

OPENMAT - XL
Entrance Test for Management Programmes 2016
October, 2016

Total No. of Questions : 200

Time : 180 Minutes

- All questions are *Compulsory*.
- Use of calculator is *not* allowed. Rough work may be done in the space provided at the end of the Test Booklet.
- The Test Booklet has the following *four* tests :

Test - I	General Awareness	No. of Questions 30
Test - II	English Language	No. of Questions 50
Test - III	Quantitative Aptitude	No. of Questions 50
Test - IV	Reasoning	No. of Questions 70

Read the instructions given on the OMR Response Sheet carefully before you start.

How to fill up the information on the OMR Response Sheet

(Examination Answer Sheet)

1. Write your complete enrolment no. in 9 digits. This should correspond to the enrolment number indicated by you on the OMR Response Sheet. Also write your correct name, address with pin code in the space provided. Put your signatures on the OMR Response Sheet with date. Ensure that the Invigilator in your examination hall also puts his signatures with date on the OMR Response Sheet at the space provided.
2. On the OMR Response Sheet student's particulars are to be filled in by pen. However use HB pencil for writing the Enrolment No. and Examination Centre Code as well as for blackening the circle bearing the correct answer number against the serial number of the question.
3. Do not make any stray remarks on this sheet.
4. Write correct information in numerical digits in Enrolment No. and Examination Centre Code Columns. The corresponding circle should be dark enough and should be filled in completely.
5. Each question is followed by four probable answers which are numbered 1, 2, 3 and 4. You should select and show only one answer to each question considered by you as the most appropriate or the correct answer. Select the most appropriate answer. Then by using HB pencil, blacken the circle bearing the correct answer number against the serial number of the question. If you find that answer to any question is none of the four alternatives given under the question, you should darken the circle with '0'.
6. If you wish to change your answer, ERASE completely the already darkened circle by using a good quality eraser and then blacken the circle bearing your revised answer number. If incorrect answer is not erased completely, smudges will be left on the erased circle and the question will be read as having two answers and will be ignored for giving any credit.
7. No credit will be given if more than one answer is given for one question. Therefore, you should select the most appropriate answer.
8. You should not spend too much time on any one question. If you find any particular question difficult, leave it and go to the next. If you have time left after answering all the questions, you may go back to the unanswered ones. There is no negative marking for wrong answers.

GENERAL INSTRUCTIONS

1. No cell phones, calculators, books, slide-rules, note-books or written notes, etc. will be allowed inside the examination hall.
2. You should follow the instructions given by the Centre Superintendent and by the Invigilator at the examination venue. If you violate the instructions, you will be disqualified.
3. Any candidate found copying or receiving or giving assistance in the examination will be disqualified.
4. The Test Booklet and the OMR Response Sheet (Answer Sheet) would be supplied to you by the Invigilators. After the examination is over, you should hand over the OMR Response Sheet to the Invigilator before leaving the examination hall. Any candidate who does not return the OMR Response Sheet will be disqualified and the University may take further action against him/her.
5. All rough work is to be done on the test booklet itself and not on any other paper. Scrap paper is not permitted. For arriving at answers you may work in the margins, make some markings or underline in the test booklet itself.
6. The University reserves the right to cancel scores of any candidate who impersonates or uses/adopts other malpractices or uses any unfair means. The examination is conducted under uniform conditions. The University would also follow a procedure to verify the validity of scores of all examinees uniformly. If there is substantial indication that your performance is not genuine, the University may cancel your score.
7. In the event of your qualifying the Entrance Test, the hall ticket should be enclosed with your admission form while submitting it to the University for seeking admission in Management Programmes along with your testimonials and programme fee. Admission forms received without hall ticket in original will be summarily rejected.

TEST - I
GENERAL AWARENESS

1. The power to increase the number of Judges in the Supreme Court of India is vested in :
(1) The President of India (2) The Chief Justice of India
(3) The Law Commission (4) The Parliament

2. In which one of the following type of forests 'teak' is a dominant tree species in India ?
(1) Tropical rain forest (2) Tropical thorn scrub forest
(3) Tropical moist deciduous forest (4) Temperate forest with grasslands

3. Turkey is located between :
(1) Black sea and Caspian sea
(2) Black sea and Mediterranean sea
(3) Gulf of Suez and Mediterranean sea
(4) Gulf of Aqlaba and Dead sea

4. Disguised unemployment generally means :
(1) Marginal productivity of labour is zero
(2) Large number of people remain unemployed
(3) Alternative employment is not available
(4) Productivity of workers is low

5. Which one of the following describes best the concept of 'Nirvana' in Buddhism ?
(1) The complete annihilation of self
(2) A state of bliss and rest
(3) The extinction of the flame of desire
(4) A mental stage beyond all comprehension

6. Acid rain is caused by the pollution of environment by the _____.
(1) Carbon dioxide and Nitrogen
(2) Nitrous oxide and Sulphur dioxide
(3) Carbon monoxide and Carbon dioxide
(4) Ozone and Carbon dioxide

7. Who was the Speaker of the First Lok Sabha ?
(1) G.V. Mavalankar (2) Hukam Singh
(3) K.M. Munshi (4) U.N. Dhebar

8. The Mongols under Chengez Khan invaded India during the reign of :
(1) Balban (2) Feroz Tughlaq
(3) Muhammad bin Tughlaq (4) Iltutmish

9. Which one of the following movements has contributed to a split in the Indian National Congress resulting in the emergence of 'moderates' and 'extremists' ?
(1) Quit India Movement (2) Swadeshi Movement
(3) Civil Disobedience Movement (4) Non-cooperation Movement
10. The leader of the Bardoli Satyagraha (1928) was :
(1) Vithalbhai J. Patel (2) Mahatma Gandhi
(3) Sardar Vallabhbhai Patel (4) Mahadev Desai
11. Which of following is nearest to the Equator ?
(1) Colombo (2) Jakarta (3) Manila (4) Singapore
12. Which of the following Planets has largest number of natural Satellites or Moons ?
(1) Saturn (2) Jupiter (3) Mars (4) Venus
13. Which one of the following countries has the highest population density ?
(1) Nepal (2) India (3) Pakistan (4) Sri Lanka
14. Which of the following hills are found where the Eastern Ghats and Western Ghats meet ?
(1) Annamalai Hills (2) Srisailam Hills
(3) Nilgiri Hills (4) Shevoroy Hills
15. Who became the first batsman to score more than 1,000 runs in an innings in any form of Cricket ?
(1) Ravindra Wade (2) Mobin Sheikh
(3) Prithvi Shaw (4) Pranav Dhanawade
16. The World Braille Day is observed every year on :
(1) 4th January (2) 6th July (3) 8th August (4) 21st October
17. Which of the following countries a new Parliament building is built by India ?
(1) Bhutan (2) Nepal (3) Maldives (4) Afghanistan
18. What is the mascot of the 2016 South Asian Games ?
(1) Chikor (2) Tikhor (3) Shera (4) Appu
19. 'On my Terms : From the Grassroots to the corridors of power', is the autobiography of :
(1) Narendra Modi (2) P.V. Narasimha Rao
(3) Sharad Pawar (4) K. Chandra Sekhar Rao

20. Which of the following schemes of Government of India has been recognised by the Guinness Book of world records ?
(1) Direct Benefit transfer on LPG
(2) Pradhan Mantri Jan Dhan Yojana
(3) Pradhan Mantri Awas Yojana
(4) Atal Mission for Rejuvenation and Urban Transformation
21. Nutrients essential for plant growth are returned to the soil by :
(1) Decomposer (2) Herbivores (3) Producers (4) Carnivores
22. How many bones are there in a human body ?
(1) 230 (2) 300 (3) 206 (4) 260
23. Which of the following is the hardest element ?
(1) Copper (2) Iron (3) Diamond (4) Silicon
24. A transformer is used to :
(1) Increase DC voltage (2) Increase or decrease AC voltage
(3) Decrease DC voltage (4) Conversion of DC into AC
25. The science of rainfall is known as :
(1) Hyetology (2) Koniology (3) Hydrology (4) Hippology
26. The instrument for measuring the speed :
(1) Diagonometer (2) Dromometer (3) Delinometer (4) Durometer
27. Which of the following countries is the world's largest cotton producer in the crop year 2014/2015 ?
(1) USA (2) India (3) Australia (4) China
28. 'Madhesi' people who are recently in news belong to which of the following country ?
(1) Bangladesh (2) Sri Lanka (3) Nepal (4) Bhutan
29. Which of the following cities has been selected by the microsoft for its pilot project in Digital India initiative ?
(1) Surat (2) Varanasi (3) Hyderabad (4) Ahmedabad
30. What is the Swachh Bharat cess on services ?
(1) 0.5% (2) 1.0% (3) 1.5% (4) 0.25%

TEST - II
ENGLISH LANGUAGE

Directions for question number 31 to 45 :

This section consists of two passages followed by questions based on the content of the passages. Answer the question following each passage on the basis of what is stated or implied in the passage.

