OPENMAT - XXX : Entrance Test for
Management Programmes 2011
August, 2011

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 digit 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. Which of the following is an odd one ?
   (1) Aryabhatta   (2) Bhasa
   (3) Bhaskara - I   (4) Bhaskaracharya - II

2. Whose painting has broken, for the first time, the one-crore price barrier for a painting by an Indian ?
   (1) M.F. Hussain   (2) Tyeb Mehta
   (3) Anjolie Ela Menon   (4) Manjeet Bawa

3. The co-founder of Hotmail, Indian born Sabeer Bhatia, sold Hotmail to whom ?
   (1) Microsoft   (2) Apple   (3) Google   (4) Yahoo

4. Whose name is associated with innovative low-cost, environment friendly housing ?
   (1) Aga Khan   (2) Ayyankali
   (3) Laurie Baker   (4) Hafeez Contractor

5. The Bhoodan Movement by Vinoba Bhave had its beginning from :
   (1) Andhra Pradesh   (2) Karnataka
   (3) Maharashtra   (4) Gujarat

6. The function of Ozone layer is :
   (1) to protect the earth from cosmic rays
   (2) to stabilise the earth's temperature
   (3) to filter harmful ultra violet rays of the sun
   (4) to prevent the radiation from earth

7. Who is associated with Green Revolution in India ?
   (1) C. Subramanyam   (2) M.S. Swaminathan
   (3) Dr. C.V. Kurien   (4) Mathew George

8. A person well known as father Teresa is :
   (1) Aryaratne   (2) Gerhard Fischer
   (3) Abdus sattar Edhi   (4) Baba Amte

9. In India Political Parties are given recognition by :
   (1) Law Commission   (2) Election Commission
   (3) Speaker of the Lok Sabha   (4) President

10. Civil Servants are not permitted to become :
    (1) Members of Parliament   (2) Chief Election Commission
    (3) Vice Chancellors of Universities   (4) Heads of Commissions of Inquiry

11. Which of the following is Ravine Port of India ?
    (1) Kolkata   (2) Vishakhapatnam
    (3) Mumbai   (4) Chennai

12. Name the indigenously built Unmanned air vehicle of India :
    (1) Vikrant   (2) Nishant   (3) Prashant   (4) Revant

13. Which one is the most sparsely populated state in India ?
    (1) Sikkim   (2) Meghalaya
    (3) Arunachal Pradesh   (4) Nagaland

14. The first country in the world to legalise euthanasia is :
    (1) France   (2) Sweden   (3) Netherlands   (4) Australia

15. The Head quarters of World Intellectual Property Organisation is located in :
    (1) Athens   (2) Geneva   (3) Vienna   (4) Paris

16. By which of the following names is Hong Kong Stock Exchange Index known as :
    (1) Nikkei   (2) Xetra dax   (3) Hang Seng   (4) Dow Jones

17. In 1975, which of the following merged with the Union of India ?
    (1) Sikkim   (2) Goa   (3) Bhutan   (4) Pondicherry

18. Article 370 of the Constitution of India deals with :
    (1) procedure for amending the Constitution
    (2) protection of life and personal property
    (3) relations between Centre and States
    (4) Special provisions for the state of Jammu and Kashmir

19. The full name of the musical instrument commonly called the Piano is :
    (1) piannisimo   (2) pianoforte   (3) pianomatic   (4) panorama

20. The Human Genome Project is related to :
    (1) Genetic mapping   (2) Genetic engineering
    (3) Genetic alteration   (4) Genetic imitation

21. The substance which is lost by the human body during dehydration is :
    (1) Sugar   (2) Potassium chloride
    (3) Calcium phosphate   (4) Sodium chloride

22. Orthography is a discipline which is devoted to the study of :
    (1) Stones   (2) Mountains   (3) Spelling   (4) Bones

23. In which of the following islands of India is an active volcano found ?
    (1) Car Nicobar island   (2) Nancowry island
    (3) Barren island   (4) Maya Bunder Island

