

stories, told one after the other by being shown to us on screen, differ very fundamentally on what actually happened — and the film does not resolve the conflict between the different stories.

We can infer from the above account that

- a. It is not possible to verify the veracity of the medium's version.
- b. True propositions mutually support one another in a kind of web.
- c. Perspectives played a major role in determining the way each regarded the situation.
- d. None of the above

115. Suzuki, the great authority on Zen Buddhism, describes *muga* as 'ecstasy with no sense of I am doing it', and 'effortlessness.' The 'observing self' is eliminated; a man 'loses himself', that is, he ceases to be a spectator of his acts. Suzuki says: 'With the awaking of consciousness, the will is split into two: ... actor and observer. Conflict is inevitable, for the actor-self wants to be free from the limitations of the observer-self. Therefore in Enlightenment, the disciple discovers that there is no observer-self, 'no soul entity as an unknown or unknowable quantity'.

The conclusion that the writer is arriving at is:

- a. Instead of an observer, what remains is the goal and the act that accomplishes it.
- b. The 'Eastern' Conception of Knowledge differs considerably from the 'Western' concept of Knowledge.
- c. It is nearly impossible for a non-enlightened disciple to be an expert in the art of *muga*.
- d. Ecstasy is the product of a sub-conscious effort.

116. When Colin Turnbull, an anthropologist, was studying pygmies in 1961, he took one of them, who had become a friend, out of the forest on a trip. The pygmies he was studying had spent their whole lives in the forest — they were known as the 'forest people' — so to go outside it and see for miles across the plains was a new experience. ... When he [the pygmy] saw a herd of buffaloes in the distance, he thought they were ants and he refused to believe that they were buffaloes because they looked so small.

The statement that can best explain the paradox given above is:

- a. Perception is an active process of interpreting the information we receive through our senses and of making sense of it.
- b. Perception is a process which not only records data but also selects from it, draws inferences from it and organises it; it is a process which can go wrong.
- c. When we look at something, we are unconsciously 'guessing' or forming hypotheses about what we can see.
- d. Perception is not determined simply by stimulus patterns; rather it is a dynamic searching for the best interpretation of the available data ... perception involves going beyond the immediately given evidence of the senses.

117. Eugenics was essentially a political movement, overwhelmingly confined to the members of the bourgeoisie or middle classes, urging upon governments a programme of positive or negative actions to improve the genetic condition of the human race. Extreme eugenicists believed that the condition of man and society could be ameliorated only by the genetic improvement of the human race — by

concentrating on encouraging valuable human strains (usually identified with the bourgeoisie or with suitably tinted races, such as the 'Nordic'), and eliminating undesirable strains (usually identified with the poor, the colonized or unpopular strangers).

An observation that would considerably strengthen the eugenicists' stand is:

- a. Certain human characteristics are not only inherited but are unevenly distributed amongst different races.
- b. Many people are convinced that blacks are inherently less intelligent and more violent than whites.
- c. Environment plays a significant role in the development of mental or emotional qualities
- d. The high birth rate of the poor is a threat to civilization.

118. A study of the effect of language on memory was performed by Loftus and Loftus, in 1975. They showed subjects a film of a traffic accident to two groups, and then asked them questions about what they had seen. After a week, the subjects were asked about the film again. One group of subjects was asked, immediately after seeing the film, "How fast were the cars going when they hit each other?" The other group of subjects was asked, "How fast were the cars going when they smashed into each other?" When they were tested later, the subjects were asked if they had seen any broken glass in the film. (There hadn't been any.) Those subjects who had heard the word "smashed" remembered seeing broken glass scattered around after the accident.