Passage I (Questions 31 to 37)

In India, we currently do not have any flexibility of including cross-disciplinary courses for degrees like engineering, computing or informatics.

Even the professors within different departments of an engineering institute literally don't talk to each other. This further cloistered culture and lack of communication among faculty, students, and researchers from different departments severely cramps the cultivation of divergent and lateral thinking, which is key to disruptive and 'out-of-the-box' thinking that is well-conceded to be the bedrock of all innovation, especially so, for scientific breakthroughs.

Steeped in tradition and theoretical overdrive, there are too many mandatory domain subjects and hardly any attention or emphasis is given to courses that can be chosen on the basis of a student's curiosity, concern, or passion.

The so-called rigor of technical courses creates further intimidating barriers for the youth who, fearing the over-technical nature of these courses, do not opt for them. Technical courses like engineering, currently account for not more than 10 percent enrolments. Therefore, creating flexibility and allowing a healthy choice of courses from the liberal arts would certainly encourage students, especially girls, to enroll for these significant science streams, and not have to take up the pure arts courses for lack of choice and for fear of failure in the over-technical courses.

To expand reach, therefore, we need a range of measures, like, reach out to those who drop out after 12th or start working as they need to do so for a living; also urge the government to consider hybrid degree programs, which allow these youth to pursue an engineering degree while working.

In the hybrid mode, engineering/science practicals can be conducted in various physical sites of universities across the country, and the student should be able to opt for a conveniently connected location. The theory component of the curriculum as well as its exams and evaluation can be put online for students to complete their courseware in anywhere, anytime mode.

This independence, apart from being practical and convenient, will also make our youth self-directed and self-motivated learners. Such an intervention will also increase capacity, as it will allow the youth to be usefully employed in the industry and also stay connected to their degree pathway, thus keeping open an integral avenue for their further growth. Universities will need to provide structured options of hybrid models to make students aware of such kind of possibilities of learning in hybrid and flexible modes.

31. The word 'cloistered' from paragraph two is closest in meaning to :

- | | |
|---------------------|----------------------------|
| (1) shunted | (2) sheltered from outside |
| (3) prohibited area | (4) free for all |

32. In India at present we allow professional courses to be combined with :

- (1) other professional courses
- (2) humanities
- (3) pure mathematics
- (4) no other courses

33. The passage mainly focuses on :

- (1) the rigour of our engineering courses.
- (2) scientific breakthroughs in our universities.
- (3) lack of flexibility to include interdisciplinary courses.
- (4) independent thinking of teachers.

34. All the following are mentioned in the passage EXCEPT :

- (1) students' unwillingness to take cross - disciplinary courses.
- (2) lack of flexibility to offer cross-disciplinary courses.
- (3) lack of communication among teachers, students and researchers of different departments.
- (4) barriers created for students of technical courses.

35. The style of the passage is :

- (1) persuasive
- (2) argumentative
- (3) narrative
- (4) expository

36. The best possible title for the passage would be :

- (1) technical courses in India.
- (2) evaluation methods in higher education.
- (3) inflexibility of Indian technical education.
- (4) hybrid models of engineering courses.

37. In the context of the passage, the word 'independence' in the last paragraph means :

- (1) freedom to choose any course
- (2) self-directed learning
- (3) free education
- (4) freedom from teachers

Passage - II (Questions 38 to 45)

A Constitution, according to Ambedkar, was "merely a mechanism for the purpose of regulating the work of the various organs of the state", and "a mechanism whereby particular members of particular parties are installed in office". The Constitution should not "tie down" the people of the country to live in a particular type of society. He raised such fundamental problems as the policy of the state, the social and economic organisation of society, and the adoption of new policies by the people in consonance with the needs of the changing times. According to him, all these matters should not be laid down in the Constitution itself; because that would be "destroying democracy altogether". If it was stated in the Constitution, he added, that the social organisation of the state should take a particular form, that would take away the liberty of the people to decide what should be the social organisation in which they might wish to live.

Ambedkar was elected to the Constituent Assembly of India by the members of the West Bengal Legislative Assembly though he was defeated in Bombay. He was elected on the Drafting Committee and later appointed its chairman. The other members being N. Gopalaswami Ayyangar, Sir Alladi Krishnaswami Ayyar, K.M. Munshi, Sir Muhammad Sadulla, N. Madhava Menon and D.P. Khaitan, with B.N. Rau as the constitutional adviser.

The Constituent Assembly first met on 9 December 1946. On 15 August 1947, it became the Sovereign Constituent Assembly of free India. The first draft of the Constitution was presented on 4 November 1948, and the final Constitution was adopted on 26 November, 1949. During the long period of more than three years, the course took different turns. Ambedkar, as chairman of the Drafting Committee, piloted it. He did his job confidently. But for that the backing of a strong united party was necessary. The Congress Party was praised by him for this job. He said that the Congress Party inside the Assembly brought into its proceedings a sense of order and discipline. He gave all the credit to the Congress Party for the smooth sailing of the Constitution in the Assembly.

Ambedkar's tribute to the Congress Party was a calculated one. He was a relentless opponent and uncompromising critic of the Indian National Congress in its policies towards his community. In the opening session of the Assembly he was one of the very few who opposed the Objectives Resolution moved by Nehru. But subsequent developments culminating in the partition of the country made him realise that political realism demanded a moderate attitude on his part towards those who had in their hands effective political power. The Congress leaders responded to this gesture so generously that they elected him the chairman of the Drafting Committee.

Ambedkar's main objective in entering the Constituent Assembly was to safeguard the interests of the scheduled castes. He said that he had not the ambition of drafting the Constitution. He was surprised when he was elected on the Drafting Committee and moreover its chairman. On another occasion he urged his followers to look to the welfare of their community, and not to lose sight of their duty towards the preservation of our independence and told them that "the course of political events is changed now".

It was charged in the Constituent Assembly that the Draft Constitution was a copy of the Government of India Act, 1935. Ambedkar replied: "There is nothing to be ashamed of in borrowing. It involves no plagiarism." He explained that the problem in 1935 was a redistribution of the powers of the British government in India to reconcile the Indian demand for full self-government, and the British determination was to keep India under their control. That act was full of compromises. It was implemented in 1937. It was suitably modified to become the Constitution of the Dominion of India between 15 August 1947 and 26 January 1950. In his opinion to appoint a Constituent Assembly was superfluous. All that was necessary was to delete those sections of the Government of India Act which were inconsistent with dominion status. The only work in the Constituent Assembly was to find out the solution of the communal problem. As regards the residuary powers, he remarked that the provision contained in the present Government of India Act, 1935, could be adopted as the best compromise.