24. Which among the following is the Winner of the Jnanpith award ?
    (1) Arundhati Roy   (2) Pupul Jayakar
    (3) Mahasweta Devi   (4) Mohini Giri

25. The 'Messenger' satellite launched by NASA is to study :
    (1) Mercury   (2) Venus   (3) Saturn   (4) Jupiter

26. Who is known as father of Economics ?
    (1) Adam Smith   (2) David Recardo
    (3) Gunnar Myrdel   (4) Karl Mark

27. Faux Pas means :
    (1) A tactless mistake   (2) A thing already done
    (3) Let it pass   (4) Do not repeat it

28. Which of the following is the most abundant constituent of earth's crust ?
    (1) Lime stone   (2) Sand stone
    (3) Igneous rocks   (4) Sedimentary rocks

29. Science of studying consumer life style is called :
    (1) ergonomics   (2) kinesics
    (3) psychographics   (4) biogenetics

30. Among the four Vedas, the oldest is :
    (1) Atharva Veda   (2) Sam Veda
    (3) Rig Veda   (4) Yajur Veda

TEST - II

ENGLISH LANGUAGE

Directions for questions 31 to 45 : This section consists of two passages followed by questions based on the contents of the passages. Answer the questions following each passage on the basis of what is stated or implied in the passage.

Passage I

It would be extremely convenient to have a single, generally accepted index of economic and social welfare of the people of our country. A glance at it would tell us how much better or worse off we had become each year, and we would judge the desirability of any proposed action by asking whether it would raise or lower this index. Some recent discussion implies that such an index could be constructed. Articles in the popular press even criticise the Gross National Product (GNP) because it is not such a complete index of the welfare, ignoring, on the one hand, that it was never intended to be, and suggesting, on the other, that with appropriate changes, it could be converted into one.

The output available to satisfy our wants and needs is one important determinant of welfare. Whatever want, need, or social problem engages our attention, we ordinarily can more easily find resources to deal with it when output is large and growing than when it is not. GNP measures output fairly well, but to evaluate welfare we would need additional measures which would be far more difficult to construct. We would need an index of real costs incurred in production, because we're better off if we get the same output at less cost. Use of just man hours for welfare evaluation would unreasonably imply that the increased total hours by raising the hours of eight women from 60 to 65 a week imposes no more burden than raising the hours of eight men from 40 to 45 a week, or even than hiring one involuntarily unemployed person for 40 hours a week. A measure of real costs of labour would also have to consider working conditions. Most of us spend almost half of our waking hours on the job and our welfare is vitally affected by the circumstances in which we spend those hours.

To measure welfare we would require a measure of changes in the need our output must satisfy. One aspect, population change, is now handled by converting output to a per capita basis on the assumption that, other things being equal, twice as many people need twice as many goods and services to be equally well off. But an index of needs would also account for differences in the requirements for living as the population becomes more urbanised and suburbanised ; for the changes in national defence requirements ; and for changes in the effect of weather on our needs. The index would have to tell us the cost of meeting our needs in the base year as compared with cost of meeting them equally well under the circumstances prevailing in every other year.

Measures of "needs" shape into measures of the human and physical environment in which we live. We all are enormously affected by the people around us. Can we go where we like without fear of attack ? We are also affected by the physical environment-purity of water and air, accessibility of green areas and other conditions. To measure this requires accurate data, but such data are generally deficient. Moreover, weighting is required: to combine robberies and murders in a crime index; to combine pollution of the river and pollution of the lakes into a water pollution index; and then to combine crime and water pollution into some general index. But there is no basis for weighting these except on individual preference.

There are further problems. We would need an index of the "goodness" of the distribution of income. There is surely consensus that given the same total income and output, a distribution with fewer families in poverty would be better, but what is the ideal distribution ? Even if we could construct indices of output, real costs, needs, state of the environment, we may not be able to compute a welfare index because we have no system of weights to combine them.

31. The author's primary concern is to :
    (1) refute the arguments for the position regarding the existing index.
    (2) make the proposal for a new index and defend it.
    (3) show defects in the present system.
    (4) review literature relevant to the construction of index.

