Section - 1

1. Who is the composer of National Anthem of India?
   (a) Bankim Chandra Chatterji   (b) Sharat Chandra Chattopadhyay
   (c) Rabindranath Tagore   (d) Ishwar Chandra Vidyasagar

2. The International Labour Organisation is headquartered at
   (a) Washington.   (b) Paris.   (c) Geneva.   (d) Rome.

3. To which field of literature is the 'Booker Prize' awarded every year?
   (a) Philosophy   (b) Autobiography   (c) Religion   (d) Fiction

4. SEZ in Indian EXIM policy expands to
   (a) Special Export Zone.   (b) Special Excise Zone.
   (c) Special Economic Zone.   (d) Special Ecological Zone.

5. In which of the following years was the Indian rupee devalued for the first time?
   (a) 1949   (b) 1955   (c) 1966   (d) 1974

6. *Bush at War* is a book authored by
   (a) Mary N. Weaver.   (b) John Grisham.   (c) Jeffrey Archer. (d) Bob Woodward.

7. Which of the following is a market research firm in India?
   (a) SOTC   (b) ORG.MARG   (c) AT&T   (d) CRY

8. 'Grand Vitara' is a SUV from which car major?
   (a) General Motors   (b) Hyundai Motors
   (c) Maruti Udyog Ltd.   (d) Mahindra and Mahindra

9. Which of the following cities has got ISO-14001 certification for environment maintenance?
   (a) Surat   (b) Pune   (c) Indore   (d) Jamshedpur

10. The marketing guru Shunu Sen, who died recently, was associated with
    (a) Nestle.   (b) Brittania Industries.
    (c) Hindustan Lever Limited.   (d) Marico Industries.

11. Which of the following taxes has been reduced from 100% to 70% in 2003-04 budget?
    (a) Service Tax   (b) Entertainment Tax   (c) Corporate Tax   (d) Sales Tax

12. Which of the following is country's first Non-Banking Financial Corporation (NBFC) to have been converted into a bank and have also started its operations?
    (a) ICICI   (b) IDBI
    (c) HDFC   (d) Kotak Mahindra Finance Ltd.

13. World's fastest computer at present is
    (a) ASCI Purple.   (b) Deep Blue.   (c) Param.   (d) Earth Simulator.

14. Identify the wrong pair.

Personality	Year of winning Nobel Prize
(a) Rabindranath Tagore	1913
(b) H. Khorana	1966
(c) S. Chandrashekhar	1983
(d) C. V. Raman	1930

15. The most famous movie of 75th Oscar Awards *Chicago* has been directed by
(a) Peter O' Tool.   (b) Rob Marshall.   (c) Roman Polanski.   (d) Adrian Brandy.

16. Justice Adarsh Sen Anand was recently in news as he was appointed as the chairman of
(a) National Commission for SCs and STs.   (b) National Human Rights Commission.
(c) Telecome Regulatory Authority of India.   (d) National Commission for Minorities.

17. The leading silk producing state in India is
(a) Karnataka.   (b) West Bengal.   (c) Madhya Pradesh.   (d) Himachal Pradesh.

18. 'Kaizen' means
(a) restructuring the processes.
(b) error-free production.
(c) continuous improvement in work process.
(d) weakening the weaknesses by strengthening the strengths.

19. According to the Berlin-based Transparency International's Corruption Perception Index 2002, out of the surveyed 102 countries, which of the following was the most corrupt nation?
(a) Paraguay   (b) India   (c) Nigeria   (d) Bangladesh

20. According to the survey of Indian population 2001, which of the following states was the least populated?
(a) Punjab   (b) Goa   (c) Haryana   (d) Mizoram

21. Which of the following accounting majors have recently changed its name to Bearing Point ?
(a) Arthur Anderson   (b) A. F. Ferguson   (c) KPMG   (d) Ernst & Young

22. Who is the present disinvestment minister of India?
(a) M. Venkaiah Naidu   (b) Pradeep Baijal   (c) Arun Shourie   (d) Ram Naik

23. Who is the present director-general of World Trade Organisation?
(a) Mike Moore   (b) James D. Wolfenson
(c) Klaus Schwab   (d) Supachai Panitchpakadi

24. Who is the present chairman of Securities and Exchange Board of India (SEBI)?
(a) A. K. Purwar   (b) G. N. Bajpayee   (c) N. Rangachari   (d) K. V. Kamath

25. Which Indian state attracted the maximum foreign direct investment in 2001-2002?
(a) Kerala   (b) Maharashtra   (c) Karnataka   (d) Orissa

26. Which of the following companies launched 'Pure for Sur' campaign?
(a) Tata Salt   (b) BPCL   (c) Amul   (d) Mother Dairy

27. According to the Union Budget 2003-04, the service tax has been raised from the present 5 per cent to
(a) 10 per cent.   (b) 9 per cent.   (c) 8 per cent.   (d) 7 per cent.

28. Tenth Five-year Plan will end in
(a) 2004.   (b) 2005.   (c) 2006.   (d) 2007.

29. According to the latest Census 2001, the literacy rate of India is
(a) 52.56%.   (b) 59.66%.   (c) 65.38%.   (d) 68.42%.

30. Who among the following personalities won the Nobel Prize 2002 for Literature?
(a) Salman Rushdie   (b) Yann Martel   (c) Rohinton Mistry   (d) Imre Kertesz

31. Under which of the following Constitutional articles financial emergency is proclaimed?
  (a) 352 (b) 370 (c) 376 (d) 378

32. SAARC is headquartered at
  (a) Jakarta (b) Bangkok (c) Kuala Lampur (d) Kathmandu

33. The book which won the Booker Prize 2002 is titled as
  (a) *Dirt Music.* (b) *Family Matters.*
  (c) *Steps Across This Line.* (d) *Life of Pie.*

34. According to the Tenth Plan (2002-07), what is the targeted growth rate of GDP?
  (a) 8% (b) 6% (c) 6.5% (d) 6%

35. Which among the following is a central government tax?
  (a) Income tax (b) Sales tax (c) Octroi (d) Property tax

36. Reserve Bank of India was nationalized in which of the following years?
  (a) 1948 (b) 1949 (c) 1950 (d) 1952

37. Who among the following has the right to speak and take part in the proceedings of the Union Legislature without the right to vote?
  (a) Advocate General (b) Comptroller and Auditor General
  (c) Solicitor General (d) Attorney General

38. World Population Day is observed on which of the following dates?
  (a) May 1 (b) May 11 (c) July 1 (d) July 11

39. Who received the Dada Saheb Phalke Award recently ?
  (a) Asha Bhosale (b) Ramesh Sippy (c) Yash Chopra (d) Sunil Dutt

40. Which of the following correctly describes the three types of justice referred to in the Preamble?
  (a) Economic, social and religious (b) Political, economic and religious
  (c) Social, economic and political (d) Social, religious and political

Section – 2

Direction for questions 41 to 50: Read the following passages, and answer the questions that follow.