38. The best possible title for the passage would be :
- (1) Ambedkar vs. Indian National Congress
 - (2) Ambedkar and Nehru
 - (3) Ambedkar's contribution to the drafting of Indian Constitution
 - (4) Ambedkar's struggle for the cause of the scheduled castes
39. Ambedkar's view of the constitution was :
- (1) The constitution should guide the people to live in a particular type of society.
 - (2) People should achieve their aspirations within the permitted limits.
 - (3) The constitution should not lay down policies of the state on social and economic matters.
 - (4) A mechanism for the purpose of regulating the work of various organs of the state.
40. One of the following was not a member of the Drafting Committee of the Constitution :
- | | |
|---------------------------|--------------------------|
| (1) Gopala Swami Ayyangar | (2) Sir Muhammad Sadulla |
| (3) N. Madhaya Menon | (4) Dr. V.K.R.V. Rao |
41. The main reason for Dr. Ambedkar's joining the Constituent Assembly was :
- (1) Jawaharlal Nehru's persuasion to Ambedkar.
 - (2) To safeguard the interests of the scheduled castes.
 - (3) Congress party's generous approach towards Ambedkar.
 - (4) To prevent free India from further break-up.
42. Ambedkar defended :
- (1) The Government of India Act, 1937.
 - (2) Borrowing portions from the Government of India Act, 1935.
 - (3) The constitution of the Dominion of India without any changes.
 - (4) Drafting an entirely a new constitution.

43. The final constitution was adopted in :
 (1) 1946 (2) 1947 (3) 1948 (4) 1949
44. Which one of the following is **not** true ?
 (1) Ambedkar was elected to Constituent Assembly by the West Bengal legislative Assembly.
 (2) Ambedkar was a relentless critic of the Congress.
 (3) Ambedkar gave due credit to Nehru while drafting the Constitution.
 (4) Ambedkar's tribute to the Congress Party was qualified one.
45. The writer of the passage is most likely a/an :
 (1) economist (2) sociologist
 (3) political scientist (4) anthropologist

Directions for question number 46 to 50 :

Each of these questions consists of a word in capital letters followed by four alternative words. From among the alternatives, choose the word most nearly **similar** in meaning to the word in capital letters in each case.

46. NOSTALGIC :
 (1) outdated (2) feeling for the past events
 (3) recollection (4) remembering only good things
47. MAYHEM :
 (1) complete disorder (2) violent clashes
 (3) free for all (4) mob violence
48. NOSY :
 (1) a person with a long nose
 (2) someone interested too much in other's affairs
 (3) one who asks too many questions
 (4) a person who suspects everyone
49. OUTRAGE :
 (1) feeling of anger and shock (2) unconcerned about others
 (3) feeling sad about something (4) provocative
50. PREREQUISITE :
 (1) preparation
 (2) something that must exist for something to happen
 (3) necessary details
 (4) Important resources

Directions for question number 51 to 55 :

Each of these questions consists of a word in capital letters followed by four alternative words. From among the alternatives, choose the word most nearly **opposite** in meaning to the word in capital letters in each case.

51. INNOCUOUS :

- (1) tasteful (2) innocent (3) harmful (4) indifferent

52. NEBULOUS :

- (1) free (2) modern (3) concrete (4) indiscriminate

53. OVERLAP :

- (1) on top of someone's lap (2) distinct
(3) inevitable (4) to cover part of the same space

54. RETARD :

- (1) slow down (2) bring down (3) fast progress (4) sleepy

55. RETROSPECT :

- (1) think about the past (2) review your actions
(3) think about the future (4) critically evaluate

Directions for question number 56 to 60 :

Each of these questions consists of a sentence with two blanks, followed by four alternative set of words. In each case select the set of words for each blank that best fits the meaning of the sentence as a whole.

56. I don't think I could spend _____ on a jacket, I could not _____ to my conscience.

- (1) that much time make peace (2) that much money justify
(3) too much attention quarrel (4) more than ten minutes agree

57. She quickly _____ her speech before _____ stage.

- (1) practised delivered on (2) ran over going on
(3) finished emptying the (4) went out she climbed

58. The film vividly portrays _____ in the London of the early _____.

- (1) one or two men morning (2) some crazy ideas periods
(3) the seamy side of life 70s (4) the commercial firms parts

59. Most people find their university years _____ but inevitably _____ things do go wrong.
- (1) from one to three as always
 - (2) as undergraduates they allow
 - (3) least exciting most productive
 - (4) among the most memorable from time to time
60. Plagiarism is a _____ and, to avoid doubt, all universities should give a definition of _____.
- (1) common practice academic reputation
 - (2) wide-ranging offence what they regard as plagiarism
 - (3) widespread reality instructions and clarifications
 - (4) rare phenomenon negligence and oversight

Directions for question number 61 to 65 :

Each of the following questions consists of a related pair of words in capital letters followed by four pairs of words. Select the pair that best expresses a relationship similar to that expressed in the pair in capital letters in each case.

61. CLEMENCY : MERCY

- | | |
|-----------------------------|-------------------------|
| (1) autocratic : democratic | (2) stringent : lenient |
| (3) love : affection | (4) brutal : gentle |

62. TREE : FLOWER

- | | | | |
|----------------|------------------|-------------------|-------------------|
| (1) sea : boat | (2) iron : cloth | (3) bread : sweet | (4) hand : finger |
|----------------|------------------|-------------------|-------------------|

63. CITY : TOWN

- | | |
|----------------------|-----------------------|
| (1) forest : road | (2) thorn : needle |
| (3) village : hamlet | (4) pipeline : street |

64. GOLD : SILVER

- | | |
|--------------------|-----------------------|
| (1) diamond : ruby | (2) necklace : pearls |
| (3) ring : diamond | (4) bangles : gold |

65. KIND : GENEROUS

- | | |
|---------------------------|-------------------|
| (1) cruel : soft | (2) metal : stone |
| (3) loving : affectionate | (4) spend : save |

Directions for question number 66 to 75 :

In all these questions, either a part or the whole of the sentence is underlined. The sentence is followed by four ways of writing the underlined part. Select the alternative which represents the correct way of writing the underlined part as standard written English.

66. To stop corruption and maladministration in institutions, there is always laws and improvements.
- (1) leaders must be allowed to use more power.
 - (2) there must be strict laws that are implementable.
 - (3) you should be responsible.
 - (4) people must work hard with officials.
67. Because of the negligence of the bus driver, many lives would have been saved yesterday.
- (1) could have been saved
 - (2) were lost
 - (3) did not reach the hospital
 - (4) must have reached home
68. You should be able to rely on the university having a code or procedure to have conducted examinations and interviews.
- (1) for everyone at intervals and leave periods.
 - (2) convenient for examinations and interviews.
 - (3) for conducting examinations and interviews.
 - (4) to conduct and not to conduct exams and interviews.
69. Your oral representations to the inquiry officer should have confirmed in writing always.
- (1) should be confirmed always in writing
 - (2) should always confirm in writing
 - (3) must not depend on writing
 - (4) cannot be followed by writing
70. The unhygienic environment in which children grow should be the historical neglect of health care systems in countries like India.
- (1) should not be
 - (2) is due to
 - (3) not so much
 - (4) does not
71. In a multicultural society, it is always necessary to cultivate tolerance to other faiths and cultures and respect each.
- (1) enact laws as per the direction of the government.
 - (2) cultivate tolerance and respect towards each other's faith and culture.
 - (3) engage the different faiths and cultures.
 - (4) persuade the majority to tolerate the other faiths.
72. History has offered us so many lessons from the past, but few are not ready to learned lessons.
- (1) but the past is past, no use learning.
 - (2) but we cannot learn anything everyday.
 - (3) but very few seem to have learnt some lessons from the past.
 - (4) but it is not possible to learn lessons from history.

73. You are at liberty to express your views as long you should not affect other's freedom.
- (1) as long as you deny other's freedom.
 - (2) as long as you do not step on other's freedom.
 - (3) as long as you do not give up.
 - (4) as long as others allow you to speak.

74. It is reasonable to complain, if an organisation has failed to fulfil any promised to its clients or customers.
- | | |
|------------------------|-------------------------|
| (1) agreement signed | (2) promise made to its |
| (3) understanding with | (4) failure to promise |

75. It can be difficult to get any decision to review unless and if reasons have given.
- (1) to be reviewed, if no reasons given
 - (2) unless reviewed with reasons
 - (3) reviewed unless reasons have been given
 - (4) review if reasons are given

Directions for question number 76 to 80 :

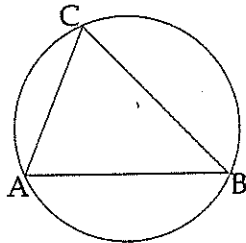
Each of these questions consists of an idiom, followed by four alternatives. Select the alternative that gives the correct meaning of the idiom.

