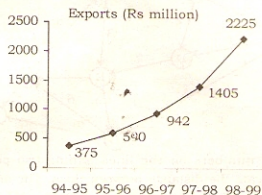
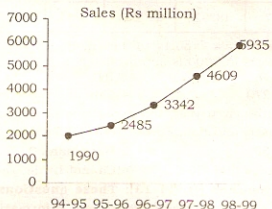


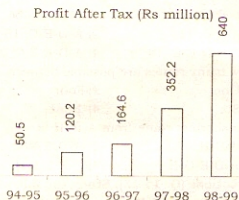
177. Who received the Wisden Award for the "Indian Cricketer of the 20th Century"?
- 1) Sachin Tendulkar
 - 2) Kapil Dev
 - 3) Sunil Gavaskar
 - 4) Ajit Wadekar
178. Where is SAARC Secretariat situated?
- 1) Islamabad
 - 2) Colombo
 - 3) Kathmandu
 - 4) New Delhi
179. Excise duty on a commodity is payable with reference to its
- 1) Production
 - 2) Production and sale
 - 3) Production and transportation
 - 4) Production, transportation and sale
180. The first of the six 250 MW units of the 1500 MW Nathpa Jhakari Hydel Power Project has been launched in October 2003 in
- 1) Madhya Pradesh
 - 2) Haryana
 - 3) Himachal Pradesh
 - 4) Kerala
181. The full form of TRAI is
- 1) Transport Regulatory Authority of India
 - 2) Telecom Regulatory Authority of India
 - 3) Telecom Regulatory Agency of India
 - 4) Transport Regulatory Agency of India
182. According to "India Vision 2020" if India has to attain the goal of total employment by the year 2020, it should work towards generating scope for _____ jobs per year.
- 1) 1 million
 - 2) 2 million
 - 3) 5 million
 - 4) 10 million
183. Afro-Asian Games from October 24, 2003 to November 1, 2003 were held at
- 1) New Delhi
 - 2) Kolkata
 - 3) Hyderabad
 - 4) Chennai
184. India's exclusive communication satellite — was launched from the spacecraft of Kourou in French Guyana on September 28, 2003.
- 1) INSAT - 3E
 - 2) INSAT - 2DT
 - 3) INSAT - 3D
 - 4) INSAT - 3DT
185. Indian won the sixth men's Asia Cup Hockey tournament held in September, 2003 in Kuala Lumpur by beating
- 1) Korea
 - 2) Pakistan
 - 3) Japan
 - 4) China
186. China becomes the third country, after Russia and the US, to send a man into orbit in their own space vehicle. The chosen "taikonaut" is
- 1) Neil Armstrong
 - 2) Yang Liei
 - 3) Ho Chi Min
 - 4) Ho Liwei
187. The book "The Kargil Conflict 1999: Separating Fact From Fiction" is written by
- 1) Dr Shireen Mazari
 - 2) Khuswant Singh
 - 3) Nawaz Sharif
 - 4) None of these
188. "Because you deserve to know" is the punchline used by
- 1) The Times of India
 - 2) The Hindu
 - 3) Indian Express
 - 4) Hindustan Times
189. Which country has banned the word 'E-mail' from all government publications and websites and replaced it by 'Courriel'?
- 1) England
 - 2) USA
 - 3) Italy
 - 4) France
190. The punchline used by HUTCH is
- 1) "The name inspires trust"
 - 2) "Improving the quality of life"
 - 3) "Wherever you go our network follows"
 - 4) "Express yourself"
191. In which State is Nalsarover Bird Sanctuary located?
- 1) Maharashtra
 - 2) Orissa
 - 3) Gujarat
 - 4) Rajasthan
192. Which one of the following provides fixed line telephone services with numbers starting with 2?
- 1) Reliance Infocom
 - 2) Tata Infocom
 - 3) BSNL
 - 4) HUTCH
193. Which among the following foreign banks is completing 150 years of its establishment this year?
- 1) HSBC
 - 2) Bank of Tokyo
 - 3) Bank of America
 - 4) None of these
194. Which of the following agencies does not finance local bodies for infrastructural development?
- 1) LIC
 - 2) HUDCO
 - 3) CRISIL
 - 4) All of these
195. Which of the following colours are mixed to bring out the several colours seen on TV?
- 1) Red, Yellow, Blue
 - 2) Red, Yellow, Green
 - 3) Red, Green, Blue
 - 4) Yellow, Green, Blue
196. The Capital of Lakshadweep is
- 1) Port Blair
 - 2) Silvassa
 - 3) Daman
 - 4) Kavaratti
197. Saatvik Agarwal, a 14-year old boy, has been chosen as a "Student Astronaut" for NASA's Mars exploration. The boy belongs to
- 1) Delhi
 - 2) Mumbai
 - 3) Kolkata
 - 4) Chennai
198. The fifth Ministerial Conference of World Trade Organisation (WTO) was held from September 10 to 14, 2003 at
- 1) Tokyo
 - 2) Cancun
 - 3) New Delhi
 - 4) Geneva
199. On October 29, 2003, the fourth flight-test of supersonic antiship cruise missile was conducted. The name of the missile is
- 1) BrahMos
 - 2) Agni
 - 3) Naag
 - 4) Trishul
200. Petroleum prices in the world are determined by
- 1) IMF
 - 2) IBRD
 - 3) OPEC
 - 4) None of these

Section I
Data Analysis and Sufficiency

Directions (Q. 1-2): These questions are based on the information given in the diagrams below.



Return on equity : $\frac{\text{Net Profit}}{\text{Equity}}$



- What is the average rate of the contribution of exports to the sales during the period 1994-95 to 1998-99 as a percentage?
 - 30.1
 - 27
 - 2.7
 - 138
- If the sales for the year 1999-2000 exceed to that of the year 1998-99 by 50% and the profits increase proportionately, then what would be the increase in return on equity (Assume the equity to remain unchanged)?
 - 5%
 - 25%
 - 50%
 - Cannot be determined

Directions (Q. 3-5): Answer these questions based on the information in the table given below.

EMPLOYMENT DATA: 1991-1997

(Figures in Millions)

Year → Employment ↓	1991	1992	1993	1994	1995	1996	1997
1. In organised sector	25.6	28.2	21.7	30.5	35.2	40.2	45.3
2. In unorganised sector	35.7	41.5	29.1	42.5	50.2	59.8	75.1
3. Unemployed	15.4	17.1	25.5	22.5	24.8	22.9	24.8

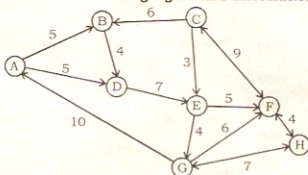
- The rate of unemployment was the highest in
 - 1991
 - 1993
 - 1995
 - 1997
- The number of employables showed the highest percentage increase in the year
 - 1996-97
 - 1995-96
 - 1993-94
 - 1991-92
- From 1994 to 1997
 - Employment numbers have fluctuated
 - Employment in organised sector has shown steady increase.
 - Figures in all the three categories have shown a steady increase.
 - Cannot reach any of the above conclusions.

Directions (Q. 6-8): Study the table given below to answer these questions. The table gives the sales data of four branches of a paint company in the three months of a year.