Passage – 1

With Friedrich Engels, Karl Marx in 1848 published *Communist Manifesto*, calling upon the masses to rise and throw off their economic chains. His mature theories of society were later elaborated in his large and abstruse work, *Das Kapital*. Starting as a non-violent revolutionist, he later became a major social theorist more or less sympathetic with violent revolution, if it was necessary in order to change the social system which he believed preyed upon the masses.

On the theoretical side, Marx set up the doctrine of surplus value as the chief element in capitalistic exploitation. According to this theory, the ruling classes no longer employed military force primarily as a means to plundering people. Instead, they used their control over employment, and working conditions under the bourgeois capitalistic system for this purpose, paying only bare subsistence wage to the worker while they appropriated all surplus value in the productive process. He further said that the strategic disadvantage of the worker in industry prevented him from obtaining a fairer share of the earning by bargaining methods and drove him to revolutionary procedures as a means to establish his economic and social rights. This revolution might be peacefully consummated by parliamentary procedures if the people prepared themselves for political action by mastering the materialistic interpretation and by organizing politically for the final event. It was his belief that the aggressions of the capitalistic class would eventually destroy the middle class and take away all their resources of income by a process of capitalistic absorption of industry — a process which has failed to occur in most countries.

With minor exceptions, Marx's philosophy is now generally accepted by left-wing labour movements in various countries, but rejected by centrist labour groups, especially those in the US. In Russia and other Eastern European countries, however, socialist leaders adopted the methods of violent revolution because of the opposition of the ruling classes. Yet, many now hold that the present communist regime in Russia and her satellite countries is no longer a proletarian movement based on Marxist theory, but a camouflaged imperialistic effort to dominate the world in the interest of a new ruling class.

41. Which of the following books did Marx author or co-author?
    (a) *Communist Manifesto* and *Surplus Value*
    (b) *Das Kapital* and *Communist Manifesto*
    (c) *Capitalistic Exploitation* and *Das Kapital*
    (d) *Communist Manifesto*, *Surplus Value* and *Das Kapital*

42. Marx started his philosophical life as a
    (a) democrat.   (b) believer in non-violent revolution.
    (c) believer in violent revolution.   (d) congressman.

43. According to the author, the present communist regime in Russia can be described as
    (a) proletarian.   (b) democratic.
    (c) imperialistic.   (d) socialist.

44. Marx's social philosophy is now generally accepted by
    (a) left-wing labour unions.   (b) centrist labour groups.
    (c) most labour unions.   (d) all labour groups.

45. The word 'abstruse' means
    (a) hard to understand.   (b) absurd
    (c) interesting.   (d) crude.

Passage – 2

In Rome, defeated enemies were generally put to death as criminals for having offended the emperor. In the Middle Ages, however, the practice of ransoming, or returning prisoners in exchange for money, became common. Though some saw this custom as a step towards a more humane society, the primary reason behind it was economic rather than humanitarian. In those times, rulers had only a limited ability to raise taxes. They could neither force their subjects to fight nor pay them to do so. The promise of material compensation in the form of goods and ransom was therefore the only way of inducing combatants to participate in a war. In the Middle Ages, the predominant incentive for the individual soldier to participate in a war was the expectation of spoils. Although collecting ransom clearly brought financial gain, keeping a prisoner and arranging for his exchange had its costs. Consequently, several procedures were devised to reduce transaction costs.

One such device was a rule asserting that the prisoner had to assess his own value. This compelled the prisoner to establish a value without much distortion; indicating too low a value would increase the captive's chances of being killed, while indicating too high a value would either ruin him financially or create a prohibitively expensive ransom that would also result in death.

A second means of reducing costs was the practice of releasing a prisoner on his word of honour. This procedure was advantageous to both parties since the captor was relieved of the expense of keeping the prisoner while the captive had freedom of movement. The captor also benefited financially by having his captive raise the ransom himself. This 'parole' was a viable practice since the released prisoner risked recapture or retaliation against his family. Moreover, in medieval society, breaking one's word had serious consequences. When, for example, King Francois I broke his word to the Emperor Charles V in 1525, his reputation suffered immensely.

A third method of reducing costs was the use of specialized institutions to establish contact between the two parties. Two types of institutions emerged: professional dealers who acted as brokers, and members of religious orders who acted as neutral intermediaries. Dealers advanced money for the ransom and charged interest on the loan. Two of the religious orders that became intermediaries were the Mercedarians and the Trinitarians who between them arranged the ransom of nearly one million prisoners.

46. The primary purpose of the passage is to
    (a) discuss the economic basis of the medieval practice of exchanging prisoners for ransom.
    (b) examine the history of the treatment of prisoners of war.
    (c) emphasize the importance of a warrior's 'word of honour' during the Middle Ages.
    (d) explore three ways of reducing the costs of ransom.

47. It can be inferred from the passage that a medieval soldier
    (a) was less likely to kill captured members of opposing armies than was a soldier of the Roman Empire.
    (b) was similar to a 20th-century terrorist in that he operated on a basically independent level and was motivated solely by economic incentives.
    (c) had few economic options and choose to fight because it was the only way to earn an adequate living.
    (d) was motivated to spare prisoners' lives by humanitarian rather than economic ideals.

48. Which of the following best describes the change in policy from executing prisoners in Roman times to ransoming prisoners in the Middle Ages?
    (a) The emperor of Rome demanded more respect than did medieval rulers, and thus Roman subjects went to greater lengths to defend their incentives.
    (b) It was a reflection of the lesser degree of direct control medieval rulers had over their subjects.
    (c) It became a show of strength and honour for warriors of the Medieval Ages to be able to capture and return their enemies.
    (d) Medieval soldiers were not as humanitarian as their ransoming practices might have indicated.

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49. The author uses the phrase 'without much distortion' in order
(a) to indicate that prisoners would fairly assess their worth.
(b) to emphasize the important role medieval prisoners played in determining whether they should be ransomed.
(c) to explain how prisoners often paid more than an appropriate ransom to increase their chances for survival.
(d) suggest that captors and captives often had understanding relationships.