76. Run into rough weather :
- | | |
|-----------------------------|----------------------------|
| (1) running in cold weather | (2) meet with difficulties |
| (3) run away from race | (4) withdraw from battle |
77. Beat about the bush :
- | | |
|-----------------------------------|------------------------|
| (1) not saying something directly | (2) clearing the grass |
| (3) waiting to catch a bird | (4) quarrelling loudly |
78. Hit the nail on its head :
- | | |
|----------------------|--|
| (1) driving a nail | (2) pointing to the crux of the matter |
| (3) hitting the iron | (4) wasting one's time |
79. The cat is out of the bag :
- | | |
|--------------------------|-----------------------------|
| (1) allow to go | (2) come out with the truth |
| (3) making things happen | (4) telling a lie |
80. In a nutshell :
- | | |
|--------------------|--------------------|
| (1) packed tightly | (2) push hard |
| (3) very briefly | (4) without hiding |

TEST - III
QUANTITATIVE APTITUDE

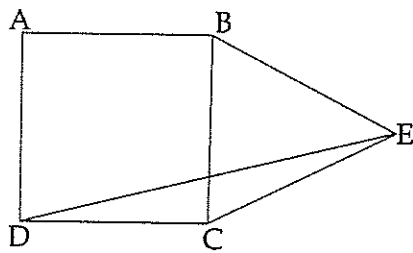
81. The value of a machine depreciates @ 15% per annum. If the price of a new machine is ₹ 60,000 its value after 2 years will be :
- (1) ₹ 43,350 (2) ₹ 45,000 (3) ₹ 52,570 (4) ₹ 51,750
82. 80% of P = 40% of Q and Q = X% P. Then the value of X is :
- (1) 360 (2) 200 (3) 300 (4) 250
83. The population of a town increase by 10% every year. If it is 16093 now, its population 2 year ago was :
- (1) 13300 (2) 14200 (3) 14750 (4) 15265
84. If A : B is 2 : 3 and B : C is 3 : 4 then A : C is equal to :
- (1) 2 : 3 (2) 6 : 7 (3) 5 : 6 (4) 1 : 2
85. If the numerator of a fraction is increased by 15% and the denominator is increased by 10%, then the value of the fraction is $\frac{15}{26}$. The original fraction is :
- (1) $\frac{130}{223}$ (2) $\frac{158}{229}$ (3) $\frac{133}{462}$ (4) $\frac{165}{299}$
86. X varies directly as Y varies and Z varies inversely as Y varies. At a time Y = 10, X = 20, Z = 5. If Y is changed to 20 then the values of Z is :
- (1) 2.5 (2) 5 (3) 10 (4) 3
87. If a box containing 10 mirrors is dropped which of the following can not be the ratio of broken mirrors to unbroken mirrors.
- (1) 1 : 1 (2) 2 : 3 (3) 3 : 2 (4) 3 : 4
88. 5 (P's Capital) = 10 (Q's Capital) = 15 (R's Capital) then the ratio of their capital is :
- (1) 6 : 3 : 2 (2) 2 : 7 : 9 (3) 8 : 5 : 3 (4) 2 : 3 : 1

89. The difference between a discount of 50% on ₹ 500 and two successive discounts of 45% and 5% on the same amount is :
- (1) ₹ 15 (2) ₹ 11.25 (3) ₹ 10 (4) ₹ 12.25
90. A man rows upstream 10 km and downstream 20 km taking 4 hrs each time. The velocity of the current is :
- (1) 2 kmph (2) 2.5 kmph (3) 1.25 kmph (4) 1.5 kmph
91. A boat goes 50 km upstream in 10 hours and a distance of 40 km. Downstream is 9 hours. The speed of the boat in standing water is :
- (1) 4.9 kmph (2) 5.2 kmph (3) 4.5 kmph (4) 4.72 kmph
92. The cost of a diamond varies directly as the square of its weight. Once, this diamond broke into four pieces with weights in the ratio 1 : 2 : 3 : 4. When the pieces were sold, the merchant got ₹ 70,000 less. Find the original price of the diamond.
- (1) ₹ 1.4 lakh (2) ₹ 2.0 lakh (3) ₹ 1.0 lakh (4) ₹ 2.1 lakh
93. A cube of side 12 cm is painted red on all the faces and then cut into smaller cubes, each of side 3 cm. What is the total number of smaller cubes having none of their faces painted ?
- (1) 16 (2) 8 (3) 12 (4) 24
94. The figures show a circle of diameter AB and radius 6.5 cm. If chord CA is 5 cm long, find the area of triangle ABC.



- (1) 60 sq.cm (2) 30 sq.cm (3) 40 sq.cm (4) 52 sq.cm
95. In a locality, two-thirds of the people have cable-TV, one-fifth have VCR, and one-tenth have both, what is the fraction of people having either cable TV or VCR ?
- (1) $\frac{19}{30}$ (2) $\frac{3}{5}$ (3) $\frac{17}{30}$ (4) $\frac{23}{30}$

96. If ABCD is a square and BCE is an equilateral triangle, what is the measure of the angle DEC ?



- (1) 15° (2) 30° (3) 20° (4) 45°
97. I bought 5 pens, 7 pencils and 4 erasers. Rajan bought 6 pens, 8 erasers and 14 pencils for an amount which was half more than what I had paid. What percent of the total amount paid by me was paid for the pens ?
- (1) 37.5% (2) 62.5% (3) 50% (4) 52.5%
98. Distance between A and B is 72 km. Two men started walking from A and B at the same time towards each other. The person who started from A travelled uniformly with average speed 4 kmph. While the other man travelled with varying speeds as follows : In first hour his speed was 2 kmph, in the second hour it was 2.5 kmph, in the third hour it was 3 kmph, and so on. When will they meet each other ?
- (1) 7 hours (2) 10 hours
(3) 3.35 km from A (4) midway between A and B
99. A man travels from A to B at a speed of x kmph. He then rests at B for x hours. He then travels from B to C at a speed of $2x$ kmph and rests at C for $2x$ hours. He moves further to D at a speed twice as that between B and C. He thus reaches D in 16 hours. If distances A-B, B-C, C-D are all equal to 12 km, the time for which he rested at B could be :
- (1) 3 hours (2) 6 hours (3) 2 hours (4) 4 hours
100. Instead of a metre scale, a cloth merchant uses a 120 cm scale while buying, but uses an 80 cm scale while selling the same cloth. If he offers a discount of 20% on cash payment, what is his overall percent profit ?
- (1) 20% (2) 25% (3) 40% (4) 15%
101. A man has nine friends, four boys and five girls. In how many ways can he invite them, if there have to be exactly three girls in the invitees ?
- (1) 320 (2) 160 (3) 80 (4) 200