Branch	Oct			Nov			Dec		
	First Bill No.	Last Bill No.	Sale (Rs)	First Bill No.	Last Bill No.	Sale (Rs)	First Bill No.	Last Bill No.	Sale (Rs)
1. Chennai	2864	2942	345641	3106	3106	461750	3107	3280	485097
2. Bangalore	4051	4101	147345	4204	4204	231469	4205	4296	221895
3. Cochin	3469	3601	269473	3704	3704	208947	3705	3762	210494
4. Hyderabad	2644	2703	165442	2787	2787	187928	2788	2841	175427

6. The total number of bills raised by the company from October to December is
 1) 1045
 2) 1155
 3) 777
 4) 1662
7. The average sale per bill in the given period was the highest in
 1) Hyderabad
 2) Cochin
 3) Bangalore
 4) Chennai
8. Which of the following statements is/are true?
 1) Bangalore branch raised the highest number of bills in December.
 2) All branches show increase in the sale every month in the period shown.
 3) Sale of Hyderabad branch in March was approximately its average sale for the three months shown.
 4) Ranking the branches by sale in the three months shows Chennai in the lead and Hyderabad coming last.
9. Australia's exports to Japan, South Asia and Russia in 2000 is approximately
 1) 185
 2) 160
 3) 270
 4) Cannot be determined
10. In the given year, the total domestic demand of Russia and East Europe is — thousand.
 1) 50
 2) More than 50
 3) Less than 50
 4) Cannot be determined

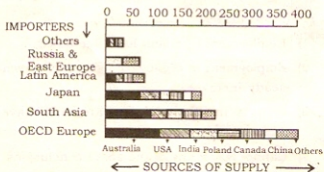
Directions (Q. 11-13): These questions are based on the following figure and information.



The numbers on the lines joining two points indicate the distance between them. The arrows indicate the way/ways in which the movement is allowed: If the arrow points in only one direction, then the movement is not allowed in the other direction.

Directions (Q. 9-10): Refer the following bar chart to answer these questions.

ELECTRONIC GOODS : HOW MUCH REQUIRED AND WHERE ACQUIRED (in thousand for the year 2000)

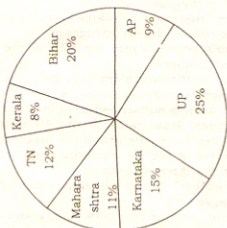


11. The shortest route from A to C will be
 1) A-B-C, 11
 2) A-D-E-C, 15
 3) A-B-D-E-C, 19
 4) A-D-E-F-C, 26
12. How many routes are possible between A and H?
 1) One
 2) Four
 3) Six
 4) None
13. The shortest route from A to H is
 1) A-G-H
 2) A-D-E-F-H
 3) A-D-E-G-H
 4) A-B-C-F-H

Directions (Q. 14-15): Study the following graph and the table carefully to answer these questions.

**POPULATION : DATA OF DIFFERENT STATES
IN 1998**

(Total Population of all the States = 25 Lakh)



**SEX AND LITERACYWISE POPULATION RATIO
States'**

States'	Sex		Literacy	
	Male :	Female	Literate :	Illiterate
Uttar Pradesh	5	3	2	7
Bihar	3	1	1	4
Andhra Pradesh	2	3	2	1
Karnataka	3	5	3	2
Maharashtra	3	4	5	1
Tamil Nadu	3	2	7	2
Kerala	3	4	9	4

14. Approximately, what is the number of literate people in Maharashtra and Karnataka together?
- 4.5 lakh
 - 6.5 lakh
 - 3 lakh
 - 3.5 lakh
15. In Tamil Nadu, if we suppose that 70% of the females and 75% of the males become literate, then what is the total number of illiterates in the State?
- 75,000
 - 85,000
 - 71,000
 - 81,000

Directions (Q. 16-17): Refer the following table to answer these questions.

**DISTRIBUTION OF MARKS OBTAINED BY 100
STUDENTS IN TWO PAPERS
(I & II) IN MATHEMATICS**

Marks out of 50 → Paper ↓	40 & above	30 & above	20 & above	10 & above	below 10
I	5	22	67	82	18
II	8	31	79	91	9
Average (Aggregate)	6	27	71	88	12

16. How many students have scored less than 40% marks in the aggregate?
- 30
 - 12
 - 17
 - 29
17. What is the percentage of students who obtained 60% and more marks in Paper II over the number

of students who obtained 40% and more marks in the aggregate (approximately)?

- 44
- 40
- 48
- Data inadequate

Directions (Q. 18-20): Study and analyse the table given below to answer these questions.

PRODUCTION, EXPORT AND CONSUMPTION OF COFFEE (lakh tonnes)					
Year	Production	Export			Domestic
		Qty.	Rs crore	US \$ million	
1990-91	1.70	1.00	279	108	0.54
1996-97	2.05	1.81	1467	452	0.55
1997-98	2.28	1.79	1708	477	0.50
1998-99	2.65	2.12	1752	431	0.50
1999-00	2.92	2.45	1901	447	0.55
2000-01	3.01	2.47	1347	334	0.58
2001-02	3.06	2.13	1050	246	0.60

18. The highest percentage of domestic consumption with reference to the production of coffee has been in the year
- 2001-02
 - 2000-01
 - 1996-97
 - 1990-91
19. During the given period, though the largest quantity of coffee exported has been lakh tonnes, the foreign exchange earned in dollars had been the highest in the year
- 3.01, 1999-00
 - 2.47, 1997-98
 - 3.06, 1997-98
 - None of these
20. Which of the following statements is correct ?
- The domestic consumption of coffee has been consistently increasing.
 - The foreign exchange earned in rupees has been increasing during the period 1990-91 to 2000-01.
 - The production of coffee in the country has been showing consistently upward trend during the given period.
 - None of these

Directions (Q. 21-25): In each of these questions, two statements are given followed by two conclusions (I) and (II). Consider the two statements to be true even if they seem to be at variance from commonly known facts. Decide which of the given conclusion(s) definitely follow(s) from the given statements. Indicate your answer as

- if only conclusion I follows
- if only conclusion II follows
- if neither I nor II follows

- 4) if both the conclusions I and II follow
21. **Statements:**
I. All pilots are brave men.
II. All astronauts are pilots.
Conclusions:
I. All astronauts are brave men.
II. Some pilots are astronauts.
22. **Statements:**
I. Some aeroplanes are living beings.
II. Some non-living beings are ghosts.
Conclusions:
I. Some aeroplanes are ghosts.
II. Some aeroplanes are not ghosts.
23. **Statements:**
I. Some hens are cows.
II. All cows are horses.
Conclusions:
I. Some horses are hens.
II. Some hens are horses.
24. **Statements:**
I. All lawyers are cheats.
II. Some women are lawyers.
Conclusions:
I. Some women are cheats.
II. All cheats are women.
25. **Statements:**
I. All lemons are mangoes.
II. No mango is cheap.
Conclusions:
I. All mangoes are lemons.
II. No lemon is cheap.
- Directions (Q. 26-30): Each of these items consist of a question and the two statements labelled (A) and (B). Use the data given in the statements (A) and (B) together with other known facts to decide whether the two statements are sufficient to answer the given question.**
- Mark your answer as**
- 1) if you can get the answer from statement (A) alone but not from (B) alone.
 - 2) if you can get the answer from statement (B) alone but not from (A) alone.
 - 3) if you can get the answer from both the statements (A) and (B) together, but not from (A) alone or (B) alone.
 - 4) if you cannot get the answer from both the statements (A) and (B) together, but need even more data.
26. A car drives around a circular track once. A second car drives from point A to point B in a straight line. Which car travels faster?
(A) The car driving around the circular track takes a longer time to complete its trip than the car travelling in a straight line.
(B) The straight line from A to B is $1\frac{1}{2}$ times as long as the diameter of the circular track.
27. Is y larger than x?
(A) $x + y = 2$ (B) $x/y = 2$
28. Mary must work 12 hours to make, in wages, the cost of a set of luggage. How many dollars does the set of luggage cost?
(A) Jim must work 15 hours to make, in wages, the cost of the set of luggage.
(B) Jim's hourly wages are 80% of the Mary's hourly wages.
29. A group of 49 consumers were offered a chance to subscribe to 3 magazines : A, B and C. 38 of the consumers subscribed to at least one of the magazines. How many of the 49 consumers subscribed to exactly two of the magazines?
(A) Twelve of the 49 consumers subscribed to all the three magazines.
(B) Twenty of the 49 consumers subscribed to magazine A.
30. Which of the four numbers w, x, y and 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.
- Directions (Q. 31-35): Each of these questions, consists of one Assertion (A) and one Reason (R). Mark your answer as**
- 1) if both the Assertion A and the Reason R are correct and R explains A.
 - 2) if both the Assertion A and the Reason R are correct but R does not explain A.
 - 3) if A is correct but R is wrong.
 - 4) if A is wrong but R is correct.
31. **Assertion (A):** A saltwater fish drinks sea water whereas a freshwater fish never drinks water.
Reason (R): A saltwater fish is hypertonic to its environment while a freshwater fish is hypotonic to its environment.
32. **Assertion (A):** The territory of India is larger than the territories of the States taken together.
Reason (R): India is the Union of States.
33. **Assertion (A):** Alcohol rather than mercury is used in a thermometer to measure a temperature of -60°C .
Reason (R): Alcohol has a lower freezing point than mercury.
34. **Assertion (A):** The windows in some buildings are 'double-glazed' (ie they have a thin layer of air between the two sheets of glass) to reduce heat losses to the outside.
Reason (R): Glass is a very bad conductor of heat.
35. **Assertion (A):** India is one of the leading fishing countries in the world.
Reason (R): India has long coastline and a large fish-eating population.
- Directions (Q. 36-40): Each of these questions, consists of two quantities, one in column A and one in Column B. Compare the two quantities and mark your answer as**
- 1) if the quantity in column A is greater.