50. All of the following are mentioned in the passage as actions that were taken to ensure that ransoming prisoners was a profitable operation EXCEPT
(a) each prisoner was made to designate the amount of ransom to be paid for his return.
(b) prisoners were released on the condition that they guaranteed that their ransoms would be paid.
(c) professional intermediaries were employed to facilitate the smooth exchange of prisoner and ransom, at a price to the prisoner.
(d) medieval rulers promised to aid soldiers in their efforts to collect ransom.

Direction for questions 51 to 53: Pick out the synonyms for the word given.

51. MUTATION
(a) Change   (b) Decency   (c) Adolescent   (d) Clangorous

52. APATHY
(a) Tolerance   (b) Unconcern   (c) Obstinacy   (d) Discrimination

53. PUNCTILIOUS
(a) Rueful   (b) Frugal   (c) Careful   (d) Insolent

Direction for questions 54 to 58: Fill in the blanks with the appropriate choices.

54. Because of his excellent ___ skills, he could mesmerize the crowd with the power of his speech.
(a) loquacious   (b) convincing   (c) presentation   (d) oratory

55. The patriot was given a tumultuous welcome ___ his countrymen.
(a) with   (b) from   (c) among   (d) by

56. There is no time like the ___ to start thinking about owning a house.
(a) current   (b) past   (c) present   (d) future

57. Practice will ___ pay its dividends.
(a) finally   (b) eventually   (c) sooner   (d) later

58. When certain kind of monkeys are ___, they act just like human beings.
(a) domesticated   (b) pet   (c) beaten   (d) flattered

Direction for questions 59 to 63: In each of the following questions find the word pair that is related to the same way as the word pair provided.

59. TRAINING : HEREDITY
(a) unnatural : usual   (b) ornithologist : birds
(c) habits : instincts   (d) astute : ingenious

60. FRAGRANT : INCENSE
(a) frequent : sound   (b) sneeze : nostrils
(c) noxious : garbage   (d) noisome : pleasant

61. TRIANGLE : HEXAGON
    (a) cone : sphere
    (b) rectangle : octagon
    (c) pentagon : heptagon
    (d) angle : quadrilateral

62. ABRIDGE : LENGTHEN
    (a) root : trunk
    (b) stop : end
    (c) lend : borrow
    (d) prize : reserve

63. Soup : Liquid
    (a) water : thirst
    (b) book : knowledge
    (c) oxygen : gas
    (d) writer : publisher

Direction for questions 64 to 67: Select the odd word from the given set of four alternatives.

64. (a) juvenile   (b) immature   (c) old   (d) childish

65. (a) slack   (b) draconian   (c) rigorous (d) severe

66. (a) Achilles   (b) Thetis   (c) Paris   (d) Pandora

67. (a) divulge   (b) inform   (c) secret   (d) reveal

Direction for questions 68 to 72: Identify the part of the sentence that has an error.

68. The reason he has been such a success is because he never gives up.
            (a)   (b)   (c)   (d)

69. Consider all the possibilities, I really believe that I would prefer not to make any changes.
     (a)   (b)   (c)   (d)

70. The fact that he was disinterested in politics was clear from the way he shunned political news.
    (a)   (b)   (c)   (d)

71. After every student had turned in their paper, the teacher dismissed the class.
     (a)   (b)   (c)   (d)

72. Any help that you can give me will be appreciate.
    (a)   (b)   (c)   (d)

Direction for questions 73 to 77: Fill in the blanks in the passage below with the appropriate choice.

For a novelist, a ... 73... call from Oprah Winfrey is like a house... 74... from the prize patrol: the big ... 75 ... has arrived. The ... 76 ... appears on Oprah's show, and sales go through the ... 77...

73. (a) phone   (b) clarion   (c) timid   (d) cat

74. (a) check   (b) call   (c) cheque   (d) hold

75. (a) dog   (b) fire   (c) cheque   (d) girl

76. (a) police   (b) don   (c) manager   (d) author

77. (a) door   (b) window   (c) wall   (d) roof

Direction for questions 78 to 80: Select the antonym of the word given.

78. MISERABLE
    (a) excited   (b) relaxed   (c) happy   (d) comfortable

79. SELDOM
    (a) often   (b) always   (c) ever   (d) daily

80. VAGUE
    (a) known   (b) sure   (c) clear   (d) positive

Section - 3

Direction for questions 81 to 85: Questions are to be answered on the basis of information available in the following table which provides the data for total worldwide production of four-wheelers of various types in different years.

Item/Make	Year				
	1950-51	**1965-66**	**1971-72**	**1976-77**	**1979-80**
Total passenger cars	155.24	195.99	203.34	210.14	212.5
American	40.83	53.88	57.43	62.03	61.30
German	36.83	42.02	39.99	40.91	41.30
Japanese	45.15	64.59	67.72	69.69	71.65
British	1.51	1.15	0.94	0.91	0.76
Korean	0.06	0.07	0.07	0.09	0.13
French	1.25	1.07	0.99	0.98	1.00
Italian	0.64	1.03	1.11	1.07	1.15
Total non-passenger vehicles	74.4	115.45	138.54	141.00	146.00
Total 4-wheelers	229.64	311.44	341.88	351.14	358.5

Worldwide production of four-wheelers (figures are in million)

81. What was the percentage increase in the production of American cars between 1950-51 and 1979-80?
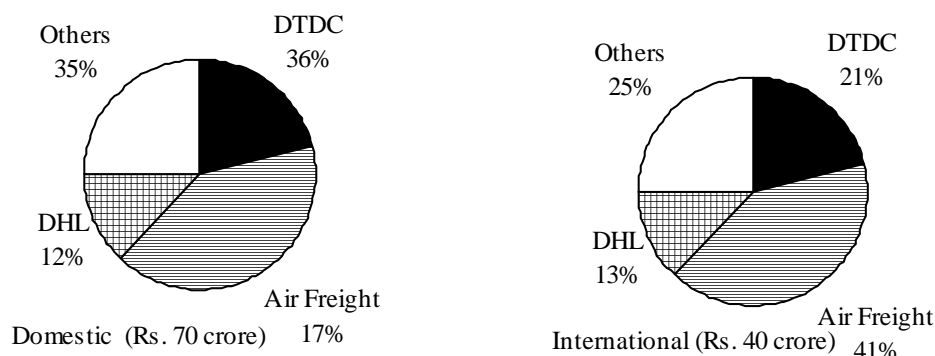   (a) 46   (b) 50   (c) 55   (d) 60