102. How many men need to be employed to complete a job in five days if ten men can complete half the job in seven days ?
 (1) 7 (2) 14 (3) 28 (4) 30
103. Ajai and Vijai can together paint their house in 30 days. After working for 20 days, Ajai has to go out and Vijai finishes the remaining work in the next 30 days. If Vijai had gone away after 20 days instead of Ajai, then Ajai would have completed the remaining work in :
 (1) 15 days (2) 20 days (3) 25 days (4) 35 days
104. The average height of a class of 40 students is 156.5 cm. If one student with a height of 146 cm leaves the class and a new student joins the class, then the average height increases by 0.5 cm. The height of the new student is :
 (1) 157 cm (2) 166 cm (3) 170 cm (4) 176 cm
105. A number is increased by 20% and again increased by 20%. In order to get back the original number, find out by what percentage should the increased number be reduced ?
 (1) $21\frac{11}{31}\%$ (2) $30\frac{5}{9}\%$ (3) 43% (4) $30\frac{4}{9}\%$
106. A shopkeeper allows a discount of 10% on a watch and still makes a profit of 12%. If the cost price of the watch is ₹ 450, then what is the marked price ?
 (1) ₹ 520 (2) ₹ 540 (3) ₹ 560 (4) ₹ 490
107. A track is in the form of a ring, whose inner circumference is 352 metres and the outer circumference is 396 metres. The width of the track is :
 (1) 44 m (2) 14 m (3) 22 m (4) 7 m
108. Three glasses of equal volumes are $\frac{1}{2}$, $\frac{2}{3}$ and $\frac{3}{4}$ full of milk respectively. The remaining portion of all the glasses is filled up with water. The mixture in the three glasses is poured into a container. The ratio of milk and water in the container is :
 (1) 23 : 12 (2) 23 : 13 (3) 23 : 14 (4) 23 : 15
109. A and B are two numbers which are in the ratio 2 : 3. If 3 is added to both of the numbers, then their ratio becomes 3 : 4. Find the sum of A and B.
 (1) 11 (2) 14 (3) 15 (4) 20
110. A, B and C are partners in a business. Their shares are in the proportion of $\frac{1}{3} : \frac{1}{4} : \frac{1}{5}$. A withdraws half of his capital after 15 months and after another 15 months, a profit of ₹ 4340 is divided. The share of C is :
 (1) 1550 (2) 1360 (3) 1240 (4) 1245

Directions for question number 111 to 115 :

The following table gives the enrolment in Higher Secondary Schools in 2013. Study the table carefully and answer these questions.

Enrolment	No. of Schools
20 - 39	526
40 - 59	620
60 - 79	674
80 - 99	717
100 - 119	681
120 - 139	612
140 - 159	540
160 - 179	517
180 - 199	522
Total	5409

111. What is the approximate percentage of schools, where the enrolment was below 120 ?
(1) 59.16 (2) 69.27 (3) 70 (4) 71
112. What is the approximate percentage of schools, where the enrolment was above 79 but below 180 ?
(1) 50 (2) 56.39 (3) 67 (4) 75.29
113. Under which class does the maximum number of schools fall ?
(1) 100 - 119 (2) 80 - 99 (3) 60 - 79 (4) None of these
114. What is the approximate percentage of the least number of schools for the classes of enrolment ?
(1) 8 (2) 9.5 (3) 19.5 (4) 25.5
115. What is the number of schools where the enrolment is above 99 but below 160 ?
(1) 2550 (2) 2033 (3) 1833 (4) 1316

Directions for question number 116 to 120 : Use the following data :

ABC Software Co., before selling a package to its clients, follows the given schedule :

Month	Stage	Cost (₹ '000 per man-month)
1 - 2	Specification	40
3 - 4	Design	20
5 - 8	Coding	10
9 - 10	Testing	10
11 - 15	Maintenance	10

The number of people employed in each month is :

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
No. of people employed	2	3	4	3	4	5	5	4	4	1	3	3	1	1	1

116. Due to overrun in Design, the Design stage took three months, i.e. months 3, 4 and 5. The number of people working on Design in the fifth month was 5. Calculate the percentage change in the cost incurred in the fifth month. (due to improvement in "Coding" technique, the stage was completed in months 6 - 8 only).
 (1) 225% (2) 150% (3) 275% (4) 240%
117. With reference to the above question, what is the cost incurred in the new "Coding" stage ? (Under the new technique, 4 people work in the sixth month and 5 in the eighth).
 (1) ₹ 1,40,000 (2) ₹ 1,50,000 (3) ₹ 1,60,000 (4) ₹ 1,70,000
118. Under the new technique, which stage of Software Development is most expensive for ABC Software company ?
 (1) Testing (2) Specification (3) Coding (4) Design
119. Which five consecutive months have the lowest average cost per man-month under the new technique ?
 (1) 1 - 5 (2) 9 - 13 (3) 11 - 15 (4) 16 - 20
120. What is the difference in the cost between the old and the new techniques ?
 (1) ₹ 30,000 (2) ₹ 60,000 (3) ₹ 70,000 (4) ₹ 40,000
121. Which of the following numbers is divisible by 3 ?
 (1) 24357806 (2) 35769812 (3) 83479560 (4) 3336433

122. The sum of two integers is -25 . If one of them is 30 then the other is :

- (1) 55 (2) 5 (3) -55 (4) -5

123. The largest of the fractions $\frac{4}{5}, \frac{4}{7}, \frac{4}{9}, \frac{4}{11}$ is :

- (1) $\frac{4}{11}$ (2) $\frac{4}{5}$ (3) $\frac{4}{7}$ (4) $\frac{4}{9}$

124. If $45 : x :: 25 : 35$ then the value of x is :

- (1) 63 (2) 72 (3) 54 (4) 45

125. Area of a circle with radius ' r ' is :

- (1) $\frac{\pi r^2}{2}$ (2) πr^2 (3) $2\pi r$ (4) πr

126. A gas pipe is an example of a :

- (1) Cuboid (2) Cube (3) Cone (4) Cylinder

127. A rhombus is symmetrical about :

- (1) the line joining the midpoints of its opposite sides
(2) each of its diagonals
(3) perpendicular bisectors of each of its sides
(4) each of its sides

128. The value of $8967 \times 637 + 8967 \times 363$ is :

- (1) 363000 (2) 8967000 (3) 2497680 (4) 5497680

129. How many prime numbers are there between 90 and 100 ?

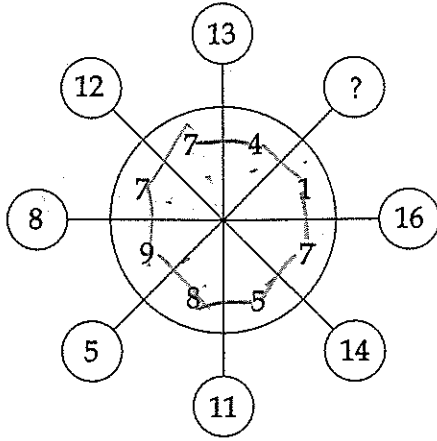
- (1) 0 (2) 1 (3) 2 (4) 3

130. The greatest number by which when 258 and 323 are divided leave remainders 2 and 3 respectively is :

- (1) 16 (2) 32 (3) 64 (4) 128

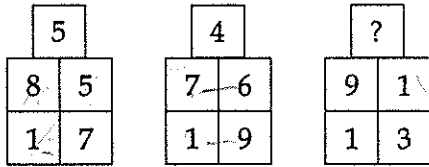
TEST - IV
REASONING

131. What number should replace the question mark ?



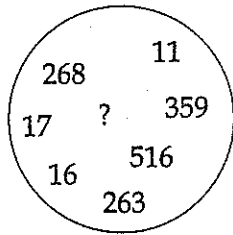
- (1) 17 (2) 8 (3) 9 (4) 15

132. What number should replace the question mark ?



- (1) 7 (2) 5 (3) 6 (4) 4

133. What number should replace the question mark ?



- (1) 13 (2) 14 (3) 15 (4) 12

134. Which letter is midway between the letter two letters below the letter immediately to the left of the letter G, and the letter three letters above the letter immediately to the right of the letter V?

A	B	C	D	E	
F	G	H	I	J	
K	L	M	N	O	
P	Q	R	S	T	
U	V	W	X	Y	Z

- (1) L (2) M (3) N (4) O

135. What goes into the empty square?

0	7	2	4	12	6	3
	7	9	6		18	9

- (1) 13 (2) 14 (3) 16 (4) 12

Directions for question numbers 136 - 139 : Look at this series given below. What numbers should come next?

136. 6, 10, 14, 18, 22, 26, 30

- (1) 36, 40 (2) 33, 37 (3) 38, 42 (4) 34, 38

137. 2, ~~44~~, 4, ~~41~~, 6, ~~38~~, 8, ~~35~~

- (1) 10, 12 (2) 35, 32 (3) 34, 9 (4) 35, 10

138. 14, ~~14~~, 26, ~~26~~, 38, ~~38~~, 50

- (1) 60, 72 (2) 50, 62 (3) 50, 72 (4) 62, 62

139. 4, 7, 26, 10, 13, 20, 16

- (1) 14, 4 (2) 14, 17 (3) 18, 14 (4) 19, 14

140. Look at this series : J14, L16, _____, P20, R22, . . .

What number should fill the blank ?