The findings of the study has significant relevance for

- a. A move subscribing severe penalties for rash drivers who cause accidents amounting to culpable homicide.
- b. A memory-improvement course for students who score below the national average in IQ tests.
- c. People who are concerned about 'leading questions' in court, or in the police questioning of witnesses.
- d. None of the above

119. A letter from a Japanese ex-student to his American Professor:

Do you believe if I say that language can make a person different? What I mean is this. Now I can speak Japanese and English. When I was mainly speaking Japanese, I did not express myself much to other people. It can be because of the circumstances I had or the culture I have. Then I started speaking English and learnt how to express myself, and came to know who I was, what I was aiming for in the future ... Now I'm back in Japan and my mind has started thinking in Japanese. Again, I seem to stop expressing myself. If I tell you which part of mine I like better, I prefer me speaking in English even though my Japanese is far better than my English.

A possible explanation for the predicament could be:

- a. the strong distinction of levels in Japanese society, which makes free communication very difficult.
- b. we all need words to express ourselves.
- c. the Japanese ex-student has slowly forgotten everything that he learned within the precincts of the American classroom.
- d. All of the above

120. Suppose a teacher holds the view — possibly mistakenly, but that is a separate issue — that If a student is lazy, she will take Arts (rather than Science).

A parallel form of reasoning can be found in the argument

- a. It is the case, at least in English-speaking Western countries, that If a student is called Ruth, then that student is a girl.
b. It is the case, at least in English-speaking Western countries, that If a student is a boy (i.e. not a girl,) he will be called Ruth.
c. It is the case, at least in English-speaking Western countries, that If a student is a girl, she will be called Ruth.
d. All of the above
121. Kusum is playing a treasure hunt game. At the final stage, Kusum needs to choose a five-digit code to unlock the vault which contains the treasure. She gets the following codes to choose from
- | | | |
|-------|-------|-------|
| 15342 | 26540 | 35412 |
| 23105 | 15320 | 13402 |
| 35047 | 71024 | 28305 |

To help her find the code, the following clues are given to her

- I. The code number is not a even number
II. The product of the first two-digits is odd.
III. The sum of the first four digits is 12.
IV. The code number is not a multiple of 5.
If Kusum had the option of selecting only one clue, which of the above four clues will give her the best chance of finding out the five-digit code?
- a. I b. II c. III d. V

122. The team sent by Djibouti (a central African country) to the Athens Olympics 2004 consists of 3 middle distance runners and 2 marathon runners. The first trip the team takes is from Djibouti airport to Athens airport, a distance of 6958 kms. Upon arrival at the Athens airport, the entire team travels forty-two kilometers to the Olympic games village.

The 2 marathon runners travel 15 kms to reach the starting point of their event and then runs for 42.195 kms. They end the marathon and travel back to the games village, a distance of 15 kms.

All the 3 middle-distance runners participate in 1500 m running. Each one of them run the heats and the semi-finals. Only one of them qualified for the final. 1500 m race was held in the Olympic stadium. The distance between the Olympic stadium and the games village was 15 km. The 1500 m race event was completed in a single day. Now calculate the approximate total distance (in kms) travelled by the entire team from the time they left Djibouti airport for Athens till the time they returned back to Djibouti airport after the Olympic 2004 games.

- a. 71, 000 kms b. 35, 500 kms c. 70, 250 kms d. 68, 480 kms

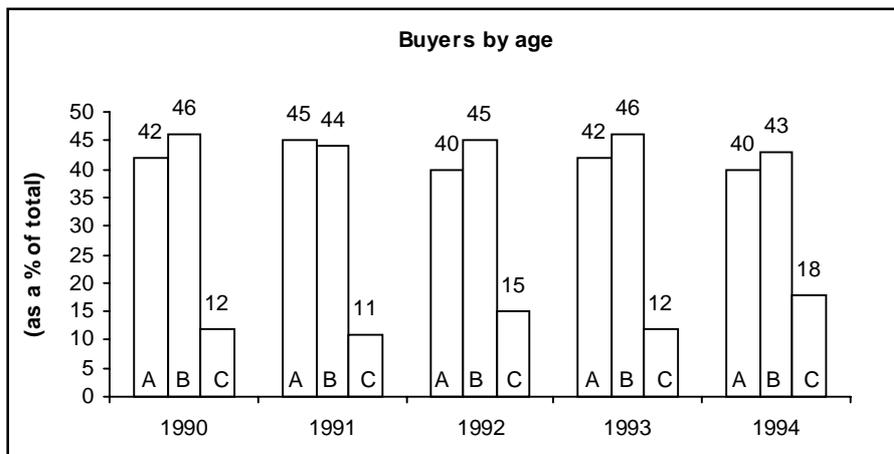
123. In a game of basket ball played during break-time in school, there are two players on each team. There are 4 players in these teams — Abhay, Bansi, Chirag and Dennis. Find out the difference in points between the winning team and the losing team.