82. What percentage change did the combined production of British, French, Korean and Italian cars register between 1950-51 and 1976-77?
    (a) 14   (b) 18   (c) 9   (d) None of these

83. What proportion of the total four-wheelers did the non-passenger vehicles form in 1971-72?
    (a) 0.33   (b) 0.37   (c) 0.41   (d) 0.52

84. The German and Japanese cars have registered an increase of how many lakhs during the given period?
    (a) 310   (b) 297   (c) 318   (d) 3100

85. American vehicles constituted 60% of the non-passenger vehicles in 1950-51. This share reduced by one percentage point in every two years. So by 1979-80, what approximately was the difference in production of American non-passenger vehicles?
    (a) 17.3 million   (b) 14.7 million   (c) 20.1 million   (d) Cannot be determined

Direction for questions 86 to 90: Questions are to be answered on the basis of information available in the following pie diagrams which represent, percentage share of major cargo carriers in India in 1996. Total turnovers of domestic and international sector are Rs. 70 crore and Rs. 40 crore respectively.

Domestic (Rs. 70 crore): DTDC 36%, Others 35%, DHL 12%, Air Freight 17%

International (Rs. 40 crore): DTDC 21%, Others 25%, DHL 13%, Air Freight 41%

86. What was Air Freight's turnover (in Rs. crore) in 1996?
   (a) 20.8   (b) 24.6   (c) 28.3   (d) 32.1

87. What was the difference (in Rs.crore) in DHL's domestic and international turnover in 1996?
   (a) 2.8   (b) 3   (c) 3.2   (d) 3.6

88. What was the difference (in Rs.crore) in DTDC's domestic turnover and the international turnover of others?
   (a) 15.2   (b) 20.2   (c) 25.2   (d) 16.8

89. If 35% of DTDC's international cargo revenue comes from documents, what is the per cent of revenue that these documents account for from DTDC's total revenue?
   (a) 2.25   (b) 3.75   (c) 5.5   (d) 9

90. If Skypak accounts for 8% of the domestic cargo, what per cent of the Others category does it account for (in the domestic cargo sector)?
   (a) 18   (b) 20.5   (c) 23   (d) 25.5

Direction for questions 91 to 95: The questions are based on the following data. Each machine can independently produce products A and B.

Capacity available		Capacity required per unit of two products		
Machine	Capacity	Machine	Product A	Product B
I	350	I	3	4
II	200	II	1	2
III	150	III	2	1
IV	300	IV	3	3

91. If 50 units each of products A and B are produced, which machine has the lowest capacity utilization?
   (a) I   (b) II   (c) III   (d) Multiple answers

92. Using any one machine only, to the maximum, how many total units of products A and B can be produced simultaneously?
   (a) 95, 5   (b) 50, 100   (c) 100, 50   (d) None of these

93. If cost of idle capacity is Rs.7.50 per unit, what is the total cost of idle capacity if 20 units each of products A and B are produced (in Rs.)?
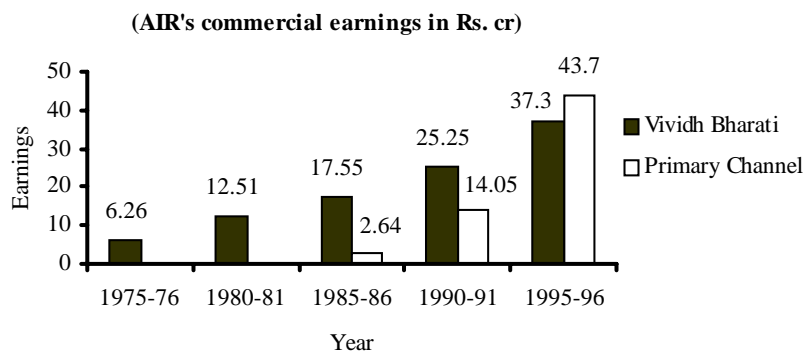   (a) 6, 750   (b) 3, 850   (c) 4, 650   (d) None of these

94. Using one machine only, to the minimum, how many units of products A and B can be produced simultaneously?
(a) 25, 25
(b) 30, 20
(c) 40, 40
(d) All of these can be produced

95. If you can produce product A alone with only one machine to the maximum, how many units of it can be produced?
(a) 200
(b) 100
(c) 113
(d) 75

Direction for questions 96 to 100: The following table details the market for Indian software companies.

Year	Financial software (in Rs. cr)	System software (in Rs. cr)	Utilities (in Rs. cr)	Total including exports (in Rs. cr)
1984	587	897	303	1,891
1985	1,030	1,135	410	2,660
1986	1,275	1,531	510	3,460
1987	1,820	2,070	700	4,720
1988	2,400	2,800	1,025	6,300

96. What is the simple growth rate per annum of the total (including exports) software from 1984 to 1988?
(a) 233%
(b) 58%
(c) 35%
(d) Cannot be determined

97. Which of the following statements is/are true?
I. The output of system software has shown the highest growth rate.
II. If utilities output grows at the same rate from 1989 to 1993 as 1984 to 1988, then output in 1993 will be Rs. 2,100 crore.
III. The ratio of financial software to utilities in 1986 is 1:4.
(a) Only I
(b) Only II
(c) Only III
(d) None of these

98. If the share of system software in the total remains same in 1990 as in 1988; and in 1990, the total output is Rs. 9,000 cr, the financial software output in 1990 is
(a) Rs. 4,000 cr
(b) Rs. 3,000 cr
(c) Rs. 2,000 cr
(d) Cannot be determined

99. Which of the following statements is/are true?
I. System software grew at a (simple rate of) 22% per annum from 1984 to 1988.
II. Total excluding exports grew at (a simple rate of) 15% per annum on an average during the period shown above.
III. Financial software is growing fastest during the period shown above.
(a) Only I
(b) Only III
(c) II and III
(d) None of these

100. What was the value of exports in 1985?
(a) Rs. 85 cr
(b) Rs. 75 cr
(c) Rs. 109 cr
(d) Cannot be determined

Direction for questions 101 to 105: Questions are to be answered on the basis of information represented in the form of bar graph which depicts the yearly earning in Rs. cr. from the two All India Radio channels, viz. Vividh Bharati and Primary Channel.