- (1) S24 (2) N18 (3) M18 (4) T24

141. Look at this series : V, VIII, XI, XIV, _____, XX,

What number should fill the blank ?

- (1) IX (2) XXIII (3) XV (4) XVII

142. Look at this series : VI, 10, V, 11, _____, 12,

What number should fill the blank ?

- (1) II (2) IV (3) IX (4) 14

Directions for question number 143 - 146 : Each question presents a situation and asks you to make a judgment regarding that particular circumstance. Answer each one solely on the basis of the information given.

143. The school principal has received complaints from parents about bullying in the school yard during recess. He wants to investigate and end this situation as soon as possible, so he has asked the recess aides to watch closely. Which situation should the recess aides report to the principal ?

- (1) A girl is sitting glumly on a bench reading a book and not interacting with her peers.
(2) Four girls are surrounding another girl and seem to have possession of her backpack.
(3) Two boys are playing a one-on-one game of basketball and are arguing over the last basket score.
(4) Three boys are huddled over a handheld video game, which isn't supposed to be on school grounds.

144. Mrs. Jansen recently moved to Arizona. She wants to fill her new backyard with flowering plants. Although she is an experienced gardener, she isn't very well-versed in what plants will do well in the Arizona climate. Also, there is a big tree in her backyard making for shady conditions and she isn't sure what plants will thrive without much direct sunlight. Her favorite gardening catalog offers several backyard seed packages. Which one should Mrs. Jansen choose ?
- (1) The Rainbow Collection is ideal for Northeast gardens. It includes a variety of colorful perennials that thrive in cool, moist conditions.
 - (2) The Greenhouse Collection will blossom year after year if planted in brightly lit locations and watered regularly.
 - (3) The Treehouse Collection will provide lush green plants with delicate colorful flowers that thrive in shady and partially shady locations.
 - (4) The Oasis Collection includes a variety of perennials that thrive in dry climates and bright sunlight.
145. Mark is working with a realtor to find a location for the toy store he plans to open in his town. He is looking for a place that is either in, or not too far from, the center of town and one that would attract the right kind of foot traffic. Which of the following locations should Mark's realtor call to his attention ?
- (1) a storefront in a new high-rise building near the train station in the center of town whose occupants are mainly young, childless professionals who use the train to commute to their offices each day.
 - (2) a little shop three blocks away from the town's main street, located across the street from an elementary school and next door to an ice cream store.
 - (3) a stand-alone storefront on a quiet residential street ten blocks away from the town's center.
 - (4) a storefront in a small strip mall located on the outskirts of town that is also occupied by a pharmacy and a dry cleaner.
146. Mrs. Carson took a taxi to meet her three friends for lunch. They were waiting for her outside the restaurant when she pulled up in the car. She was so excited to see her friends that she left her bag in the taxi. As the taxi pulled away, she and her friends took notice of the license plate number so they would be able to identify the car when they called the taxi company. The four license plate numbers below represent what each of the four women thinks she saw. Which one is most likely the license plate number of the taxi ?
- (1) JXK 12L
 - (2) JYK 12L
 - (3) JXK 12I
 - (4) JXX 12L

Directions : Answer question 147 solely on the basis of the following information :

When a new employee is hired at the law firm, a human resources representative should take the following steps on the employee's first day of work.

- (a) Greet the employee in the reception area and offer him/her coffee or tea.
- (b) Take the employee back to the human resources office and have him/her complete a general information questionnaire, a healthcare insurance form, and a tax form.
- (c) Take a photograph of the employee for his/her identification card.
- (d) Issue the employee a temporary identification card.
- (e) Walk the employee to the department in which he/she will be working and introduce him/her to his/her colleagues.
- (f) Bring the employee to his/her office or cubicle.

147. It is Kate Milford's first day of work as a paralegal at the law firm of Jasper, Jenkins and Mead. Taylor Franklin, the human resources manager, greets Kate in the reception area and gets her a cup of tea as they walk back to the human resources office. Taylor asks Kate to sit at a table and fill out three forms. While Kate completes the forms, Taylor checks her messages and asks her secretary to confirm a meeting she has for later that morning. Taylor then takes a photograph of Kate that will be used on her company identification card. As Taylor walks Kate over to the paralegal department, she tells her that the identification card should be ready in a couple of days. Taylor introduces Kate to her new colleagues, who all greet her quite warmly, and then shows her to her new cubicle, jots down her phone extension, and says that Kate should call her if she has any questions at all. Taylor Franklin's actions were.

- (1) proper, because she is the human resources manager and knows how to greet a new employee.
- (2) improper, because she did not spend enough time making sure that Kate was comfortable.
- (3) proper, because she told Kate that she should feel free to call her if she had questions.
- (4) improper, because she did not issue a temporary identification card.

Directions : Answer questions 148 through 150 on the basis of the information below.

The government of an island nation is in the process of deciding how to spend its limited income. It has \$7 million left in its budget and eight programs to choose among. There is no provision in the constitution to have a surplus, and each program has requested the minimum amount they need; in other words, no program may be partially funded. The programs and their funding requests are :

- Hurricane preparedness : \$2.5 million
- Harbor improvements : \$1 million
- School music program : \$0.5 million
- Senate office building remodelling : \$1.5 million
- Agricultural subsidy program : \$2 million
- National radio : \$0.5 million
- Small business loan program : \$3 million
- International airport : \$4 million

148. If the legislature decides to fund the agricultural subsidy program, national radio, and the small business loan program, the only other single program that can be funded is :

- (1) hurricane preparedness
- (2) harbor improvements
- (3) school music program
- (4) senate office building remodelling

149. If the legislature decides to fund the agricultural subsidy program, national radio, and the small business loan program, what two other programs could they fund ?

- (1) harbor improvements and international airport
- (2) harbor improvements and school music program
- (3) hurricane preparedness and school music program
- (4) hurricane preparedness and international airport

150. Senators from urban areas are very concerned about assuring that there will be funding for a new international airport. Senators from rural areas refuse to fund anything until money for agricultural subsidies is appropriated. If the legislature funds these two programs, on which of the following could they spend the rest of the money ?

- (1) the school music program and national radio
- (2) hurricane preparedness
- (3) harbor improvements and the school music program
- (4) small business loan program

Directions : Answer questions 151 through 153 on the basis of the information below :

A cinema complex with six movie theaters never shows the same movie in more than one theater. None of the theaters is the same size as any other, with number 1 being the largest and going in order to number 6, the smallest. The theater also has the following rules.

- It will never show more than two R-rated movies at once.
- It will always show at least one G-rated movie and one PG-rated movie in the two middle sized theaters (theaters 3 and 4).
- It will never show more than one foreign film at a time and never in the biggest theater.
- The starting times of movies will be staggered by fifteen minutes and will always be on the quarter hour.
- Employees need twenty minutes between showings to clean the theaters.

The cinema has the following films to choose from this particular week :

Shout, rated R ✓

Que Pasa, a Spanish film rated PG ✓

Abra Cadabra, rated G ✓

Lessons, rated R ✓

Jealousy, rated PG

Mist, a Swedish film rated R

Trek, rated NC-17

Fly, rated G

151. Which one of the following is an acceptable listing of films to show this week ?

- (1) Shout, Mist, Trek, Que Pasa, Fly and Jealousy
- (2) Shout, Mist, Trek, Fly, Jealousy and Abra Cadabra
- (3) Que Pasa, Lessons, Mist, Shout, Abra Cadabra and Trek
- (4) Shout, Lessons, Mist, Trek, Fly and Jealousy

152. If shout starts at 8 : 30, Mist at 8 : 15, Trek at 8 : 00, Fly at 7 : 45, Jealousy at 7 : 30, and Abra Cadabra at 7 : 15 and each movie is exactly two hours long, at what time will the next showing of Trek start ?