- 2) if the quantity in column B is greater.
 3) if the two quantities are equal.
 4) if the relationship cannot be determined from the information given.

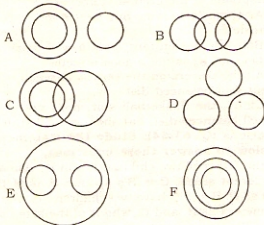
Column A**Column B**

36. $(0.2)^3$ $\sqrt{0.64}$
 37. $(5)(144)(6)$ $(12^2)(5^2)$
 38. $\frac{C^2D^2E^2}{C^3D^3E^3}$ $\frac{CDE}{3}$

39. Distance covered by a motorist going @ 50 miles per hour from 10:55 pm to 11:25 pm, the same evening. 25 miles
 40. Radius of a circle with circumference 9 Radius of a circle with area of 25 sq units.

Section II**Intelligence and Critical Reasoning**

Directions (Q. 41-46): Each item is represented by a circle. Your task is to match the right parts on the basis of the relationship among the words given in each of these questions.



41. Water : Atmosphere : Hydrogen
 1) A 2) B 3) D 4) E
 42. Shirt : Collar : Pocket
 1) E 2) D 3) A 4) B
 43. English : Latin : Greek
 1) A 2) F 3) C 4) D
 44. Week : Day : Year
 1) F 2) E 3) C 4) A
 45. Frame : Model : Painting
 1) A 2) B 3) E 4) F
 46. City : Children : State
 1) F 2) E 3) D 4) C

Directions (Q. 47-51): Use the information given below to answer these questions.

The office of the XYZ Corporation presently consists of three book-keepers (A, B and C) and five secretaries (D, E, F, G and H). Management is planning to open a new office in another city using

three secretaries and two book-keepers of the present staff. To do so, they plan to separate certain individuals who do not function well together. The following guidelines were established to set up the new office:

- (i) Book-keepers A and C are constantly finding fault with one another and should not be sent as a team to the new office.
 (ii) C and E function well alone but not as a team. They should be separated.
 (iii) D and G have not been on the speaking terms for many months. They should not go together.
 (iv) Since D and F have been competing for promotion, they should not be in the same team.
47. If A is to be moved as one of the book-keepers, then which of the following cannot be a possible working unit?
 1) ABDEH 2) ABDGH 3) ABEFH 4) ABEGH
48. If C and F are moved to the new office, then how many combinations are possible?
 1) 1 2) 2 3) 3 4) 4
49. If C is sent to the new office, then who among the following cannot go with C?
 1) B 2) D 3) F 4) G
50. Under the guidelines developed, who among the following must go to the new office?
 1) B 2) D 3) E 4) G
51. If D goes to the new office, then which of the following is (are) true?
 I. C cannot go
 II. A cannot go
 III. H must also go
 1) I only 2) II only
 3) I and II only 4) I and III only

Directions (Q. 52-55): Use the information given below to answer these questions.

After months of talent searching for an administrative assistant to the President of the College, the field of applicants has been narrowed down to five (A, B, C, D and E). It was announced that the finalist would be chosen after a series of all-day group personal interviews were held. The examining committee agreed upon the following procedure :

- (i) The interviews will be held once a week.
 (ii) No more than 3 candidates will appear at any all-day interview session.
 (iii) Each candidate will appear at least once
 (iv) If it becomes necessary to call applicants for additional interviews, no more than one such applicants should be asked to appear the next week.
 (v) Because of the details in the written applications, it was agreed that whenever Candidate B appears, A should also be present.
 (vi) Because of travel difficulties, it was agreed

that C will appear for only one interview.

52. At the first interview, the candidates A, B and D appear. Which of the following combinations can be called for the interview to be held next week?
 1) BCD 2) CDE 3) ABE 4) ABC
53. Which of the following is a possible sequence of combinations for interviews in two successive weeks?
 1) ABC ; BDE 2) ABD ; ABE
 3) ADE ; ABC 4) BDE ; ACD
54. If A, B and D appear at the interview and D is called for an additional interview the following week, then which two candidates may be asked to appear with D?
 I. A II. B III. C IV. E
 1) I and II 2) I and III only
 3) II and III only 4) III and IV only
55. Which of the following correctly states the procedure followed by the search committee?
 I. After the second interview, all the applicants have appeared at least once.
 II. The committee sees atleast one applicant a second time.
 III. If a third session is held, then it is possible for all the applicants to appear at least twice.
 1) I only 2) II only
 3) I and II only 4) III only

Directions (Q. 56-58): Study the information given below to answer these questions.

A certain city is served by six subway lines, designated by the letters A, B and C and the numbers 1, 2 and 3. When it snows, morning service on line B is delayed.

When it rains or snows, service on the lines A, 2 and 3 is delayed on both the morning and the afternoon.

When the temperature drops below 30°F, then afternoon service is cancelled on either line A or line 3, but not both. When the temperature rises above 90°F, then afternoon service is cancelled on either line C or line 3, but not both.

When service on line A is delayed or cancelled, then service on the line C, which connects with line A, is delayed. When service on line 3 is cancelled, then service on line B, which connects with line 3, is delayed.

56. On January 10, with the temperature at 15°F, it snows all the day. On how many lines will the service be affected, including both the morning and the afternoon?
 1) 2 2) 3 3) 4 4) 5
57. On August 15, with the temperature at 97°F, it begins to rain at 1 pm. What is the minimum number of lines on which the service will be affected?
 1) 2 2) 3 3) 4 4) 5
58. On which of the following occasions would the service on the greatest number of lines be disrupted?

- 1) A snowy afternoon with the temperature at 45°F.
 2) A snowy morning with the temperature at 45°F.
 3) A rainy morning with the temperature at 45°F.
 4) A snowy afternoon with the temperature at 20°F.