- I. Bansi scored half as many points as Chirag.
II. Abhay outscored his partner Bansi by six points.
III. Chirag scored four more than two times the points scored by Dennis.
IV. The number of points scored by Dennis can be found by reversing the digit of his favourite number 13.
- a. 33 b. 25 c. 20 d. None of these

124. I gave Satish a fixed length of cloth to make a suit for himself. Two months later, I found him wearing only a jacket and asked him what happened to the rest of the cloth. Satish replied in the form of a verse
- My suit length was cut in half
Half was thrown away
The other half was cut again
One third along the way.
The larger part (2 m long)
is what I used.
How long was my suit length
that you gave me to use?*
- Can you find what length of cloth I had given to Satish initially to make a suit?
- a. 5 m b. 6 m c. 7 m d. None of these
125. Mallika and her father are both born on 9th October. He was born in 1961 and she was born in 1991. Every year on their birthday, Mallika's father reminds her that she is catching up to his age. What he essentially meant was that her age as a fraction of her father's age was increasing. Find out the number of years required for Mallika's age to increase from $\frac{1}{3}$ of her father's age to $\frac{3}{7}$ of her father's age.
- a. 7.5 years b. 3 years c. 8.5 years d. Cannot be determined

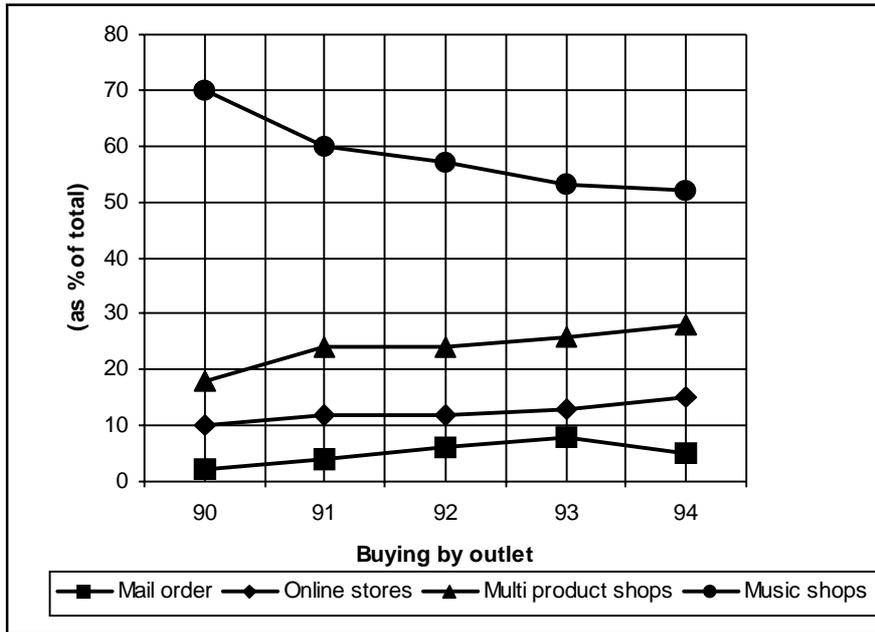
Direction for questions 126 to 130: Refer to data below and answer the questions.

For a city called Phoren, the figures given below show the music cassettes/CDs buying behavior of people according to their age and their preference for different types of sales outlets during the period 1990 to 1994. It is assumed that nobody below the age of 10 years buys any music cassette/CD in this city.