(AIR's commercial earnings in Rs. cr)

101. By how many times has AIR's commercial earnings increased over the given period?
   (a) 10.9   (b) 11.9   (c) 12.9   (d) 13.9

102. What was the annual percentage increase of AIR's commercial earnings from 1985-86 to 1995-96?
   (a) 25   (b) 27.5   (c) 30   (d) 32.5

103. What is the deviation of Vividh Bharati's percentage increase in revenue from 1985-86 to 1995-96 to its percentage increase in revenue from 1975-76 to 1985-86?
   (a) 67   (b) – 70   (c) 69   (d) None of these

104. What was the annual percentage increase in the increase of revenue of the Primary Channel since its inception?
   (a) 20.5   (b) 205   (c) 250   (d) Cannot be determined

105. If the FM channel contributed Rs. 10 crore in 1995-96, what is the percentage of the remaining earnings to the total earnings of 1980?
   (a) 460   (b) 510   (c) 610   (d) None of these

Direction for questions 106 to 110: Answer the questions on the basis of the information provided in the following table. The table depicts the network of Indian Railways having narrow gauge, metre gauge and broad gauge tracks in km in different states and union territories of India.

State	Narrow gauge (km)	Metre gauge (km)	Broad gauge (km)
Andhra Pradesh	440	180	580
Assam	40	120	72
Bihar	190	248	216
Gujarat	150	290	415
Haryana	-	60	110
Jammu & Kashmir	175	35	244
Karnataka	65	122	365
Kerala	18	45	190
Madhya Pradesh	220	185	536
Orissa	154	136	190
Punjab	62	-	238
Rajasthan	125	181	276
Tamil Nadu	110	293	390
Uttar Pradesh	390	243	429
West Bengal	165	110	380
Union Territories	25	45	65

106. What per cent of Karnataka's railway network has broad gauge tracks?
(a) 67
(b) 70
(c) 71.2
(d) None of these

107. What per cent of Madhya Pradesh's railway network does not have broad gauge tracks?
(a) 43
(b) 49
(c) 57
(d) 62

108. What per cent of Orissa's railway network has metre gauge tracks?
(a) 18.5
(b) 21.25
(c) 30
(d) None of these

109. What per cent of Rajasthan's railway network is the narrow gauge and the broad gauge taken together?
(a) 31
(b) 46
(c) 59
(d) 69

110. If Delhi accounts for 35% of the total length of railway tracks within Union Territories, what is the length of railway tracks within the capital?
(a) 47.25 km
(b) 51.25 km
(c) 54.75 km
(d) 44.25 km

Direction for questions 111 to 115: Each of the following questions consists of a question and two statements, I and II.

Mark:
(a) If one statement alone is sufficient but the other statement alone is not sufficient to answer the question.
(b) If each statement alone is sufficient to answer the question.
(c) If statements I and II together are sufficient to answer the question but neither statement alone is sufficient.
(d) If even statements I and II together are not sufficient to answer the question.

111. How much gross profit did White Store make during its Great Refrigerator Sale?
I. The store sold 112 refrigerators for Rs. 33,060.
II. The refrigerators cost White Store an average of Rs. 186.

112. The positive integer C is a perfect cube; what is its value?
I. $30 < C < 100$
II. C is an even number.

113. What is the volume of a cylindrical can?
   I. The radius of the can is 3 inches.
   II. The area of the bottom is 9p square inches.

114. What is the value of $x^3 - 2x^2 + 7$?
   I. $3x^3 - x = 2$
   II. $x^5 = 1$

115. What is the value of $(u + v)$?
   I. $2w - 7 = 0$
   II. $u + v - 3w = 11$

Direction for questions 116 to120: The following questions are accompanied by two statements I and II. You have to determine which statement is/are sufficient to answer the question.

Mark:
(a) If only one statement alone is sufficient to answer the question.
(b) If either statement I or II is independently sufficient to answer the question.
(c) If neither statement I nor II is sufficient to answer the question.
(d) If both the statements I and II are together sufficient to answer the question.

116. A sells an article to B at a profit of 10%. B sells the same article to C and also makes a profit of 10%. How much profit did A make?
   I. C sells the article for Rs. 300.
   II. B's profit was Rs. 120.

117. A library has separate sections for its English, Urdu and Hindi books. How many books does the library have in all the three sections together?
   I. There are 1459 books in each section.
   II. The English section contains 500 books which is half the total number of Urdu and
      Hindi books put together.

118. A man spends 20 minutes in commuting to his office by bus. How far is the office from his home?
   I. The bus travels at a speed of 20 kmph.
   II. The same journey by train takes 15 minutes.

119. How many students participated in the school play?
   I. The ratio of boys to girls who took part in the play is 1:4.
   II. The school play had 12 females.

120. The area of a circle is four times that of another. What is the circumference of the smaller circle?
   I. The circumference of the larger circle is twice that of the smaller one.
   II. The two circles partly overlap each other.

Section – 4

121. Ten years ago, Nidhi's mother Sita was 4 times older than her daughter. After 10 years, the mother will be twice older than the daughter. What is the present age of Sita?
    (a) 40 years
    (b) 50 years
    (c) 30 years
    (d) 45 years

122. In an election of two candidates, the candidate who gets 41% votes is rejected by a majority of 2412 votes. Find the total number of votes polled.
    (a) 4100
    (b) 13400
    (c) 5900
    (d) 7100

123. I sold a book at a profit of 12%. If I had sold it for Rs. 18 more, then 18% would have been gained. Find the cost price.
    (a) Rs. 600
    (b) Rs. 300
    (c) Rs. 400
    (d) Rs. 200

124. A man covers half of distance of his journey at an average speed of 30 kmph, half of the remaining at 45 kmph and the rest on foot at an average speed of 10 kmph. Total time taken to complete the journey is 2 hours 50 min. Find the total distance covered by him.
    (a) 50 km
    (b) 40 km
    (c) 55 km
    (d) 60 km

125. $\dfrac{n}{n-1} \times \dfrac{n^2-1}{(n+1)^2} \times \dfrac{n^2+n}{n^2} = ?$

    (a) $\dfrac{n \times (n-1)}{(n+1)}$
    (b) 1
    (c) $\dfrac{1}{n+1}$
    (d) 0

126. The difference between the compound interest and the simple interest earned at the end of 3rd year on a sum of money at a rate of 10% per annum is Rs. 77.5. What is the sum?
    (a) Rs. 3, 500
    (b) Rs. 2, 500
    (c) Rs. 3, 000
    (d) Rs. 2, 000

127. A medical college having 600 students collected fund to build a laboratory. The amount contributed by each boy and girl was equal to their respective total numbers in the college. The UGC grant was equal to the fund collected by the students. Ratio of boys to girls is 7 : 3. What amount of money was available to build the laboratory?
    (a) Rs. 2,08,000
    (b) Rs. 4,17,600
    (c) Rs. 3,52,000
    (d) Data inadequate

128. Two taps can fill a tank in 24 min. and 36 min respectively. A 3rd outlet pipe can empty the tank in 30 min. If all of them are opened simultaneously, what will be the time required to fill the tank?
    (a) 1 hour 15 min
    (b) 20 min
    (c) 12 min
    (d) None of these

129. Four cows are tethered, one to each corner of a square grass land by means of ropes of equal length, so that each can graze over the maximum possible area without encroaching on the territory of another. What is the ungrazed area of the region if each side of the square land is x units long?