Directions (Q. 59-60): Use the statement given below to answer these questions.

All good athletes want to win and all athletes who want to win, eat a well-balanced diet. Therefore, all athletes who do not eat a well-balanced diet are bad athletes.

59. If the assumptions of the argument above are true, then which of the following statements must be true?
 1) No bad athlete wants to win.
 2) No athlete who does not eat a well-balanced diet is a good athlete.
 3) Every athlete who eats a well-balanced diet is a good athlete.
 4) All athletes who want to win are good athletes.
60. Which of the following, if true, would refute the assumptions of the argument above?
 1) Ann wants to win, but she is not a good athlete.
 2) Bob, the accountant, eats a well-balanced diet, but he is not a good athlete.
 3) All the players on the Burros baseball team eat well-balanced diet.
 4) Cindy, the Basketball star, does not eat a well-balanced diet, but she is a good athlete.

Directions (Q. 61-64): Study the statements given below to answer these questions.

A is the father of two children B and D, who are of the different sexes. C is B's spouse. E is of the same sex as D. B and C have two children : F, who is of the same sex as B; and G, who is of the same sex as C.

E's mother H, who is married to L, is the sister of D's mother M.

E and E's spouse I have two children J and K, who are of the same sex as I.

No person has married more than once and no children have been born out of wedlock.

The only restrictions on marriage are that marriage to a sibling to a direct descendant, or to same time, are forbidden.

61. F is
 1) G's brother 2) G's sister
 3) B's daughter 4) D's niece or nephew
62. According to the rules, D can marry
 1) F only 2) G only
 3) J only 4) F, J or K
63. If L and H divorced, then H could marry
 I. D only II. F III. D or G
 1) I only 2) II only

- 3) III only 4) II or III, but not both
64. If the generation of F and K's parents and their siblings contains more females than males, then which of the following must be true?
- 1) There are more females than males in F and K's generation
 - 2) J is a male
 - 3) A is of the same sex as D
 - 4) K and G are of the same sex

Directions (Q. 65-66): Examine the route diagram given below to answer these questions.



65. Which is the most crowded junction, assuming that each arrow denotes equal traffic?
- 1) U 2) X 3) Y 4) Z
66. What is the maximum number of bus routes possible from X to Y so that the bus does not come to one junction more than once in a route?
- 1) 4 2) 6 3) 8 4) 9

Directions (Q. 67-80): Answer these questions independent of each other.

67. In a war between Agrezi Pura and Pirangi Land, fought for 20 days, the number of people died on any given day is twice that of the number died on the previous day (except on the first day). If a total of 1024000 people died on the last day of this war, then the number of people died on the 10th day of the war is approximately
- 1) 512000 2) 1000
 - 3) 19352 4) None of these
68. Two trains bound for New Delhi from Kanyakumari leave Kanyakumari within an interval of 30 minutes. For the first train, there are 6 stops while for the second train, there are only 5 stops. At each stop, the trains will stop for 15 minutes. Which of the following statements should necessarily be true?
- 1) During the entire journey to New Delhi, the second train will always be behind first train.
 - 2) During the entire journey to New Delhi, the second train will always be behind first train if the first train stops at all the stations in which the second train stops.
 - 3) During the entire journey to New Delhi, the second train will be ahead of the first train at some points, if second train does not stop at the three stations in which the first train stops.
 - 4) None of the above.
69. In an examination, there are 90 questions. Each question carries 1 mark for the right answer, - 0.5 for the wrong answer and - 0.25 mark for the unanswered question. Ramesh had answered all the questions and got the number of wrong answers as half of the number of right answers. James had answered only 80 questions but got marks equal to that of Ramesh. Then
- 1) Both James and Ramesh had the same number of correct answers
 - 2) James had more correct answers than Ramesh.
 - 3) Ramesh had more correct answers than James
 - 4) Cannot be determined
70. A market survey shows that 40% consumers liked Cola drink of brand 'A', 25% consumers liked Cola drink of brand 'B' and 10% consumers liked both. What per cent of the consumers liked neither Cola 'A' nor 'B'?
- 1) 35% 2) 25% 3) 45% 4) 55%
71. A person has two parents, four grand parents, eight great grand parents, etc. Find the number of ancestors which the person has in the 10th generation (assume that there are no inter-marriages).
- 1) 102 2) 1024 3) 2054 4) 10208
72. A library has an average of 510 visitors on Sundays and 240 on other days. The average number of visitors per day in a month of 30 days beginning with a Sunday is
- 1) 285 2) 276 3) 250 4) 280
73. In climbing around a pole 15 m high, a monkey climbs 5 m and slips 3 m, in alternate minutes. To get to the top of the pole, the monkey would take minutes.
- 1) 10 2) 7 3) 15 4) 11
74. Parvati has more points than Nishant. Bulbul has fewer points than Laila. Nishant and Sam have the same number of points. Sam has more points than Bulbul.
- If the above statements are true, then which of the following must also be true ?
- 1) Laila has more points than Parvati
 - 2) Nishant has fewer points than Laila
 - 3) Parvati has more points than Bulbul
 - 4) Nishant has fewer points than Bulbul
75. Two mail sorters, x and y, are working at constant rates. x can sort l letters in 60 minutes, while y can sort l letters in 30 minutes. How many minutes will it take them to sort l letters working together but independently?
- 1) 10 2) 15
 - 3) 20 4) 45
76. Spokesman for a Chemical Company to the residents of a nearby town : We have conducted tests and have found no evidence that the fumes leaking from our waste disposal site are harmful to the humans. There is no reason to be alarmed, much less to begin evacuating people from their homes.

Which of the following would be the least relevant question for the head of the residents' committee to direct to the Chemical Company spokesman?

- 1) What steps are being taken to correct the situation?
 - 2) Are further tests being conducted?
 - 3) How much will it cost you to stop the leaks?
 - 4) Do the fumes have an adverse effect on plants or animals?
77. Typically, the entrepreneur is seen as an individual who owns and operates a small business. But simply to own and operate a small business or even a big business does not make someone an entrepreneur. If this person is a true entrepreneur, then new products are being created and new ways of providing services are being implemented.

Which of the following conclusions can best be drawn from the above passage?

- 1) Someone who develops an enterprise may be considered an entrepreneur.
 - 2) Entrepreneurs do not own and operate small business.
 - 3) Entrepreneurs are the main actors in the economic growth.
 - 4) Entrepreneurs are inventors.
78. The burning of coal, oil and other combustible energy sources produce carbon dioxide — a natural constituent of the atmosphere. Elevated levels of carbon dioxide are thought to be responsible for half the greenhouse effect. Enough carbon dioxide has been sent into the atmosphere already to cause a significant temperature increase. Growth in industrial production must be slowed, or production processes must be changed.

Which of the following, if true, would tend to weaken the strength of the above conclusion?

- 1) Carbon dioxide is bad for the health
 - 2) Most carbon dioxide is emitted by automobiles
 - 3) Industry is switching over to synthetic liquid fuel extracted from coal.
 - 4) A shift to other energy sources would be too costly.
79. Monopoly is characterised by an absence of or decline in competition. ABC Company realises that its operations are in competitive industries. Which of the following conclusions may be inferred from the above ?
- 1) ABC's market is not monopolistic.
 - 2) The ABC Company has no domestic competitors.
 - 3) The ABC Company is publicly-owned.
 - 4) The ABC Company is in a service industry.
80. In a world of many trading countries, the trade between two countries need not be balanced for the trade of each to be in global balance. Differing

demands and productive capabilities among the countries will cause a specific country to have trade deficits with some countries and surpluses with other countries.