A : 10 years to below 25 years
B : 25 years to below 45 years
C: 45 years and above

The chart given below represents the buying pattern for the same set of people classified according to the type of sales outlets from where music cassettes / CDs are bought



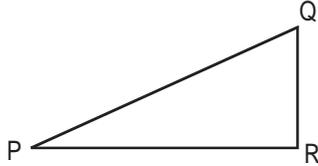
126. If in 1990, there were a total of 1000 buyers of music cassettes/CDs in the city of Phoren and the number of buyers increase by 100 every year, then what is the total number of buyers of music cassettes/CDs who were from age group 45 years and above during the period 1990 to 1994?
- a. 729 b. 789 c. 829 d. 879
127. By what percentage has the difference between number of buyers who buy music from mail order and those from online stores changed between 1990 and 1994? (assume the number of buyers of music cassettes/CDs have remained the same for every year during this period)
- a. Decrease by 15% b. Decrease by 25% c. Increase by 15% d. Increase by 25%
128. Which of the following outlets has(/have) managed to retain the number of its customers at almost the same level for a period of three consecutive years in the period 1990 to 1994?
- a. Multi product shops b. Online stores c. Both (a) and (b) d. Data Insufficient
129. If in every age group the pattern of buying from various sales outlets show the same break-up as the one given for the total, then what approximately was the number of buyers in the age group 25 years to below 45 years buying music cassettes/CDs from music shops in 1990? (use data from question 126)
- a. 500 b. 322 c. 425 d. 380
130. For various sales outlets, the pattern of buying for different age groups follow the same pattern as that given for the total buyers in the given period (1990-1994). What is the percentage change in percentage of buyers in age group of 10 years to below 25 years from online stores between 1993 and 1994?
- a. 10.7% b. 15.3% c. 19.0% d. Data Insufficient

Directions for questions 131 to 140: Each question consists of a question and two statements, I and

II. Choose

- If one of the two statements (I or II) alone is sufficient to answer the question, but cannot be answered by using the other statement alone.
- If each statement alone is sufficient to answer the question asked.
- If I and II together are sufficient to answer the question but neither statement alone is sufficient.
- If even I and II together are not sufficient to answer the question.

131. Is $\triangle PQR$ a right angled triangle?



- $\angle Q - \angle P > 0$
- The ratio $\frac{\angle P + \angle Q}{\angle R}$ is equal to 1.

132. If m and n are consecutive positive integers, is $m > n$?

- $m - 1$ and $n + 1$ are consecutive positive integers.
- m is an even integer.

133. If a , b and c are integers, is $(a - b + c)$ greater than $(a + b - c)$?

- b is positive.
- c is negative.

134. What is the number of complete rotations (a complete rotation is 360 degree) that a bicycle wheel makes while rolling 100 meters in a straight line without slipping?

- The diameter of the bicycle wheel, including the tyre is 0.5 meter.
- The wheel makes twenty 360-degree rotations per minute.

135. If a certain animated cartoon consists of a total of 17,280 frames on a film, how many minutes will it take to run the cartoon film without interruptions?

- The cartoon film runs without interruption at the rate of 24 frames per second.
- It takes 6 times as long to run the cartoon film as it takes to rewind the film, and it takes a total of 14 minutes to do both.

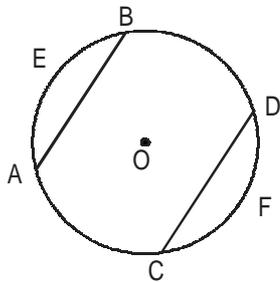
136. If $n = p + r$, where n , p and r are positive integers and n is odd, is $p = 2$?