32. The author implies that the use of man hours is not an appropriate measure of the real cost because it :
    (1) ignores the conditions under which the output is generated.
    (2) fails to take into consideration the environmental costs of production.
    (3) it emphasises the output of real goods as opposed to services.
    (4) is not an effective method of reducing unemployment.

33. It can be inferred from the passage that the most important reason why a single index of welfare cannot be designed is :
    (1) the cost associated with producing the index would be prohibitive
    (2) considerable empirical research would have to be done regarding output and needs
    (3) any weighting of various measures into a general index would be inherently subjective and arbitrary
    (4) production of the relevant data would require time, thus the index would be only a reflection of past welfare

34. The author regards the idea of a general index of welfare as :
    (1) an unrealistic dream   (2) a scientific reality
    (3) an important contribution (4) a future necessity

35. According to the passage, the GNP is :
    (1) A fairly accurate measure of output
    (2) A reliable estimate of needs
    (3) An accurate forecaster of welfare
    (4) A precise measure of welfare

36. According to the passage, an adequate measure of need must take into account all of the following **except** :
   (1) changing size of the population
   (2) changing effects on people of the weather
   (3) differences in the needs of urban and suburban populations
   (4) accessibility of green areas and other amenities

37. According to the passage, the criticism of the GNP as a complete index of welfare is unfair because :
   (1) with appropriate changes it could become one
   (2) it was never intended to be a general measure of welfare
   (3) it is a good measure of output
   (4) it emphasises the output of pure goods

38. The passage it is most likely :
   (1) An address to a symposium on public policy decisions
   (2) A chapter in a general introduction to a book
   (3) A pamphlet on government programme to aid the poor
   (4) A speech by the university vice chancellor to a graduating class

39. According to the passage, a single index of welfare is desirable because :
   (1) it would allow us to evaluate the attractiveness of any developmental proposal by simply analysing its impact on the index
   (2) it would enable us to have a composite assessment of the welfare of people on a year to year basis
   (3) it would make an important contribution to our understanding of needs and output
   (4) Both 1 and 2 above

40. According to the passage, it is desirable to consider working conditions while constructing a measure of the real costs of labour because :
   (1) Conditions of work affect the labour output
   (2) Large proportions of our waking hours are spent at work and our welfare is profoundly affected by the circumstances at the workplace
   (3) The real cost of labour are otherwise difficult to calculate
   (4) The cost of labour is a small proportion of the output cost

Passage II

The function of strategic planning is to position a company for long term growth and expansion in a variety of markets by analyzing its strengths and weaknesses and examining current and potential opportunities. Based on this information, the company develops strategy for itself. That strategy then becomes the basis for supporting strategies for its various departments.

This is where all too many strategic plans go astray-at implementation. The recent business management surveys show that most CEOs who have a strategic plan are concerned with the potential breakdown in the implementation of the plan. Unlike nineteen eighties and nineties corporations that blindly followed their five year plans even when they were misguided, today's corporations tend to second guess.

An outsider can help facilitate the process, but in the final analysis, if the company doesn't make the plan, the company won't follow the plan. This was one of the problems with strategic planning in the nineteen eighties. In that era, it was an abstract, top down process involving only a few top corporate officers and hired guns. Number crunching experts came into a company and generated tome-like volumes filled with a mixture of abstruse facts and grand theories which had little to do with the day to day realities of the company. Key middle managers were left out of the planning sessions, resulting in lost opportunities and ruffled feelings.

However, more hands-on strategic planning can produce startling results. A recent survey queried over a thousand small to medium sized businesses to compare companies with the strategic plan to companies without one. The survey found that companies with strategic plans had annual revenue growth of 6.2 percent as opposed to 3.8 percent for the other companies.

Perhaps most importantly, a strategic plan helps companies anticipate - and survive - change. New technology and the mobility of capital mean that markets can shift faster than ever before. Some financial analysts wonder why they should do the planning two years ahead when market dynamics may be transformed by next quarter. The fact is that it is the very pace of change that makes planning so crucial. Now, more than ever, companies have to stay alert to the marketplace. In an environment of continual and rapid change, long range planning expands options and organisational flexibility.