Which of the following conclusions best summarises the passage above?

- 1) A country's trade will always be in balance even though it runs a deficit with a single country.
- 2) A country's trade deficits and surpluses with other countries always balance out.
- 3) A country's global trade balance is a sign of strength or weakness.
- 4) A country's global trade balance is determined by the relative demands and productive capabilities.

Section III

Language Comprehension

Directions (Q. 81-91): Read the following passages carefully to answer these questions. The questions are based on what is stated or implied in the respective passages.

Passage I

India's successful bid to host 2010 Commonwealth Games in Delhi has been hailed as an extraordinary victory by sports administrators, prominent sportspersons, politicians, barons of industry and common folk alike. That India, which is home to almost half the population of the British Commonwealth of Nations, will be only the second Asian country (after Malaysia in 1998) to host the prestigious, multi-discipline games is a matter of pride.

In the larger context, India's victorious bid must be viewed against the background of the country's recently acquired assertive self-identity as a developing nation confidently marching into the new millennium, leaving behind the colonial chippiness and excess baggage of the past; and what better way to showcase the emerging identity than on a prestigious centre-stage in the world of sport? India's giant neighbour, China, showed the way by winning its bid to host the 2008 Olympic Games in Beijing with a truly impressive show of infrastructure and all-round development. There will be real significance to New Delhi hosting, just two years after the Beijing Games, a multi-discipline event that is second only to the Olympics in sheer prestige and size. Not surprisingly, the Indian Olympic Association, the Union Government and the bid committee have received kudos from many quarters. The Confederation of Indian Industry has described the successful bid as "a turning point in the history of Indian sports." The CII, which already has a Memorandum of Understanding with the IOA, will be expected to play a key role in the financial success

of the games in a nation whose government can ill afford to spend tens of millions of dollars of taxpayers' money on a mega-event.

Critics have already made the point that the Commonwealth Games are not good value for money; Indian sports are not developed to the extent that the host nation can make a big impression on the games. What is more, although these games are far less ungovernable and unwieldy than the Olympics, it will take a management miracle to make them economically viable. This is where the role of corporate India assumes enormous significance. The games ultimate success will lie not only in how well the budgeted amount is spent on infrastructure development, on the games village and in sprucing up the nation's capital, but also in the Organising Committee's ability to run the big show without reaching too deep into the pocket of taxpayers.

81. Which one of the following is not the view of critics according to the passage?

- 1) Commonwealth Games are not good value for money.
- 2) Indian sports are not developed to the extent that it can make big impression.
- 3) Commonwealth Games are far less Governable than the Olympics.
- 4) None of these

82. According to the passage, the ultimate success of organising Commonwealth Games will be gauged by

- 1) Fund utilisation for infrastructure development of the games village.
- 2) Spending of money in bringing up the country's capital.
- 3) Ability to conduct within the budgeted amount without much public expense.
- 4) All the above

Passage II

The fundamental objectives of sociology are the same as those of science generally—discovery and explanation. To discover the essential data of social behaviour and the connections among the data is the first objective of sociology. To explain the data and the connections is the second and larger objective. Science makes its advances in terms of both of these objectives. Sometimes it is the discovery of a new element or set of elements that marks a major breakthrough in the history of a scientific discipline. Closely related to such discovery is the discovery of relationships of data that had never been noted before. All of this is, as we know, of immense importance in science. But the drama of discovery, in this sense, can sometimes lead us to overlook the greater importance of explanation of what is revealed by the data. Sometimes decades, even centuries, pass before known connections and relationships are actually explained. Discovery and explanation are the two great interpenetrating,

interacting realms of science.

The order of reality that interests the scientists is the empirical order, that is, the order of data and phenomena revealed to us through observation or experience. To be precise or explicit about what is, and is not, revealed by observation is not always easy, to be sure. And often it is necessary for our natural powers of observation to be supplemented by the most intricate of mechanical aids for a given object to become "empirical" in the sense just used. That the electron is not as immediately visible as is the mountain range does not mean, obviously, that it is any less empirical. That social behaviour does not lend itself to as quick and accurate description as, say, chemical behaviour of gases and compounds does not mean that social roles, statuses, and attitudes are any less empirical than molecules and tissues. What is empirical and observable today may have been nonexistent in scientific consciousness a decade ago. Moreover, the empirical is often data inferred from direct observation. All of this is clear enough, and we should make no pretense that there are not often shadow areas between the empirical and the nonempirical. Nevertheless, the first point to make about any science, physical or social, is that its world of data is the empirical world. A very large amount of scientific energy goes merely into the work of expanding the frontiers, through discovery, of the known, observable, empirical world.

From observation or discovery we move to explanation. The explanation sought by the scientist is, of course, not at all like the explanation sought by the theologian or metaphysician. The scientist is not interested in – not, that is, in his role of scientist – in ultimate, transcendental, or divine causes of what he sets himself to explain. He is interested in explanations that are as empirical as the data themselves. If it is the high incidence of crime in a certain part of a large city that requires explanation, the scientist is obliged to offer his explanation in terms of factors which are empirically real as the phenomenon of crime itself. He does not explain the problem, for example, in terms of references to the will of God, demons, or original sin. A satisfactory explanation, is not only one that is empirical, however, but one that can be stated in the terms of a causal proposition. Description is an indispensable point of beginning, but description is not explanation. It is well to stress this point, for there are all too many scientists, or would-be scientists, who are primarily concerned with data gathering, data counting, and data describing, and who seem to forget that such operations, however useful, are but the first step. Until we have accounted for the problem at hand, explained it causally by referring the data to some principle or generalisation already established, or to some new principle or generalisation, we have not explained anything.

83. What is the major objective of the passage?

- 1) Show that explanation is more important than discovery
 - 2) Prove that sociology is a science
 - 3) Explain the main objectives of sociology
 - 4) Discuss scientific method
84. According to the passage, scientists are not interested in theological explanations because
- 1) Scientists tend to be atheists
 - 2) Theological explanations are not empirical
 - 3) Scientists are primarily concerned with data collection
 - 4) Theology cannot explain social behaviour.
85. Which of the following statements best agrees with the author's position?
- 1) Explanation is inferred from data
 - 2) Empiricism is the science of discovery
 - 3) Generalisation is a prerequisite for explanation
 - 4) Causation is a basis for explanation
86. The major objective of the second paragraph is
- 1) To explain what the term 'empirical order' means
 - 2) To show that science changes as time passes
 - 3) To demonstrate the difference between chemistry and sociology
 - 4) To show electrons are empirical data

Passage III

Higher education, in modern society seeks to preserve, transmit and advance knowledge. Many experts, committees and commissions have underlined the importance of education as an instrument of change and progress. The task of nation building depends on the quality and number of persons coming out of our schools and colleges. The National Policy of Education (NPE) was formulated in 1968 with this long-term objective.

In a highly competitive social environment, only the best courses will attract students. Therefore, governmental agencies demand universities to demonstrate their commitment to quality before funding new courses. Traditional education is losing its aura, and the new courses should have their direct bearings on society. Educational institutions should develop a quality perspective, adopting corporate practices such as strategic planning, delegation of responsibility and fixing accountability norms. In the present socio-economic milieu, quality in education will appeal to many, especially to those students who intend to acquire professional skills and training that will establish them in the employment market. However, it is to be noted that quality assurance in education cannot be only student centric but should also be society-oriented, as society supports the education system. Every educational institution needs to set out its mission to meet the expectations of society and its people and the country at large.

