d) acceptable
93. (a) the (b) some
 (c) any (d) that
94. (a) an (b) for
 (c) as (d) small
95. (a) even (b) some
 (c) little (d) enough

SECTION IV CRITICAL REASONING

Directions (Qs. 96 to 105): Each of the following problems has a question and two statements labelled (A) and (B). Use the data given in (A) and (B) together with other available information (such as the number of hours in a day, mathematical facts, etc.) to decide whether the statements are sufficient to answer the question. Then select the answer option as:

- (a) if you can get the answer from (A) alone but not from (B) alone.
 (b) if you can get the answer from (B) alone but not from (A) alone.
 (c) if you can get the answer from both (A) and (B) together, but not from (A) alone or (B) alone.
 (d) if you cannot get the answer from statements (A) and (B) together, but need even more data.
96. Is x greater than 0?
 (A) $x^3 + 1 = 0$
 (B) $x^2 - 1 = 0$
97. Is y larger than x ?
 (A) $x + y = 2$
 (B) $\frac{x}{y} = 2$
98. Is n the square of an integer k ?
 (A) $n = 4j^2$ with j an integer.
 (B) $n^2 = A^2 + B^2$ with A, B integers.

99. If a and b are both positive numbers, then which is larger, $2a$ or $3b$?
 (A) a is greater than $2b$.
 (B) a is greater than or equal to $b + 3$.
100. Is $xy < 0$?
 (A) $\frac{1}{x} < \frac{1}{y}$
 (B) $x > 0$
101. A square originally had sides with length s . The length of the side is increased by $x\%$. Did the area of the square increase by more than 10% ?
 (A) x is greater than 5.
 (B) x is less than 10.
102. Is $k^2 + k - 2 > 0$?
 (A) $k < 1$
 (B) $k < -2$
103. Which is larger, a^b or b^a ? $a > 0$ and $b > 0$.
 (A) $a = 1$
 (B) $b > 2$
104. Which of the four numbers w, x, y , or z is the largest?
 (A) The average of w, x, y , and z is 25.
 (B) The numbers w, x , and y are each less than 24.

105. How many of the numbers x and y are positive?
 (A) x is less than 5
 (B) $x + y = 24$.

Directions (Qs. 106 to 108): Study the given information and answer the questions.

The table below shows the total number of students who enrolled for five marketing courses over the last four years in a management institute. Answer the following questions based on the table.

Courses	1999	2000	2001	2002
Brand Management (BM)	24	29	30	33
Sales Management (SM)	25	30	26	29
Marketing Research (MR)	43	39	38	40
International Marketing (IM)	29	33	34	32
Consumer Behaviour (CB)	21	19	23	24