    (a) $\dfrac{1}{x}$ sq. units
    (b) $x^2(1-x)$ sq. units
    (c) $x^2\left(1-\dfrac{\pi}{4}\right)$ sq. units
    (d) $\pi\left(\dfrac{x^2}{4}\right)$ sq. units

130. The number of times the hands of a clock are at straight angle in a day is ___.
    (a) 12
    (b) 24
    (c) 44
    (d) 56

131. A dishonest milkman fills up his bucket which is only $\frac{4}{5}$ full of milk with water. He removes 5 litres of the mixture from the bucket and adds equal quantity of water. If the mixture now contains 60% of milk. What is the capacity of the bucket in litres?

    (a) 15   (b) 20   (c) 25   (d) 30

132. A can do a piece of work in 20 days and B the same piece of work in 40 days. If A and B work on alternate days, beginning wirh A the work is finished during the course of the ___ day when ___ is working.

    (a) 26th, A   (b) 27th, A   (c) 26th, B   (d) 27th, B

Direction for questions 133 and 134: Seventy-five children went to an amusement park where they could ride on the merry–go–round, roller coaster and ferris wheel. It was known that 10 of them took all three rides, and 45 had taken at least two of the three rides. Each ride costs Rs 2. The total receipt of the amusement park was Rs. 246.

133. How many children did not try any of the rides?

    (a) 5   (b) 10   (c) 7   (d) 20

134. How many children took exactly one ride?

    (a) 5   (b) 23   (c) 15   (d) 20

Direction for questions 135 to 160: Answer each of the following questions independently.
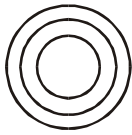
135. It costs Rs. 6,000 and Rs. 6,100, respectively to paint the 4 walls of 2 square halls, of the same height. If the length of one hall exceeds the length of the other by 1 m and the cost of painting is Rs. 5 per sq. m, what is the height of the two halls?

    (a) 3 m   (b) 5 m   (c) 7.5 m   (d) 10 m

136. A man sells chocolates in boxes. Either full boxes or half a box of chocolates can be bought from him. A customer comes and buys half the number of boxes the seller has plus half a box. A second customer comes and buys half a box. After this, the seller is left with no chocolate box. How many chocolate boxes did the seller have before the first customer came initially?

    (a) 2   (b) 3   (c) 1   (d) Cannot be determined

137. A, B and C invest Rs. 4,000, Rs. 5,000 and Rs. 6,000 respectively, in a business. A gets 25% of profits for managing the business and the rest of the profit is divided among A, B and C in proportion to their investment. If in a year A gets Rs. 100 less than B and C together, what was the profit that year?

    (a) Rs. 500   (b) Rs. 750   (c) Rs. 1,000   (d) Rs. 1,200

138. At a club meeting, each member shook hands with every member present. If there were totally 190 handshakes, how many members were there at the meeting?

    (a) 15   (b) 95   (c) 20   (d) None of these

139. The price of sugar increased by 20% and a housewife reduced the consumption of sugar by 20%. What was the effect of this reduction on her expenditure on sugar?

    (a) It remained unchanged   (b) Decreased by 1%
    (c) Increased by 1%   (d) Decreased by 4%

140. Three poles A, B and C, 100 m, 60 m, and 67 m long stand along a straight row in that order from left to right. If the distance between the tops of A and B, A and C are respectively 41 and 65 metres, what is the distance between the feet of B and C?

    (a) 40 m   (b) 40.7 m   (c) 47 m   (d) 65 m

141. It is desired to extract the maximum power of 3 from 24! Where n! = n (n −1).(n − 2)……3, 2, 1. What will be the exponent of 3?
(a) 9 (b) 11 (c) 10 (d) 12

142. Two pipes A and B can fill a tank independently in 20 hours and 30 hours respectively, while pipe C can empty it in 60 hours. Pipes A and B were kept open simultaneously for 12 hours. When a person reached the tank when it should have been full he observed that pipe C also remained open by mistake for these 12 hours. He immediately closed it. In what time now onwards would the tank get full?
(a) 3 hours (b) 2 hours (c) 2.4 hours (d) 3.6 hours

143. The average of 8 scores is 87. Of these, the highest is 2 more than the one next in the magnitude. If these two scores are eliminated the average of the remaining scores is 85. What was the highest score?
(a) 89 (b) 90 (c) 92 (d) 94

144. A circle of radius 9 cm. has its radius decreased by 2 cm. What is the approximate percentage decrease in area?
(a) 39 (b) 61 (c) 31.5 (d) 39.5

145. A thief spots a policeman 100 metres away and takes to his heels. If the policeman chases the thief immediately, how far would the thief have run before he is overtaken? The speeds of the thief and the policeman are 8 kmph and 10 kmph respectively?
(a) 4 km (b) 2 km (c) 500 m (d) 400 m

146. In what time will Rs. 8, 000 amount to Rs. 9, 261 at 5% compound interest?
(a) 1.5 years (b) 2 years (c) $2\frac{1}{2}$ years (d) 3 years

147. The sum of three consecutive odd numbers is 20 more than the first number. What is the middle number?
(a) 7 (b) 9 (c) 11 (d) Data inadequate

148. Fifteen men take 21 days of 8 hours each to do a piece of work. How many days of 6 hours each would 21 women take if 3 women do as much work as 2 men?
(a) 20 (b) 21 (c) 25 (d) 30