The philosophy of total quality management

(TQM) has its relevance in educational institutions too. It is understood as application of management techniques for continuous quality improvement (CQI) in the academia with appropriate tools for meeting the needs and expectations of the stakeholders. The TQM approach in educational institutions emphasises that the institute should have a vision of what it wants to be and clearly define its mission compatible with the vision, and accordingly lay down its objectives to be transformed into specific, attainable, meaningful goals. The question is : How many educational institutions have a well-defined vision, mission and objectives and how effective are they in working towards accomplishment of the objectives? Frankly, many institutions in the realm of higher education lack the courage and commitment to implement TQM.

Quality in higher education can be attained only when promoters understand its significance and their own role in building a knowledge-society. Government initiatives and other measures will yield effective results only when educational institutions develop an ethical perspective. It is more relevant in the context of privatisation of education where the players will have more autonomy in the design of curriculum, recruitment of faculty, methods of enrollment and evaluation of students and so on. It is pertinent in this context to understand the concept of ethics.

The seven sins of current times can be reckoned as — business without morality, politics without principles, education without character, worship without sacrifice, wealth without hard work, devotion without austerity and existence without regard for the scriptures. Ethics, essentially personal, evolves from an individual's mind. Ethical behaviour of business organisations is shaped by the individual employee's characteristics. Ethics is grounded in values and, not learned nor taught. Values are learnt from childhood situations. The dimensions of ethics include adherence to truth, a commitment to justice and personal and public integrity. The meaning and implications of these are very wide. Integrity in the context of ethics is not financial integrity or honesty but integrity of character, which in a broad sense is consistency in thought, word and deed. Higher education system today is replete with unethical practices by management and teachers. Proliferation of educational institutions, especially professional colleges, is attributable largely to the commercial motives of wealth and popularity, not contributing to the social causes of education, knowledge dissemination and shaping the future of the young members of society. This is in sharp contrast to the ancient practice of education rooted firmly in philanthropic values. Modern educational institutions pay least attention to the development of infrastructure to facilitate the learning process. Overcrowded classrooms are a common sight in many

professional colleges. Instances of colleges admitting students much in excess of the permitted intake, blatant flouting of norms prescribed are abundant. This results in an insufficient teacher-student ratio, which adversely affects the quality of teaching and quality standards. Conducive atmosphere for learning is also lost in the process.

Recruitment of faculty is another area of concern. Nepotism is rampant, seriously jeopardising the abilities of institutes to offer value-based and quality assured education. Student's interests are being subordinated to personal interests and class interests of the promoters. Teachers should also be held responsible for the declining academic standards. They are pursuing the noble profession of teaching with commercial motives by relegating teaching to the level of a secondary source of income. Many academicians do not invest their intellectual capital for the betterment of the students. Instead, they devote their time and energies to their own commercial and political pursuits, other than their profession, which earns them social recognition and esteem. These trends have caused a serious lacunae in the higher education system, which ought to be oriented on ethical motives. The current trend will defeat the very purpose of education, which is intended to mould the youngsters of today into knowledgeable, resourceful, creative, and energetic members of society. Therefore, there is every need for inculcating ethical behaviour in all individuals, directly or indirectly involved in the functioning of higher education system. The education system needs to be overhauled before it degenerates further. The government, the educationists and the stakeholders, parents and students should bring about an ethical revolution by contributing their part. Only then can India strengthen its values in educating, make it qualitatively compatible with that of the developed countries, while keeping intact its traditional value base.

87. What is the central idea of the passage?

- 1) The current trend in education has led to the degeneration of the education system
- 2) The concept of standards and quality used in industry should be applicable in the field of education too
- 3) The traditional system of education must be revived for maintaining quality standards
- 4) Ethics is vital in all spheres of life

88. The author is for privatisation of educational institutes because

- 1) Private institutes motivate teachers better
- 2) All private institutes have a well defined vision
- 3) Students perform better in private institutes
- 4) Private institutes have more autonomy in designing their curriculum

89. Which of the following is true of the ancient system of education?

- 1) Traditional education had a quality perspective as opposed to modern institutions
- 2) Traditional education was essentially value based
- 3) Traditional educational institutions gave due importance to the development of infrastructure to facilitate the learning process
- 4) Traditional educational institutions played an important role in preserving and advancing knowledge

90. The author is least likely to agree with which of the following views?

- 1) Privatisation of education would lead to more autonomy of the educational institutions
- 2) There is a need to inculcate ethical behaviour in teachers to maintain quality standards in education
- 3) Student-teacher ratio affects the quality of teaching
- 4) The quality of education in developed countries is not satisfactory.

91. Which of the following has not caused a serious lacunae in the higher education system?

- 1) Devotion of teachers' time and energies to commercial motives
- 2) Selfless devotion to the cause of students
- 3) Poor development of infrastructural facilities
- 4) Excess intake of students in various colleges

Directions (Q. 92-94): In each of these questions there are four statements of which one is false. Select the statement which is not appropriate as per standard English usage.

92. 1) Temperance is practising moderation in food and drink.
2) A torpid person is generally hyperactive.
3) When you are uptight you are extremely nervous, tensed up.
4) An upfront payment is generally made in the open.
93. 1) Upmarket product are so positioned that the poor and lower middle classes prefer to buy them.
2) Those planning to enter brewery business must acquaint themselves with rudiments of zymology.
3) A dilettante is a person who follows art or science for amusement in a superficial way.
4) Excessive brutality marks x-rated films.
94. 1) When something starts getting smaller in size it is said to be waxing
2) A yokel is not familiar with the sights and sounds of a big city.
3) An urbane person is an uncouth person.
4) Every scientific theory is explained or justified by a principle or principles underlying it.

Directions (Q. 95-97): Choose the word that

best expresses the meaning of the given set.

95. Natural ability

- 1) Foster 2) Flair
3) Flaunt 4) Foible

96. Very untidy

- 1) Senile 2) Slovenly
3) Sloppy 4) Sapient

97. To be servile

- 1) Feign 2) Fawn
3) Fend 4) Fetish

Directions (Q. 98-100): Fill in the blanks with the most appropriate word/words given.

98. Leading designs of new fashion are _____.

- 1) Haute Couture 2) Clothiers
3) Hoopla 4) Basilisk

99. Sociological factors rather than legal implications should be the focus of study before society permits the terminally ill to exercise their _____.

- 1) Rule of thumb 2) Red alert
3) Reciprocal 4) Right to die

100. _____ very hungry, he bought a sandwich.

- 1) Feel 2) Feeling
3) He felt 4) To feel

Directions (Q. 101-103): In each of the sentences given in these questions, there are four words or phrases marked as A, B, C and D. Choose the one which is incorrectly used.

101. Against her parent's (A)/wishes (B)/she wants (C) to be the journalist (D).

- 1) A 2) B 3) C 4) D

102. I was surprised (A)/ by the large (B)/ amount (C)/ of people who (D)/ came there.

- 1) A 2) B 3) C 4) D

103. Leaves are believed (A)/ to be one of the best substance(B)/ to form (C)/compost piles(D)

- 1) A 2) B 3) C 4) D

Directions (Q. 104-106): A word is given in capital letters followed by four words. Choose the word that is opposite in meaning to the capitalised word.

104. BAROQUE

- 1) Polished 2) Constant
3) Aglow 4) Simple

105. CRYPTIC

- 1) Futile 2) Candid
3) Famous 4) Indifferent

106. DIATRIBE

- 1) Eulogy 2) Elegy
3) Range 4) Mass

Directions (Q. 107-109): A word is given in capital letters followed by four words. Choose

the word that is closest in meaning to the capitalised word.