- p and r are prime numbers.
- $r \neq 2$

137. If $x + y > 0$, is $x > |y|$?

- $x > y$
- $y < 0$

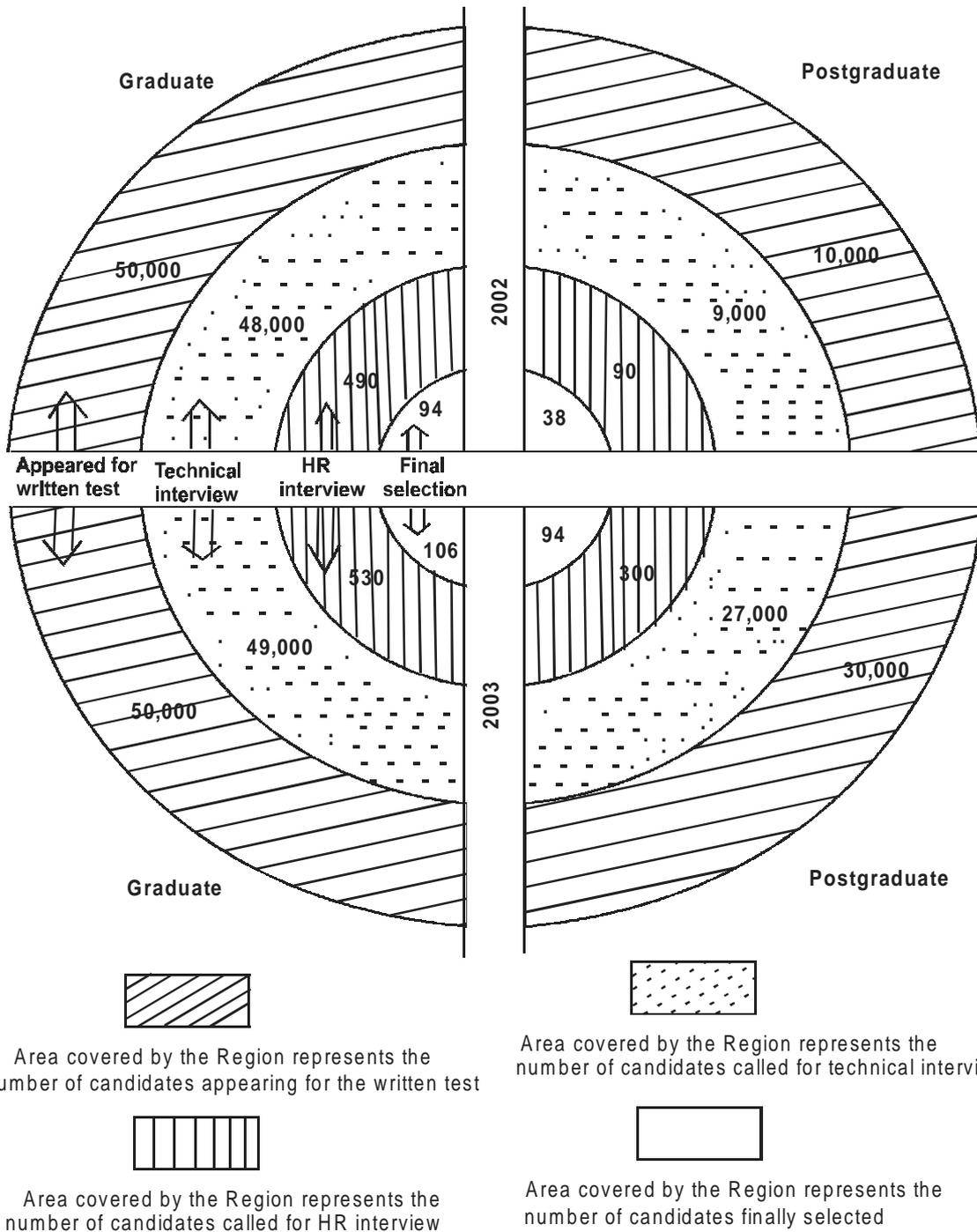
138. If a , b and c are digits, is $(a + b + c)$ a multiple of 9? [A digit can be one of the integers 0, 1, 2, 3, 4, 5, 6, 7, 8, 9.]
- I. The three digit number abc is a multiple of 9.
 - II. $[(a \times b) + c]$ is a multiple of 9.
139. AB and CD are both chords of the circle with centre O . Which is longer — AB or CD ?