149. Two integers are less than 10 and are in the ratio 3 : 1. Their product is ___ .
(a) 10 (b) 12 (c) 15 (d) 24

150. What is the least square number which is divisible by 3, 4, 5 and 8?
(a) 900 (b) 6, 400 (c) 4, 900 (d) 3, 600

151. B invests Rs. 500 more than A in a business, but A's investment in the business is for 4 months whereas B's investment is for 3 months only. If A's share of a total profit of Rs. 520 is Rs. 40 more than B's, how much did A contribute to the business?
(a) Rs. 2,500 (b) Rs. 3,000 (c) Rs. 3,500 (d) Rs. 4,000

152. A train running at 36 kmph passes another train completely in 12 s, which is half of its length, running in the opposite direction at 54 kmph. If it also passes a railway platform in 1.5 m, what is the length of the platform (in metres)?
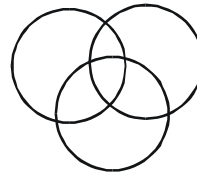(a) 700 (b) 860 (c) 900 (d) 1, 000

153. A reduction in the price of apples enables a person to purchase 3 apples for Re.1 instead of Rs.1.25. What is the percentage reduction in price?

(a) 20   (b) 25   (c) 30   (d) $33\frac{1}{3}$

154. What is the greatest 3-digit number which when divided by 6, 9 or 12 leaves a remainder of 1 in each case?
(a) 949   (b) 961   (c) 973   (d) 987

155. X and Y are playing a game. There are 11 coins of 50-paisa on the table and each player must pick up at least 1 coin but not more than 5. The person picking up the last coin loses. X starts. What maximum number of coins should he pick up at the start to ensure a win no matter what strategy Y employs?
(a) 4   (b) 3   (c) 5   (d) Cannot be determined

156. Three dice are thrown simultaneously. What is the probability of getting a sum of 15 on the upper faces of the dice?

(a) $\frac{5}{72}$ (b) $\frac{1}{108}$ (c) $\frac{1}{54}$ (d) $\frac{7}{216}$

157. The surface area of a cube is 150 sq. cm. What is the length of its diagonal in cm?

(a) 2.5   (b) $\frac{5\sqrt{3}}{2}$ (c) $5\sqrt{2}$ (d) $5\sqrt{3}$

158. A milkman makes a profit of 10% on the sale of milk. If there were to add 10% water to the milk, by what per cent of cost will the profit per cent of milk increases?
(a) 9   (b) 10   (c) 11   (d) None of these

159. The auto fare in Ahmedabad has the following formula based upon the metre reading. The metre reading is rounded upto the next higher multiple of 4. For instance, if the metre reading is 37 paise, it is rounded up to 40 paise. The resultant is multiplied by 12. The final result is rounded off to nearest multiple of 25 paise. If 53 paise is the metre reading, what will be the actual fare?
(a) Rs. 6.75   (b) Rs. 6.50   (c) Rs. 6.25   (d) Rs. 7.50

160. A and B cycle from Mumbai to Pune, a distance of 192 km, at 18 and 14 kmph, respectively.
A reaches Pune and starts back for Mumbai. How far from Pune will he meet B?
(a) 12 km   (b) 16 km   (c) 24 km   (d) 42 km
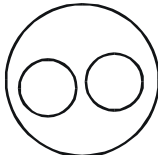
Section - 5

Direction for questions 161 to 163: Choose the Venn diagram which best illustrates the three given classes in each of the following questions.
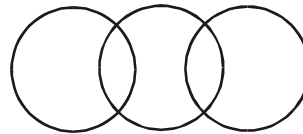

(a)

(b)

(c)

(d)

161.   Doctor, Male, Female

162.   Body, Leg, Finger

163.   Rock, Wood, Solid

Direction for questions 164 and 165: Read the information carefully and answer the following questions.

A family consists of six persons. A is E's grandfather, E is the niece of B and D. A has three children, a daughter and two sons. B is F's sister-in-law. D is unmarried. C is also a member of this family.

164.   How is C related to F?
(a) husband   (b) wife   (c) brother-in-law   (d) brother

165.   How is B related to A?
(a) son   (b) daughter   (c) sister   (d) brother

166.   Pointing towards a man in a photograph, a woman said, "He is the father of the brother of my father". How is the man related to the woman?
(a) father   (b) uncle   (c) grandfather   (d) uncle or father

167.   Find the missing number in the series:
8640, 1440, ?, 72, 24, 12
(a) 720   (b) 288   (c) 120   (d) 240

168.   Find the missing number in the series:
5, 18, 33, ?, 69, 90
(a) 46   (b) 48   (c) 50   (d) 52

Direction for questions 169 and 170: One of the terms given in the letter series is missing. Find the missing term among the alternatives given in each question.

169. QT, CF, ?, VY, HK
(a) KN   (b) FJ   (c) LP   (d) HI

170. C, F, J, O, ?, B
(a) S   (b) T   (c) U   (d) V

171. If the word MENTAL is written LNDFMOSUZBKM, then how would the word TEST be written in that code?
(a) UVFGTIIV   (b) RSCDQRRS   (c) SUDFQRSM   (d) SUDFRTSU

172. THRICE is coded UJUMHK, then EQUALS will be coded ___.
(a) FRVBMT   (b) FPVZMU   (c) FSXEQY   (d) FRWDPX

173. In a certain code language, 'kew xas huma deko' means 'she is eating apples'. 'kew tepo qua' means 'she sells toys' and 'sut time deko' means 'I like apples'. Which words in the language means 'she' and 'apples'?
(a) 'xas' and 'deko'   (b) 'deko' and 'tepo'
(c) 'kew' and 'deko'   (d) 'xas' and 'kew'

174. In a certain code, 'they are fools' means 'plane is risky', 'we are wise' means 'train is fast' and 'wise never fools' means 'fast always risky'. Which of the following stands for 'train'?
(a) they   (b) we   (c) never   (d) fools

175. In a certain code language OPTION is coded as UKXFQM. How will CHOICE be coded?
(a) HLRKDF   (b) ICSFEF   (c) ICKFED   (d) IMRLEF

176. Given below is a matrix with a missing term. Identify the misssing term.

7	8	9	6
4	3	7	5
3	?	7	9

(a) 4   (b) 2   (c) 6   (d) 8

177. Find the misssing term.

8	3	4
7	6	1
2	4	?
13	5	4

(a) 4   (b) 3   (c) 2   (d) 1

178. Identify the missing term.

6	7	42	13
13	3	39	16
4	?	28	11

(a) 1   (b) 0   (c) 5   (d) 7

Direction for questions 179 to 183: Answer the questions based on the information given below.
On rolling 6 dice, it is found that:
I. Three of the dice show the same number. The rest show different numbers.
II. Only one dice shows 6.
III. Not more than 3 dice show 4 or more.