- (1) 10 : 00 (2) 10 : 15 (3) 10 : 30 (4) 10 : 45

153. The movies this week are showing in the following theaters :

Theater 1 : *Shout*

Theater 2 : *Trek*

Theater 3 : *Abra Cadabra*

Theater 4 : *Jealousy*

Theater 5 : *Fly*

Theater 6 : *Mist*

Shout is doing the most business, followed by *Trek* and to the management's surprise, *Mist*. The management wants to move *Mist* to a larger theater. Which theater is the most logical ?

- (1) Theater 1 (2) Theater 2 (3) Theater 3 (4) Theater 5

Directions : Answer questions 154 and 155 on the basis of the information below :

At a Halloween party where people were asked to dress as an object that represented their professions, Quentin, Rachel, Sarah, Thomas and Ulysses were among the guests. Rachel and Sarah are women. The costumes included a flower, a pencil, a spoon, a camera and a thermometer. The professions included a photographer, a florist, a doctor, an accountant and a chef.

- Quentin is an accountant.
- Neither Rachel nor Sarah was dressed as a spoon.
- None of the men is a doctor.
- Thomas is dressed as a camera.
- Sarah is a florist.

154. Which person is dressed as a thermometer ?

- (1) Quentin (2) Rachel (3) Sarah (4) Thomas

155. What is Ulysses's profession ?

- (1) photographer (2) florist (3) doctor (4) chef

CEO - red - blue - green - yellow - purple
 Cheryl Bert Enid David Alice

Directions : Answer questions 156 through 158 on the basis of the information below :

At a small company, parking spaces are reserved for the top executives : CEO, President, Vice President, Secretary and Treasurer - with the spaces lined up in that order. The parking lot guard can tell at a glance if the cars are parked correctly by looking at the color of the cars. The cars are yellow, green, purple, red and blue, and the executives' names are Alice, Bert, Cheryl, David and Enid.

- The car in the first space is red. (CEO)
- A blue car is parked between the red car and the green car.
- The car in the last space is purple. (Treasurer)
- The Secretary drives a yellow car.
- Alice's car is parked next to David's.
- Enid drives a green car.
- Bert's car is parked between Cheryl's and Enid's.
- David's car is parked in the last space.

CEO - red
 Bert - blue
 Enid - green
 David - yellow
 Alice - purple
 Secretary - Cheryl

156. What color is the Vice President's car ?

- (1) green (2) yellow (3) blue (4) purple

157. Who is the CEO ?

- (1) Alice (2) Bert (3) Cheryl (4) David

158. Who is the Secretary ?

- (1) Enid (2) David (3) Cheryl (4) Alice

Directions : Answer questions 159 through 161 on the basis of the information below :

Five towns - Fulton, Groton, Hudson, Ivy and Jersey - which are covered by the same newspaper, all have excellent soccer teams. The teams are named the Panthers, the Whippets, the Antelopes, the Kangaroos, and the Gazelles. The sports reporter, who has just started at the newspaper, has to be careful not to get them confused. Here is what she knows :

- The team in Fulton has beaten the Antelopes, Panthers and Kangaroos.
- The Whippets have beaten the teams in Jersey, Hudson and Fulton.
- The Antelopes are in Groton.
- The team in Hudson is not the Kangaroos.

Fu - Gazelles
 Gro - Antelopes
 Hud - Kangaroos
 Ivy - Whippets
 Jer - Panthers

159. Where are the Whippets ?

- (1) Fulton (2) Groton (3) Hudson (4) Ivy

160. Where are the Panthers ?

- (1) Ivy (2) Jersey (3) Fulton (4) Hudson

161. What team is in Fulton ?

- (1) Panthers (2) Gazelles (3) Whippets (4) Kangaroos

162. Find the two statements that together prove that :

RUPERT HAS MORE REAL ESTATE THAN KERRY.

- (a) Rupert has more real estate than everyone he went to school with.
(b) The High Flier's Tennis Club has very wealthy members.
(c) Of everyone he plays tennis with, Rupert has the most real estate.
(d) Kerry is a member of the High Flier's Tennis Club where Rupert often plays tennis.
(e) Rupert did not go to school with Kerry, but plays tennis with him at the club.
- (1) (a) and (e) (2) (b) and (c) (3) (b) and (d) (4) (c) and (e)

163. For years the beautiful Renaissance buildings in Palitito have been damaged by exhaust from many tour buses that come to the city. There has been little parking space, so most buses have idled at the curb during each stop on their tour, and idling produces as much exhaust as driving. The city has now provided parking that accommodates a third of the tour buses, so damage to Palitito's buildings from the buses' exhaust will diminish significantly.

Which of the following, if true, most strongly supports the argument ?

- (1) The exhaust from Palitito's few automobiles isn't a significant threat to the buildings.
(2) Palitito's Renaissance buildings are not threatened by pollution other than engine exhaust.
(3) Tour buses typically spend less than one-quarter of the time they are in Palitito transporting passengers from one site to another.
(4) Most tourists come to Palitito by tour bus than by any other single means of transportation.

164. Northern Air has dozens of flights daily into and out of Belleville Airport, which is highly congested. Northern Air depends for its success on economy and quick turnaround and consequently is planning to replace its large planes with Skybuses, whose novel aerodynamic design is extremely fuel efficient. The Skybus' fuel efficiency results in both lower fuel costs and reduced time spent refueling.

Which of the following, if true, could present the most serious disadvantage for Northern Air in replacing their large planes with Skybuses ?

- (1) The Skybus would enable Northern Air to schedule direct flights to destinations that currently require stops for refueling.
(2) Aviation fuel is projected to decline in price over the next several years.
(3) The fuel efficiency of the Skybus would enable Northern Air to eliminate refueling at some of its destinations, but several mechanics would lose their jobs.
(4) The aerodynamic design of the Skybus causes turbulence behind it when taking off that forces other planes on the runway to delay their takeoffs.

165. Roland : The alarming fact is that 90 percent of the people in this country now report that they know someone who is unemployed.

Sharon : But a normal, moderate level of unemployment is 5 percent, with 1 out of 20 workers unemployed. So at any given time if a person knows approximately 50 workers, 1 or more will very likely be unemployed.

Sharon's argument is structured to lead to which of the following as a conclusion ?

- (1) The fact that 90% of the people know someone who is unemployed is not an indication that unemployment is abnormally high.
- (2) The current level of unemployment is not moderate.
- (3) If at least 5% of workers are unemployed, the result of questioning a representative group of people cannot be the percentage Roland cites.
- (4) It is unlikely that the people whose statements Roland cites are giving accurate reports.

166. Which of the following most logically completes the argument ?

Although the pesticide TDX has been widely used by fruit growers since the early 1960's, a regulation in force since 1960 has prohibited sale of fruit on which any TDX residue can be detected. That regulation is about to be replaced by one that allows sale of fruit on which trace amounts of TDX residue are detected. In fact, however, the change will not allow more TDX on fruit than was allowed in the 1960's, because :

- (1) Pre-1970 techniques for detecting TDX residue could detect it only when it was present on fruit in more than the trace amounts allowed by the new regulations.
- (2) Many more people today than in the 1960's habitually purchase and eat fruit without making an effort to clean residues off the fruit.
- (3) People today do not individually consume any more pieces of fruit, on average, than did the people in the 1960's.
- (4) At least a small fraction of the fruit sold each year since the early 1960's has had on it greater levels of TDX than the regulation allows.

167. Pointing to a man on the stage, Sushmita said, "He is the brother of the daughter of the wife of my husband. "How is the man on the stage related to Sushmita ?

- (1) Son (2) Husband (3) Cousin (4) Nephew

168. Cherian said, 'This girl is the wife of the grandson of my mother'. What is Cherian to the girl ?

- (1) Father (2) Grandfather (3) Husband (4) Father-in-law

169. Pointing to a boy, Ramesh said, "His only brother's mother is my father's wife". How is Ramesh related to that boy ?