- I. Arc AEB is smaller than arc CFD .
 - II. The area of the circular segment $CAEBDC$ is smaller than the area of circular segment $ACFDBA$.
140. How much cardboard (in terms of the area) will it take to make an open cubical cardboard box with no top?
- I. The area of the bottom of the cardboard box is 4 square feet.
 - II. The volume of the cardboard box is 8 cubic feet.

Direction for questions 141 to 144: Answer the questions based on the given information:

Following figure gives us the detailed information regarding the selected entry level software professionals for a reputed organization for the year 2002 and 2003. In the figure **upper half** of figure gives detail of the data for the year 2002 and **lower half** for the year 2003. Also **left half part** of the figure tells about graduate candidates and **right half part** gives details about postgraduate candidates. Selection process consists of a written test followed by a technical interview and then a HR interview. A candidate can be eliminated at the end of each round.



141. The difference in percentage of candidates finally selected to the total number of candidates who appeared for the written test in the years 2002 and 2003 is :
 a. 13.33% b. 0.03% c. 0.3% d. 1.33%
142. The ratio of graduates not called for the technical interview in 2002 to that of postgraduates not called for the technical interview in 2002 and 2003 is :
 a. 2.0 b. 0.75 c. 0.5 d. Data insufficient
143. Total final selection for both the years (2002 and 2003) is approximately what percentage of the total postgraduate candidates called for HR interview in the period 2002-2003?
 a. 80% b. 85% c. 90% d. 75%
144. Ratio of final selection of graduates in 2002 to postgraduates in 2003 is :
 a. 1 : 1 b. 2 : 3 c. 27 : 50 d. 3 : 2

Directions for questions 145 to 148: Refer to data below and answer the questions.

It was observed that the prices of Vinyl Chloride (VC) follow the equation $y = \frac{1}{3}x^3 - 4x^2 + 15x + 4$, where y is the price of VC per tonne (in Rs.' 000) and x is the excess supply of VC (in lakh tonnes) during the previous year. VC is used to manufacture another polymer Poly Vinyl Chloride (PVC).

Across the years, a cubic equation relationship of the form $y = ax^3 + bx^2 + x + d$ was found to be true for calculating the prices of PVC per tonne (in Rs.'000) i.e., (y) and excess supply of PVC during the previous year (in lakh tonnes) i.e., (x). For a period of 4 years, the prices of PVC and the excess supply during the previous year are given in the following table.

Price (Rs. per tonne)	Excess supply of PVC in previous year (tonnes)
45000	200,000
39000	300,000
33000	400,000
21000	500,000

A company PET India Ltd decides to manufacture and sell PVC. For each tonne of PVC manufactured, 1.2 tonne of VC is required, which is to be bought by the company. Further, the fixed costs for different levels of production are given below.

Upto 3000 tonnes \Rightarrow Rs 50 lakh

For 3001 to 5000 tonnes \Rightarrow Rs 70 lakh

For 5001 to 10000 tonnes \Rightarrow Rs 100 lakh.

The produced PVC is sold at prevailing prices.

Contribution per tonne of PVC produced in a year = Price of PVC per tonne – Price of required VC per tonne of PVC produced.

Breakeven production happens when fixed cost is equal to total production of PVR.

145. Which of the following equations represent the relationship between the price of PVC and the excess supply of PVC during the previous year where y is the price of PVC (in Rs.' 000) and x is the excess supply in the previous year (in lakh tonnes)?
- a. $y = 3x^3 + 4x^2 - 3x + 16$ b. $y = -(x^3 + 9x^2 - 32x + 81)$
 c. $y = -(x^3 - 9x^2 + 32x - 81)$ d. $y = -3x^3 - 4x^2 + 3x - 16$

153. Which of the following statements is true
- Death rate was 42% in town Chitra
 - Crude death rate of town Akshaya was more than that of town Bistara.
 - Standardized death rate of town Dhanusha less than that of Chitra.
 - Standardized death rate of any town is more than the crude death rate.