179. What is the minimum possible total of numbers on the faces if the three dice show the same number 2?
(a) 14   (b) 21   (c) 16   (d) 9

180. What is the maximum total if 4 of the dice show less than 4?
(a) 29   (b) 32   (c) 17   (d) 22

181. What would be the maximum total if 3 dice are faulty and have only 5 on all faces? (Condition III is waived.)
(a) 31   (b) 28   (c) 34   (d) 44

182. If only 1 dice shows 1, what is the maximum number of dice with numbers greater than 4?
(a) 3   (b) 1   (c) 2   (d) 4

183. What is the maximum number that can be on the face of the 3 dice which show the same number?
(a) 2   (b) 4   (c) 3   (d) 5

184. After his office, in the evening, a man walks facing the sun. He turns first to his right, then to his left and again to his left and then to his right. In which direction is he moving now?
(a) South   (b) North   (c) East   (d) West

185. Starting from a point, Raju walked 12 m towards North, he turned right and walked 10 m, he again turned right and walked 12 m, then he turned left and walked 5 m. How far is he now and in which direction from the starting point?
(a) 27 m towards East   (b) 5 m towards East
(c) 10 m towards West   (d) 15 m towards East

186. Ajay facing east travelled 10 km straight, then he took a left turn and moved another 5 km, then he again took a left turn and moved further 10 km. How far is he from the starting point?
(a) 15 km   (b) 5 km   (c) 10 km   (d) 20 km

187. If it is possible to make a meaningful word with the third, sixth and ninth letters of RESTAURANT, then what will be the first letter of the word? If no such word is possible, mark 'X' as your answer. If more than one such words are possible, mark 'M' as your answer.
(a) U   (b) M   (c) S   (d) X

188. If starting from the left, the first and the seventh, the second and the eighth, the third and the ninth ....and so on, letters of RELATIONSHIP are interchaged; what will be the third letter from the right, if the second half of the new word, thus formed is reversed?
(a) T   (b) L   (c) A   (d) E

189. Bablu ranked sixteenth from the top and twenty-ninth from the bottom among those who passed an examination. Six boys did not participate in the competition and five failed in the examination. How many boys were there in the class?
(a) 44   (b) 50   (c) 55   (d) 40

190. Nageena is taller than Sonia but not as tall as Manish. Rama is taller than Namita but not as tall as Sonia. Who among them is the tallest?
(a) Manish   (b) Sonia   (c) Namita   (d) Nageena

191. A cube is made into a number of small cubes by dividing each edge into four equal parts. What is the minimum number of additional small cubes required to create a bigger cube that will completely enclose the original cube?
(a) 152   (b) 216   (c) 96   (d) 148

192. Bucket P has thrice the capacity as bucket Q. It takes 50 turns for bucket P to fill an empty drum. How many turns will it take for both the buckets P and Q to fill the empty drum?
(a) 30.5   (b) 45.5   (c) 37.5   (d) 25.5

193. The number of times the hands of a clock are at right angles in a day is ___.
(a) 4   (b) 12   (c) 22   (d) 44

Direction for questions 194 to 197: Each question below is followed by a statement and two arguments numbered I and II. You have to decide which of the following arguments is a strong argument and which is a weak argument.

Mark:
(a) If only argument I is strong.
(b) If only argument II is strong.
(c) If neither argument I nor II is strong.
(d) If both the arguments I and II are strong.

194. **Statement:**
Is America justified in giving most sophisticated arms to Pakistan?
Arguments:
I. Yes, because China has sophisticated arms.
II. No, because Pakistan will use them against India.

195. **Statement:**
Does the world need a new economic order?
Arguments:
I. Yes, because the rich nations are exploiting the poor economically.
II. No, because no economic order can remove economic disparities.

196. **Statement:**
Is it possible to eradicate poverty from India?
Arguments:
I. Yes, because poverty is created by man and he can remove it.
II. No, because eradication of poverty would demand overhauling of the economy of the country.

197. **Statement:**
Should we have only two political parties in India?
Arguments:
I. Yes, because many political parties create confusion in the country.
II. No, because larger number of political parties will give a large number of political ideologies
     from which voter can use one.

Direction for questions 198 to 200: There are three short passages given below. Read each of the passages and answer the question that follows it.

198. According to Albert Einstein's famous theory of relativity, time travel is theoretically possible. Assuming that time travel were to be made possible through some technological breakthrough, it would be advantageous to send someone back in time to prevent the assassination of Archduke Franz Ferdinand in 1914 and thus keep World War I from ever occurring.

    Which of the following assumptions can be deduced from above argument?

    (a) It is not possible to alter a significant current in world history merely by changing a single event.
    (b) The technology necessary for time travel is likely to be developed in the near future.
    (c) If Franz Ferdinand had not been assassinated, some other catalytic event would have led to the start of
        World War I.
    (d) The assassination of Franz Ferdinand was the crucial event that triggered the start of World War I.

199. In the film *Jurassic Park*, scientists create live dinosaurs by replicating dinosaur DNA found inside an insect that had bitten a dinosaur and was then trapped in amber. Although such a feat has not yet been accomplished, one day modern science will probably succeed in recreating prehistoric creatures in a similar manner.

All of the following assumptions underlie the conclusion of the passage above EXCEPT

(a) the genetic information in DNA is sufficient to permit the recreation of an entire animal.
(b) it will someday be possible to accurately replicate DNA in a laboratory.
(c) enough DNA can be extracted from an insect to recreate an entire animal.
(d) scientists will never fully understand how DNA functions.

200. In March 1917, under pressure from communist revolutionaries, Tsar Nicholas II of Russia abdicated his throne. Sixteen months later, the Tsar and his immediate family, including Alexis, the heir apparent, were executed on orders of the new communist government because its leaders believed that all vestiges of the old regime had to be obliterated for the security of the new regime.

The leaders of the new communist government must have made which of the following assumptions?

(a) Executing the Tsar and his heir would send a clear message to all in Russia concerning the ruthlessness of the new regime.
(b) If Nicholas or Alexis had remained alive, he could have provided a rallying point for supporters of the old regime.
(c) A communist regime could theoretically be compatible with a government ruled by a Tsar.
(d) The populace of Russia would be overwhelmingly supportive of the decision to execute the Tsar and his family.