107. FRAUGHT

- 1) Wild 2) Frantic
3) Filled 4) Threatening

108. INEBRIETY

- 1) Drunkenness 2) Gluttony
3) Felory 4) Starvatic

109. INUNDATE

- 1) Abuse 2) Deny 3) Swallow 4) Flood

Directions (Q. 110-114): In each of these questions, a related pair of words or phrases is followed by four pairs of words or phrases. Select the pair that best expresses a relationship similar to that expressed in the original pair.

110. BARGE : VESSEL ::

- 1) Link : Chain 2) Shovel : Implement
3) Clock : Hands 4) Brake : Automobile

111. RENEGADE : TURNCOAT ::

- 1) Miser : Spendthrift
2) Reprobate : Hot head
3) Maverick : Scape goat
4) Agitator : Fire brand

112. GLAND : ENZYME ::

- 1) Organ : Kidney 2) Brain : Cortex
3) Generator : Current 4) Muscle : Spasm

113. POTBOILER : NOVELIST ::

- 1) Easel : Painter
2) Doggerel : Poet
3) Caption : Cartoonist
4) Symphony : Composer

114. MODERATOR : DEBATE ::

- 1) Umpire : Game
2) Chef : Banquet
3) Legislator : Election
4) Conspirator : Plot

Directions (Q. 115-118): Choose the option that best expresses the meaning of the given idiomatic phrase.

115. By the skin of one's teeth

- 1) By a very small margin
2) To cost almost nothing
3) To take one's time to decide
4) To forgo old grievances

116. Bark is worse than one's bite

- 1) To misjudge a person
2) One is not as ferocious as one appears
3) Overlook faults in someone
4) Appearances are deceptive

117. Back up

- 1) Move back slowly 2) Withdraw
3) Support 4) Return

118. Look up to

- 1) Despise 2) Visit
3) Examine 4) Respect

Directions (Q. 119-120): In each of the sentences given in these questions, a portion is underlined. The sentence is followed by four alternative versions of the underlined portion.

Select the alternative that you consider most correct and effective according to the requirements of the standard written English.

119. Using it wisely, leisure promotes health, efficiency and happiness.
 1) If used wisely
 2) Having used it wisely
 3) Because of usefulness
 4) Because it is used wisely
120. Unless they reverse present policies immediately the world may suffer permanent damage from the unregulated use of pesticides.
 1) Unless present policies are reversed
 2) Unless present policies will be reversed
 3) If it will not reverse present policies
 4) If present policies will not be reversed

Section IV

Mathematical Skills

121. The two sides of a right triangle containing the right angle measure 3 cm and 4 cm. The radius of the incircle of the triangle is
 1) 3.5 cm 2) 1.75 cm 3) 1 cm 4) 0.875 cm
122. The distance between the tops of two trees 20 m and 28 m high is 17 m. The horizontal distance between the trees is
 1) 9 m 2) 11 m 3) 15 m 4) 31 m
123. A 25 m long ladder is placed against a vertical wall inside a room such that the foot of the ladder is 7 m from the foot of the wall. If the top of the ladder slides 4 m downwards, then the foot of the ladder will slide by
 1) 2 m 2) 4 m 3) 8 m 4) 16 m
124. If two diameters of a circle intersect each other at right angles, then the quadrilateral formed by joining their end points is a
 1) Rhombus 2) Rectangle
 3) Square 4) Parallelogram
125. Of all the chords of a circle passing through a given point in it, the smallest is that which
 1) Is trisected at the point
 2) Is bisected at the point
 3) Passes through the centre
 4) None of these
126. If the system of equations $2x + 3y - 5 = 0$, $4x + ky - 10 = 0$ has an infinite number of solutions, then
 1) $k = 3/2$ 2) $k \neq 3/2$
 3) $k \neq 6$ 4) $k = 6$
127. In covering a distance of 30 km, Amit takes 2 hours more than Suresh. If Amit doubles his speed, then he would take 1 hour less than Suresh. Amit's speed is
 1) 5 kmph 2) 7.5 kmph
 3) 6 kmph 4) 6.25 kmph
128. The least number that must be subtracted from each of the numbers 14, 17, 34 and 42 so that the remainders may be proportional, is
 1) 0 2) 1 3) 2 4) 7
129. In a mixture of 60 litres, the ratio of milk and water is 2 : 1. If this ratio is to be 1 : 2, then the quantity of water (in litres) to be further added is
 1) 20 2) 30 3) 40 4) 60
130. The ratio of the length of a rod and its shadow is 1 : $\sqrt{3}$. The angle of elevation of the sun is
 1) 30° 2) 45° 3) 60° 4) 90°
131. The length of a rectangle is increased by 60%. By what per cent would the width be decreased so as to maintain the same area?
 1) $37\frac{1}{2}\%$ 2) 60% 3) 75% 4) 120%
132. A rectangular carpet has an area of 60 m². Its diagonal and longer side together equal 5 times the shorter side. The length of the carpet is
 1) 5 m 2) 12 m 3) 13 m 4) 14.5 m
133. The opposite pairs of sides of a square are increased by 40% and 30% respectively. The area of the resulting rectangle exceeds the area of the square by
 1) 42% 2) 62% 3) 82% 4) 72%
134. The length of a rope by which a cow must be tethered in order that it may be able to graze an area of 9856 sq metres is
 1) 56 m 2) 64 m 3) 88 m 4) 168 m
135. How many bricks, each measuring 24 cm × 11.5 cm × 8 cm, will be needed to construct a wall 8 m long, 6 m high and 23 cm wide, while 5% of the total wall contains mortar?
 1) 5000 2) 5250 3) 4750 4) 5250
136. The dimensions of an open box are 52 cm × 40 cm × 29 cm. Its thickness is 2 cm. If 1 cu cm of metal used in the box weighs 0.5 gm, then the weight of the box is
 1) 6.832 kg 2) 7.576 kg
 3) 7.76 kg 4) 8.56 kg
137. How many metres of cloth 2.5 m wide will be needed to make a conical tent with base radius 7 m and height 24 m?
 1) 120 m 2) 180 m 3) 220 m 4) 550 m
138. A society of 356 voters has to choose a President. 5 candidates are seeking office. If all the voters exercise their votes, then what is the least number of votes that a successful candidate could receive and yet have more votes than any other candidate?
 1) 71 2) 72 3) 81 4) 82
139. Gunjan went to the stationers and bought things worth Rs 25, out of which 30 paise went on sales tax on taxable purchases. If the tax rate was 6 per cent, then what was the cost of the tax free items?
 1) Rs 15 2) Rs 20
 3) Rs 15.70 4) Rs 19.70
140. In an examination, there were 1100 boys and