Direction for questions 154 to 158: Refer to data below and answer the questions.

The table given below shows the world cup cricket sponsorship packages by Doordarshan and Star Sports. The time given against each amount denotes the airtime available for the given amount (for example, to obtain 300 secs of airtime across all group B league matches for live coverage in Doordarshan, the amount to be paid is Rs. 2 crore)

The time given in seconds (sec) denotes the air time available for advertisement display.

Matches	Doordarshan Packages				Star Sports Packages	
	Live Coverage				Live	Recorded
Sponsorship amount	Rs 2 crore	Rs 1.5 crore	Rs 1 crore	Rs 75 lakhs	Rs 50 lakhs	Rs 25 lakhs
Final	330 sec	270 sec	210 sec	150 sec	30 sec	30 sec
Semi Finals	360 sec	300 sec	180 sec	120 sec	30 sec	30 sec
Quarter Finals	360 sec	240 sec	180 sec	120 sec	30 sec	30 sec
Group A league matches	390 sec	270 sec	180 sec	150 sec	–	30 sec
Group B league matches	300 sec	240 sec	120 sec	120 sec	630* sec	150** sec

** League matches featuring India as one of the teams.

* All other league matches (not featuring India)

The above table is used by companies to plan the media mix — an optimum media mix indicates getting maximum air time with minimum cost.

154. If a company spends the same amount as asked by Doordarshan for 330 sec during live coverage of the finals for getting a similar package in live coverage of the finals on Star Sports how many seconds of air time, either more or less, does it get?
- 120 seconds more
 - 210 seconds more
 - 210 seconds less
 - 120 seconds less
155. If a sponsor has a budget of Rs 150 lakh and he wishes to have maximum air time, not withstanding which match he is sponsoring, then what is the optimum media mix for him?
- sponsor live coverage on Doordarshan of final
 - sponsor live coverage on Star Sports of Group B league matches not featuring India.
 - sponsor the recorded coverage on Star Sports of the Group A league matches.
 - Sponsor live coverage on Doordarshan of the Group A league matche.
156. A company X has decided to spend Rs 10 crore on the coverage of the final on Doordarshan. Its competitor company Y also spends the same amount for the same match at the same time but on Star Sports. What is the maximum difference between the air times that company 'X' can get?
- No difference
 - 1600 seconds
 - 1500 seconds
 - 600 seconds
157. A sponsor has decided to obtain 180 seconds of air time on the recorded coverage of the quarter finals on Star Sports. He changed his mind and decided to obtain the same time on live coverage of a Group A league match on Doordarshan. How much more or less, should he pay?
- Rs. 50 lakhs less
 - Rs. 50 lakhs more
 - He has to pay equal amount
 - Depends on Doordarshan package chosen

161. How many white coloured cars are of single owner which are currently not insured?
a. 5 b. 6 c. 8 d. 7
162. What is the approximate difference between the average price of white coloured cars and that of other coloured cars?
a. Rs. 40,000 b. Rs. 25,000 c. Rs. 45,000 d. Rs. 35,000
163. By what percentage is the total number of cars registered in the year 2000 more than that registered in 1999?
a. 266.66% b. 166.66% c. 133.33% d. Data insufficient

Additional information for questions 164 and 165: All the M-800 STD cars are categorised in an increasing order of kilometers (KMs) travelled and in a decreasing order of their respective prices. Then they are ranked as 1, 2... so on according to their order in the respective tables (distance table and price table). The cars with the same data are given the same rank in the table. After this, the cars are ranked as per the increasing order of the cumulative ratings, where Cumulative Rating = Ranking in the distance table \times Ranking in the price table.

164. What is the rank of the car with M. Blue colour in the cumulative rating table?
a. 3 b. 4 c. 5 d. None of these
165. What is the rank of the car in the cumulative rating table with the date of registration as 20/04/2001?
a. 6 b. 4 c. 7 d. None of these