- (1) Uncle (2) Father (3) Nephew (4) Brother

170. If B's mother was A's mother's daughter. How was A related to B ?

- (1) Father (2) Sister (3) Brother (4) Maternal Uncle

171. If RAIN could be given the code number 42, what code number can be given to SUN ?

- (1) 45 (2) 51 (3) 54 (4) 32

172. If BAG=30 and BAD=21, then DEED=?

- (1) 18 (2) 36 (3) 62 (4) 72

173. In a certain code RAID is written as 5126 and NEAR is written as 7315. How is DINE written in that code ?

- (1) 6253 (2) 6273 (3) 6723 (4) 1273

174. A shopkeeper uses a code name 'BUDGETAR' with a value of ₹ 36, where B=₹ 1, U=₹ 2, D=₹ 3, and so on. Using the same code, find out the price of 'BUTTER' ?

- (1) ₹ 30 (2) ₹ 28 (3) ₹ 24 (4) ₹ 38

175. If the word 'TENOR' is coded as 'RONET', what should be the word for the code 'CHAINED' ?

- (1) BGZHMDC (2) DIBJOFE (3) DNIEAHC (4) DENIAHC

176. If the order of letters of each of the following words is reversed, then which of the following will be the meaningful word ? If more than one such word can be formed, mark 'S' as the answer and if no such word can be formed, mark 'X' as the answer. NAIL, PAIL, RAIL, MADAM, REST.

- (1) X (2) RAIL (3) MADAM (4) S

123456789101112131415161718192021222324252627282930313233343536373839404142434445464748495051525354555657585960616263646566676869707172737475767778798081828384858687888990919293949596979899100

177. If the letters in the word UNDERTAKING are rearranged in the alphabetical order, which one will be in the middle in order after the rearrangement ?

- (1) G (2) I (3) K (4) N

A D E H I K

178. Which letter in the word CYBERNETICS occupies the same position as it does in the English alphabet ?

- (1) C (2) E (3) I (4) T

179. If the first and second letters in the word DEPRESSION were interchanged, also the third and the fourth letters, the fifth and the sixth letters and so on, which of the following would be the seventh letter from the right ?

- (1) R (2) O (3) S (4) P

180. If the positions of the first and the sixth letters in the word DISTRIBUTE are interchanged ; similarly the positions of the second and the seventh, the third and the eighth and so on, which of the following letters will be the fifth from left after interchanging the positions ?

- (1) E (2) I (3) S (4) T

Directions for question number 181 - 183 : In each of the following questions, choose that set of numbers from the four alternatives sets, that is similar to the given set.

181. Given Set : (9, 15, 21)

- (1) (10, 14, 16) (2) (7, 21, 28) (3) (5, 10, 25) (4) (4, 8, 12)

182. Given Set : (14, 23, 32)

- (1) (15, 23, 31) (2) (14, 19, 24) (3) (13, 21, 29) (4) (12, 21, 30)

183. Given Set : (1, 8, 27)

- (1) (5, 12, 32) (2) (32, 39, 59) (3) (60, 79, 86) (4) (64, 125, 216)

184. How many 5s are there in the following number sequence which are immediately preceded by 7 and immediately followed by 6 ?

Terms : 7 5 5 9 4 5 7 6 4 5 9 8 7 5 6 7 6 4 3 2 5 6 7 8

- (1) 1 (2) 2 (3) 3 (4) 4

Directions for question number 185-186 : Following questions are based on the five three-digit numbers given below.

5 1 9 3 6 4 2 8 7 1 5 8 8 3 5

185. If the positions of the first and the third digit within each number are interchanged, which of the following will be the third digit of the second lowest number ?

- (1) 9 (2) 4 (3) 7 (4) 5

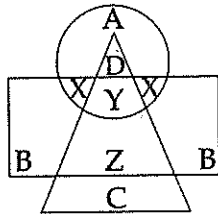
186. Which of the following is the difference between the second digit of the lowest and the highest of these numbers ?

- (1) 3 (2) 1 (3) 2 (4) 0

187. Anu and Vinay are ranked seventh and eleventh respectively from the top in a class of 31 students. What will be their respective ranks from the bottom in the class ?

- (1) 20th and 24th (2) 24th and 20th
 (3) 25th and 21st (4) None of these

Directions for question number 188-192 : In the following diagram, the circle represents College Professors, the triangle stands for Surgical Specialists, and Medical Specialists are represented by the rectangle.



188. College Professors who are also Surgical Specialists are represented by ?

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

189. Surgical Specialists who are also Medical Specialists but not Professors are represented by :

- (1) B (2) X (3) Y (4) Z

190. C represents :

- (1) Medical Specialists (2) College Professors
 (3) Surgical Specialists (4) Medical and Surgical Specialists

191. B represents :

- (1) Professors who are neither Medical nor Surgical Specialists
- (2) Professors who are not Surgical Specialists
- (3) Medical Specialists who are neither Professors nor Surgical Specialists
- (4) Professors who are not Medical Specialists

192. College Professors who are also Medical Specialists are represented by :

- (1) A (2) X (3) Y (4) Z

Directions for question number 193-195 : Each of the questions below consists of a question and two statements numbered (I) and (II) given below it. You have to decide whether the data given in the statements are sufficient to answer the questions. Read both the statement and :

Give answer (1). if the data in statement (I) alone are sufficient to answer the question, while the data in statement (II) alone are not sufficient to answer the question.

Give answer (2). if data in statement (II) alone are sufficient to answer the question, while the data in statement (I) alone are not sufficient to answer the question.

Give answer (3). if the data either in statement (I) alone or statement (II) alone are sufficient to answer the questions.

Give answer (4). if the data in both statements (I) and (II) together are necessary to answer the questions.

193. Seventeen people are standing in a straight line facing south. What is Bhavna's position from the left end of the line ?

- (I) Sandeep is standing second to the left of Sheetal. Only five people stand between Sheetal and the one who is standing at the extreme right end of the line. Four people stand between Sandeep and Bhavna.
- (II) Anita is standing fourth to the left of Sheetal. Less than three people are standing between Bhavna and Anita.

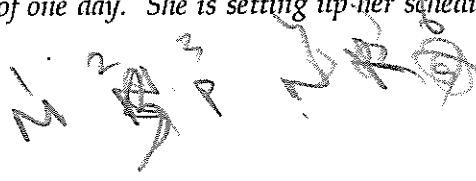
194. Five letters - A, E, G, N and R are arranged to the right according to certain conditions. Which letter is placed third ?

- (I) G is placed second to the right of A. E is to the immediate right of G. There are only two letters between R and G.
- (II) N is exactly between A and G. Neither A nor G is at the extreme end of the arrangement.

195. Six people - S, T, U, V, W and X are sitting around a circular table facing the centre. What is T's position with respect to X ?

- (I) Only two people sit between U and W. X is second to the left of W. V and T are immediate neighbours of each other.
- (II) T is to the immediate right of V. There are only two people between T and S. X is an immediate neighbour of S but not of V.

Directions for question number 196 to 199 : A sales representative plans to visit each of six companies M, N, P, Q, R and S exactly once during the course of one day. She is setting up her schedule for the day according to the following conditions.



- (a) She must visit M before N and R.
- (b) She must visit N before Q.
- (c) The third company she visits must be P.

196. Which of the following must be true of the sales representative's schedule ?

- (1) She visits M before Q
- (2) She visits N before R
- (3) She visits P before M
- (4) She visits P before S

197. If the sales representative visits S first, which company must she visit second ?

- (1) M
- (2) N
- (3) P
- (4) Q

198. The sales representative could visit any of the following companies immediately after P except :

- (1) S
- (2) R
- (3) Q
- (4) M

199. If the sales representative visits Q immediately before R and immediately after S, she must visit Q :

- (1) First
- (2) Second
- (3) Fourth
- (4) Fifth

200. Which of the following expressions will be true if the expression $R > O = A > S < T$ as definitely true ?

- (1) $O > T$
- (2) $S < R$
- (3) $T > A$
- (4) $S = O$

Y

X

- o o o -