106. If it is mandated that a student who wishes to enroll for BM or CB has to take MR, then which statement is necessarily true?
 (a) In 1999, only one student must have enrolled for both BM and CB.
 (b) In 2001, not more than 7 students could have enrolled for both BM and CB.
 (c) In 2000, at least 9 students must have enrolled for both BM and CB.
 (d) In 2002, not more than 5 students could have enrolled both for BM and CB.
107. If it is mandated that those who enroll for IM should take SM or CB, then which of the statements is necessarily true?
 (a) In 1999, the number of students who enrolled for SM, CB, and IM was at least 4.
 (b) In 2000, the number of students who enrolled for IM and CB and not SM was not more than 10.
 (c) If at least 4 students who took IM and SM also took CB, the maximum number of students who took CB but not IM is 17.
 (d) In 2002, the number of students who enrolled for SM, CB, and IM was at least 3.
108. If the rules of the institute prescribe that a student should take 3 and not more than 3 marketing area courses to specialise in the marketing stream, which of the following statements cannot be true?
 (a) In 1999, all those who took CB also took BM and MR.
 (b) In 2000, all those who took BM also took SM and IM.
 (c) In 2001, all those who took BM also took MR and IM.
 (d) All the above.
109. Three engineering graduates Paul, George and Pauline joined three firms specialising in manufacturing, software and pharmaceuticals. They were posted in the marketing, finance and quality departments. If the person who joined the manufacturing company is posted in marketing and George is posted in quality, what should necessarily be true?
 (a) If Pauline is working in the finance department she should be in a software company.
 (b) If George had joined a software firm then Paul must be working with a manufacturing firm.
 (c) If George is in the pharmaceutical industry, and Paul is working in finance, then Pauline must not have joined a manufacturing firm.
 (d) If Pauline is in the finance department and the person who joined a software company is working with the quality department, then Paul is working in the manufacturing industry.
110. I do not believe that ambitious people are good parents. Of course, there are some parents who have successful careers and well-raised children. But these parents are not really ambitious. Were they ambitious, they could not devote the necessary time and energy to raising their children well.
 Which of the following best explains the flawed reasoning in the author's argument?
 (a) It relies on a word with two different meanings.
 (b) It bases an absolute conclusion upon relative evidence.
 (c) It assumes the conclusion.
 (d) It generalises from inappropriate specifics.
111. Testing the reasoning abilities of illiterate people has proven to be particularly challenging to psychologists. When illiterate people are given tasks that are designed to require them to reason to a conclusion, they are relatively successful when the mechanical devices used in the test are familiar ones. But if the devices used in the test are unfamiliar to the illiterate persons, they are relatively unsuccessful at performing analogous tasks. Which of the following conclusions can be reasonably drawn from the information above?
 (a) Reasoning abilities of illiterate people should not be tested using tasks that do not involve familiar devices.
 (b) Literacy is required in order to test the reasoning abilities of people through the use of mechanical devices.
 (c) Testing illiterate people for reasoning abilities is relatively unsuccessful.
 (d) Mechanical devices are a poor substitute for words in reasoning to a conclusion.

112. Monthly employee evaluations are an excellent tool for managers. With them, employees that are not productive can be removed from the company, and efficient workers rewarded, and all within the space of a month. The argument above logically depends on which of the following assumptions?
- Workers do not in evaluations of the management of the company.
 - Unproductive employees often refuse to cooperate with managers doing the evaluations, because they see these evaluations as a violation of their privacy.
 - Evaluations can identify with some accuracy whether an employee is productive or not.
 - Employee evaluations are a better source of information about employee grievances than are monthly staff meetings.
113. With the computer market booming, the demand for electronic typewriters has steadily declined over the last 15 years. So, industry analysts were undoubtedly surprised to see a 30% increase in total sales of electronic typewriters last year. In anticipation of an increase in its sales, the Wordmaster Typewriter Company is planning to manufacture more electronic typewriters for the coming year. Which of the following statements, if true, would strongly suggest that the plan will fail?
- According to consumer surveys the majority of those interviewed said that if given a choice between a Wordmaster product and that of its major competitor, they would buy the competitor's product.
 - In order to produce more typewriters, Wordmaster will have to invest a sizeable amount of money in new equipment and in a new factory.
 - The typewriter industry as a whole recorded a jump in sales last year, but specifically in electronic typewriters, which are the closest things in the market to a computer word processor.
 - In 1985 Wordmaster suffered the beginnings of a serious slump that lasted 10 years.
114. A medical research team in France recently discovered that people with low risk of heart disease tend to also have low stress levels. The team concluded that a healthy cardiovascular system could protect people from the stress of modern life. The research team's conclusion depends on which of the following?
- Medical and pharmaceutical treatments of stress are more effective than psychological treatment.
 - People with high stress levels are more likely to have serious heart disease than are those who have low stress levels.
 - High stress levels do not increase one's chances of suffering from heart diseases.
 - Other medical studies indicate that stress levels in citizens of industrialised countries increased over the last 30 years, as the world has become increasingly more complex and life more hectic.
115. In terms of population, Chennai is much larger than Bangalore. Since Mumbai has a greater population than Delhi, it follows that Chennai has more inhabitants than does Delhi. Any of the following makes the argument more logically correct Except
- Delhi has fewer inhabitants than Bangalore.
 - Bangalore has the same number of inhabitants as Delhi.
 - Chennai has the same number of inhabitants as Mumbai.
 - Mumbai has more inhabitants than Bangalore.