- 900 girls. 50% of the boys and 40% of the girls passed the examination. The percentage of candidates failed is
 1) 45% 2) 45.5% 3) 54.5% 4) 59.2%
141. A discount series of 10%, 20% and 40% is equal to a single discount of
 1) 50% 2) 56.80% 3) 60% 4) 70.28%
142. The price of cooking oil has increased by 25%. The percentage of reduction that a family should effect in the use of cooking oil so as not to change its expenditure on cooking oil is
 1) 15% 2) 20% 3) 25% 4) 30%
143. Two men undertake to do a piece of work for Rs 200. One alone can do it in 6 days and the other in 8 days. With the help of a boy, they finish it in 3 days. How much is the share of the boy?
 1) Rs 45 2) Rs 40 3) Rs 30 4) Rs 25
144. Two pipes A and B can fill a tank in 20 and 30 minutes respectively. If both the pipes are used together, then how long will it take to fill the tank?
 1) 50 minutes 2) 12 minutes
 3) 25 minutes 4) 15 minutes
145. A grocer bought 10 kg of apples for Rs 81 out of which one kg were found rotten. If he wishes to make a profit of 10% then he should sell it at per kg.
 1) Rs 9.00 2) Rs 9.90 3) Rs 10.10 4) Rs 10.20
146. Sixteen cylindrical cans, each with a radius of 1 unit, are placed inside a cardboard box four in a row. If the cans touch the adjacent cans and/or the walls of the box, then which of the following could be the interior area of the bottom of the box in square units?
 1) 16 2) 32 3) 64 4) 128
147. An express train was running at an average speed of 100 kilometres per hour, stopping for 3 minutes after every 75 kilometres. How long did it take to reach its destination of 600 kilometres from the starting point?
 1) 6 hr 21 min 2) 6 hr 24 min
 3) 6 hr 30 min 4) 6 hr 27 min
148. Two cars are running along the same road. The first one, which is running at the rate of 30 kmph, starts 6 hours ahead of the second one, which is running at the rate of 50 kmph. How long will it take the second car to catch up with the first one?
 1) 6 hours 2) 9 hours
 3) 12 hours 4) 15 hours
149. If the sum of the 6th and the 15th elements of an arithmetic progression is equal to the sum of the 7th, 10th and 12th elements of the same progression, then which element of the series should necessarily be equal to zero?
 1) 10th 2) 8th
 3) 1st 4) None of these
150. In a 800 m race, around a stadium having the circumference of 200 m, the top runner meets the last runner on the 5th minute of the race. If the top runner runs at twice the speed of the last runner, then what is the time taken by the top runner to finish the race?
 1) 20 min 2) 15 min
 3) 10 min 4) 5 min
151. A dairy man pays Rs 6.4 per litre of milk. He adds water and sells the mixture at Rs 8 per litre, thereby making 37.5% profit. Find the proportion of the water to that of the milk received by the customers.
 1) 1 : 15 2) 1 : 10
 3) 1 : 20 4) 1 : 12
152. A train can travel 20% faster than a car. Both start from a point A at the same time and reach point B 75 km away from A at the same time. On the way, however, the train lost about 12.5 minutes while stopping at the stations. Find the speed of the car in km per hour.
 1) 50 kmph 2) 55 kmph
 3) 60 kmph 4) 65 kmph
153. A manufacturer undertakes to supply 2000 pieces of a particular component at Rs 25 per piece. According to his estimates, even if 5% fail to pass the quality tests, then he will make a profit of 25%. However, as it turned out, 50% of the components were rejected. What is the loss to the manufacturer?
 1) Rs 12,000 2) Rs 13,000
 3) Rs 14,000 4) Rs 15,000
154. A recipe gives directions to mix 4 parts of substance A with 7 parts of substance B. These substances are to be taken by weight, but by mistake they were taken by volume. Find the error in the percentage of the weight of A in the mixture, if 117 cm^3 of the substance A weighs as much as 151 cm^3 of the substance B.
 1) 5.05% 2) 6.00%
 3) 7.05% 4) 6.08%
155. The taxi charges in a city comprise of a fixed charge together with the charge of the distance covered. For a journey of 13 km, the charges paid are Rs 96 and for a journey of 18 km, the charges paid are Rs 131. What will a person have to pay for travelling a distance of 25 km?
 1) Rs 180 2) Rs 117
 3) Rs 215 4) Rs 202
156. The letters of the word PROMISE are arranged so that no two of the vowels should come together. Find the total number of arrangements.
 1) 49 2) 1440
 3) 7 4) 1898
157. A bag contains 5 red balls and 8 blue balls. It also contains 4 green and 7 black balls. If a ball is drawn at random, then find the probability that it is not green.
 1) 5/6 2) 1/4
 3) 1/6 4) 7/4
158. A vertical stick 12 m long cast a shadow 8 m

- long on the ground. At the same time a tower casts its shadow 40 m long on the ground. Find the height of the tower.
- 1) 44 m 2) 60 m
3) 68 m 4) 80 m
159. In a circular lawn, there is a 16 m long path in the form of a chord. If the path is 6 m away from the centre of the lawn, then find the radius of the circular lawn.
- 1) 16 m 2) 6 m
3) 10 m 4) 8 m
160. Given that Carbon-14 decays at a constant rate in such a way that it reduces to 50% in 5568 years. Find the age of an old wood piece in which carbon is only $12\frac{1}{2}\%$ of the original.
- 1) 1856 years 2) 16704 years
3) 1392 years 4) 22727 years
- 3) Institute for Rural Development
4) Insurance Research and Development Agency
168. The authority signing on a "One-Rupee Note" is
- 1) Governor
2) Secretary, Ministry of Finance
3) RBI Chief
4) Chief Minister
169. Mobile Banking—an application through which Reliance India mobile subscribers can view their bank account balance, get mini-statements, fixed deposit details, request for cheque book, make stop-cheque requests and bill payments from their handsets and time and from anywhere. Reliance has joined hands with for Mobile Banking Application.
- 1) ICICI 2) SBI
3) City Bank 4) HDFC Bank
170. Which popular indoor game was originally called Lexico?
- 1) Carrom 2) Scrabble
3) Badminton 4) Table Tennis
171. Oberon Titania, Ariel, Umbriel and Miranda are the five chief satellites of which of the following planets?
- 1) Jupiter 2) Neptune
3) Uranus 4) Mars
172. An Arjuna Award winner Anju Bobby George has become the first Indian athlete to win a medal at the World Athletics Championship held in Paris. She has won Bronze Medal in
- 1) High Jump 2) Shooting
3) Long Jump 4) Gymnastics
173. Bollywood actress, Ms Kiron Kher has won the Best Actress Award at the 56th Locarno International Film Festival in August 2003 for her role in *Khamosh Paani*. The festival was held in
- 1) Paris 2) Tokyo
3) Switzerland 4) Singapore
174. Which two companies have formed a research and collaboration alliance to develop patented drugs?
- 1) Ranbaxy and Glaxo SmithKline
2) Ranbaxy and Penacea Biotech
3) Nicholas Piramal and Ranbaxy
4) None of these
175. SEBI has introduced "rolling settlement" for selected shares. What does this mean?
- 1) All shares have to be paid on the day of purchase
2) Purchasers have to make advance payment for the shares
3) Purchase can be set off against the sales
4) Payment has to be settled at the end of fifth day
176. The 'IC' chip used in computers is made of
- 1) Chromium 2) Iron Oxide
3) Silica 4) Silicon

Section V

Indian and Global Environment

161. When were the Bharat Ratna and other national awards introduced?
- 1) 1950 2) 1947
3) 1954 4) 1960
162. When was the human genome map unveiled?
- 1) February 2001 2) February 2002
3) January 2001 4) None of these
163. On July 23, 2003, India's first matrimonial service on mobile phone was launched by the consortium of
- 1) BPL Mobile and Escotel
2) Escotel and RPG Cellular
3) Escotel, BPL Mobile and Spice Cellular
4) BPL Mobile, Escotel, RPG Cellular and Spice Cellular
164. "The Gram Sabha was the foundation on which the three-tiered Panchayati Raj System rests and from which they derive their strength and legitimacy." Against this background, which of the following was declared as the 'Year of Gram Sabha'?
- 1) 1998-1999 2) 1999-2000
3) 2000-2001 4) 2001-2002
165. Which one of the following is the indigenously developed pilotless target aircraft?
- 1) Hansa 2) Akash
3) Lakshya 4) None of these
166. Eighty-Sixth Constitutional Amendment made free and compulsory education for all between _____ a Fundamental Right.
- 1) 10 and 20 years 2) 5 and 20 years
3) 6 and 14 years 4) 10 and 14 years
167. IRDA stands for
- 1) Insurance Regulatory and Development Authority
2) Indian Rural Development Agency