SECTION V LOGICAL REASONING

Directions (Qs. 116 to 118): A commercial flower grower raises flowers in each of the three growing seasons every year—spring, summer and winter—with the year beginning in spring. Exactly seven different kinds of flowers—Q, R, S, T, W, X and Z—are grown every year. Each kind of flower is grown at least once a year. The flowers are grown according to the following rules:

- No more than three different kinds of flowers are grown in any one growing season.
 - No kind of flower can be grown in two seasons in a row.
 - Q can be grown neither in the winter season nor in the same growing season as W or X.
 - S and T are always grown in the same growing season.
 - R can be grown in a growing season only if Q is grown in the preceding season.
116. Which of the following is an acceptable schedule for the three growing seasons?

	Spring	Summer	Winter
(a) Q		S, T, R	Q, X, Z
(b) S, X		Q, T, Z	R, W
(c) W, X		Q	Z, S, T, R
(d) Q, S, T		R, W, X	Z

117. If Z and R alone are grown in the winter season, then which of the following must be grown in the preceding spring?
 (a) X (b) R
 (c) T (d) W
118. If Z is grown in the spring and W in the summer of one year, then which of the following can also be grown in the summer?
 (a) X (b) Q
 (c) S (d) T

Directions (Qs. 119 to 124): Three local companies - F, G and H - and three out-of-state companies - X, Y and Z - must each be scheduled for one of the six consecutive days from Monday through Saturday to make their presentations

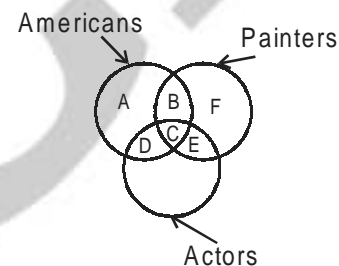
- (i) F's presentation must be made earlier than H's presentation.
 (ii) X's presentation must be made earlier than Z's presentation, but not on the day immediately preceding Z's presentation.
 (iii) The three presentations by the local companies cannot all be made before any presentation by an out-of-state company is made, nor can the three presentations by the out-of-state companies all be made before any presentation by a local company.

119. Which of the following is a list of the six companies in the order in which they could be scheduled to make their presentations?
 (a) F, H, G, X, Y, Z (b) F, H, Z, G, Y, X
 (c) G, Y, F, X, Z, H (d) X, G, Y, F, H, Z
120. If F's presentation is to be made on Friday, then the companies making their presentations in the three-day period, Monday through Wednesday, must include
 (a) G and X (b) G and Y
 (c) H and Z (d) X and Y
121. If X's presentation is to be made on Thursday, then Friday's presentation must be made by either
 (a) F or Y (b) F or Z
 (c) G or H (d) G or Z
122. Which of the following is a list of all those days, and only those days, on which Z could make his presentation?
 (a) Wednesday, Friday
 (b) Wednesday, Thursday, Friday, Saturday

- (c) Thursday, Friday, Saturday
 (d) Tuesday, Wednesday, Friday, Saturday

123. If F is to make his presentation after Z then which of the following is a day on which X could make his presentation?
 (a) Tuesday (b) Wednesday
 (c) Friday (d) Saturday
124. If H is to make his presentation on Wednesday and if Y's presentation is to be made earlier than the H's presentation, then G must make his presentation on
 (a) Monday (b) Tuesday
 (c) Thursday (d) Friday

Directions (Qs. 125 to 127): Given below is a diagram in which the figures interlock each other. Each figure represents a certain section of people indicated thereon. Different regions of the diagram are lettered 'A' through 'G'. Read the statements of each of the questions to answer which region represents the respective statement.



125. Americans who are painters but not actors is represented by
 (a) A (b) B
 (c) C (d) D
126. Painters who are neither Americans nor actors is represented by
 (a) B (b) C
 (c) E (d) F
127. Non-American painters and actors are represented by
 (a) E (b) A
 (c) C (d) F

Directions (Qs. 128 to 130):

- (i) An Airedale, a Boxer, a Collie, and a Doberman win the top four prizes in the Kennel Show. Their owners are E, F, G and H, not necessarily in that order. Their dogs' names are J, K, L and M, not necessarily in that order.
- (ii) G's dog wins neither the first nor the second prize.
- (iii) The Collie wins the first prize.
- (iv) M wins the second prize.
- (v) The Airedale is J.
- (vi) F's dog, the Doberman, wins the fourth prize.
- (vii) H's dog is K.

128. In which of the following statements are the dogs correctly listed in descending order of their prizes?
- I. K; the Airedale; E's dog
 II. The Boxer; G's dog; J
 III. E's dog; the Airedale; L
- (a) I only (b) II only
 (c) III only (d) I and III only.
129. On the basis of the statements (i), (ii), (iii), (iv) and (vii) only, which of the following may be deduced?
- I. M is the Boxer.
 II. The Doberman is K or L.
 III. J wins the third prize.
- (a) I and II only (b) I and III only
 (c) II and III only (d) I, II and III
130. On the basis of the statements (i), (ii), (iii), (iv) and (vii) only, which of the following may be deduced?
- I. G's dog is J or L.
 II. E's dog wins the first or second prize.
 III. K is the Collie.
- (a) I only (b) II only
 (c) I and II only (d) I, II and III

Directions (Qs. 131 to 135): The only persons who attended a meeting were four ship captains and the first mates of only three of those captains. The captains were R, S, T and W. The first mates were L, N and V. Each person in turn delivered a report to the group as follows:

- (i) Each first mate spoke immediately after his or her captain.
- (ii) S was the first captain to speak, and T was the second captain to speak.
131. All of the following are possible orders of the speakers except
- (a) S, L, T, V, W, R, N (b) S, N, T, V, R, W, L
 (c) S, T, L, R, N, W, V (d) S, T, V, N, W, R, L

132. If R spoke after L and L was the third of the first mates to speak, then all of the following statements could be true except
- (a) W spoke immediately after V.
 (b) L was the fourth speaker after S.
 (c) W's first mate was present.
 (d) The captains spoke in the order S, T, W, R.
133. If L spoke immediately after R and immediately before W, and W was not the last speaker, then R spoke
- (a) Second (b) Third
 (c) Fourth (d) Sixth
134. If V is S's first mate, then N could be the person who spoke immediately
- (a) Before T (b) Before L
 (c) Before V (d) After T
135. If L was the third of the first mates to speak and R was the captain whose first mate was V, then which of the following must be true?
- (a) L spoke some time before R.
 (b) N spoke some time before W.
 (c) L spoke some time before W.
 (d) W spoke some time before R.

Directions (Qs. 136 to 160): For each question choose the most appropriate answer.

136. WIPRO intends to provide computer training at polytechnics in which State of India?
- (a) Maharashtra (b) Karnataka
 (c) West Bengal (d) Bihar
137. Recently, India and which other country have agreed to step up cooperation in areas like biotechnology and school education, and explore new areas for further cooperation like the Golden Rice project?
- (a) Russia (b) Bangladesh
 (c) Israel (d) South Africa
138. What is the magnitude of India's defence expenditure as a percentage of her GDP?
- (a) 1.2% (b) 1.5%
 (c) 1.8% (d) 2.4%

139. Reliance Industries Ltd. has made its second largest gas discovery after the Krishna–Godavari basin in the coal-bed methane exploration block in which part of India?
 (a) Shahdol (MP)
 (b) Hazaribagh (Jharkhand)
 (c) Chambal (UP)
 (d) Rourkela (Orissa)
140. Recently, ONGC has secured two major projects in which African country for laying a 714-km pipeline and for revamping a refinery?
 (a) Morocco (b) Libya
 (c) Egypt (d) Sudan
141. Following a complaint by the Indian Academy of Paediatrics which company has been asked by Drugs Controller General of India (DCGI) to withdraw all advertisements aimed at promoting its hepatitis vaccine?
 (a) Pfizer (b) Torrent Pharma
 (c) Glaxo Smithkline (d) Ranbaxy
142. The Supreme Court has recently given a landmark judgement by which government employees, including doctors working in the State-run hospitals and dispensaries
 (a) Have the right-fundamental, legal, moral and equitable-to go on strike.
 (b) Have the right-fundamental, legal, moral and equitable-to go on strike with 20 days, intimation to the government.
 (c) Have the right-fundamental, legal, moral and equitable-to strike work under certain conditions.
 (d) Have no right-fundamental, legal, moral and equitable-to go on strike.
143. The Election and Other Related Laws (Amendment) Bill, 2003 proposes use bigger dash ——— that corporates can fund political parties up to per cent of their net profit?
 (a) 7% (b) 6%
 (c) 5% (d) 4%
144. PETA was recently in news for persuading/forcing
 (a) Petroleum companies to stop using chamois leather products in petrol pumps.
 (b) General Motors to not use leather interiors in cars.
 (c) Daimler–Chrysler to withdraw its leather interiors from its Benz cars.
 (d) All the above.
145. UNSC West Asia road map envisages
 (a) Palestinian State by 2005.
 (b) Secularism and democracy in Lebanon.
 (c) Israel's withdrawal from West Bank.
 (d) A grand road connecting Palestine, Lebanon and Syria.
146. As per news reports the FDI limit in private banks in India is likely to be raised from the current ——— per cent to ——— per cent shortly.
 (a) 62% to 75% (b) 49% to 74%
 (c) 51% to 49% (d) 26% to 74%
147. The current rate of inflation is:
 (a) 7.4% (b) 6.3%
 (c) 4.8% (d) 5%
148. The following is no more in the small savings schemes
 (a) Kisan Vikas Patra
 (b) PPF NSS Scheme
 (c) Post Office Saving Scheme
 (d) Indira Vikas Patra
149. Biometrics technology is associated with
 (a) identifying individuals by body scan.
 (b) identifying individuals by fingerprints, voice, eyes, etc.
 (c) technology used in plant tissue culture.
 (d) None of the above.
150. Srinidhi Varadarajan, in news recently, is associated with
 (a) Convergence Technologies
 (b) Bio informatics
 (c) Creation of the world's third fastest super computer
 (d) Japanese earth simulator
151. Name the company which has agreed to pay a fine of \$ 50 million for 'inadequacy in sales and disclosure practices'
 (a) DSP Merrill Lynch (b) Morgan Stanley
 (c) Anderson (d) Enron
152. As per the latest reports, the NPAs of public sector banks amount to:
 (a) Rs 7,200 crore (b) Rs 54,086 crore
 (c) Rs 7,232 crore (d) Rs 4,568 crore

153. Annual Economic Survey and Mid-year Reviews are brought out by the
(a) Commerce Ministry (b) Finance Ministry
(c) RBI and CII (d) Economic Times
154. India's share of world trade is
(a) 1% (b) 1.26%
(c) 0.65% (d) 0.76%
155. The Framework Agreement on Comprehensive Economic Cooperation was recently signed between:
(a) India and USA (b) India-ASEAN
(c) India and China (d) India and Indonesia
156. Who invented the typewriter?
(a) Shockley (b) Pascal
(c) Sholes (d) Waterman
157. An altimeter is used to measure
(a) Atmospheric pressure.
(b) The approximate height above the ground.
(c) The strength of an electric current.
(d) The difference in hearing.
158. Lead-free petrol was introduced in our country because
(a) It is no longer needed as an anti-knock agents.
(b) It lowers the efficiency of the engine.
(c) It causes less pollution.
(d) It is cheaper.
159. Alexander Fleming discovered
(a) Penicillin (b) X-ray
(c) Streptomycene (d) Telephone
160. GATT headquarters is located in
(a) Geneva (b) New York
(c) Paris (d) Washington, D.C.