41. The primary purpose of the passage is to :
    (1) refute the idea that change is bad for a corporation's long term health
    (2) describe how long term planning, despite some potential pitfalls, can help a corporation to grow
    (3) compare and contrast two styles of corporate planning
    (4) evaluate the strategic planning goals of corporate India today

42. It can be inferred from the passage that, in general, strategic planning during the nineteen eighties and nineties had all of the following shortcomings EXCEPT :
    (1) A reliance on outside consultants who did not necessarily understand the nuts and bolts of the business
    (2) A dependence on theoretical models that did not always perfectly describe the workings of the company.
    (3) An inherent weakness in the company's own ability to implement the strategic plan.
    (4) An excess of information and data that made it difficult to get to the key concepts.

43. The author has most likely mentioned the results of the survey of 1,000 companies in order to :

(1) Put forth an opposing view on strategic plans so that he can then refute it

(2) Illustrate that when strategic planning is hands on, it produces uninspiring results

(3) Give a concrete example of why a strategic planning did not work during the nineteen eighties

(4) Support the contention that strategic planning when done correctly can be very successful

44. The passage suggests which of the following about the financial analysts mentioned in it :

(1) They believe that strategic planning is the key to weathering the rapid changes of the marketplace

(2) They are working to understand and anticipate market developments that are two years ahead

(3) Their study of market dynamics had led them to question the reliability of short term planning strategies

(4) They might not agree with the author that one way to survive rapidly changing conditions comes from long range planning

45. The word *abstruse facts* used in the passage refers to facts that are :

(1) Difficult to comprehend   (2) Unsubstantiated

(3) Imaginary   (4) Accurate

Directions for questions 46 to 50 : Each of these questions consists of a word in capital letters followed by four alternative words or phrases. From among the alternatives, choose the word most nearly *similar* in meaning to the word in capital letters in each case.

46. ABYSMAL

(1) bottomless   (2) eternal   (3) meteoric   (4) diabolic

47. CONSTRUE

(1) reserve   (2) promote   (3) explain   (4) erect

48. EMANCIPATE

(1) take back   (2) set free   (3) make worse   (4) embolden

49. FURTIVE

(1) underhanded   (2) coy   (3) brilliant   (4) abortive

50. PIQUE

(1) pyramid   (2) revolt   (3) resentment   (4) struggle

Directions for questions 51 to 55 : Each of these questions consists of a word in capital letters followed by four alternative words or phrases. From among the alternatives, choose the word most nearly *opposite* in meaning to the word in capital letters in each case.

51. AFFABLE
     (1) rude   (2) ruddy   (3) needy   (4) useless

52. HERETIC
     (1) interpreter   (2) believer   (3) pacifist   (4) owner

53. DISABUSE
     (1) crash   (2) violate   (3) renege   (4) deceive

54. PRISTINE
     (1) cultivated   (2) condemned   (3) irreligious   (4) cautious

55. SENILITY
     (1) virility   (2) forgetfulness (3) youth   (4) maturity

Directions for questions 56 to 60 : Each of these questions consists of a sentence with one or two lines blanks, followed by four alternative words or set of words. In each case, choose the word or set of words for each blank that best fits the meaning of the sentence as a whole.

56. An individual who is _____ is incapable of _____ .
     (1) fettered ..... flight   (2) modest ..... shame
     (3) penurious ..... thought   (4) ambitious ..... failure

57. The reasoning in the editorial is so _____ that we cannot see how anyone can be _____ by it :
     (1) inconsistent ..... defied   (2) astute ..... impressed
     (3) cogent ..... amused   (4) specious ..... deceived

58. The _____ of the flat was unbelievable, it was difficult to realise that human beings could live in such _____ .
     (1) disorder ..... isolation   (2) squalor ..... filth
     (3) barrenness ..... confusion   (4) clutter ..... proximity

59. When the disease is in _____ state it is almost impossible to determine its existence by _____ .
     (1) a dormant ..... postulate   (2) a critical ..... examination
     (3) a latent ..... observation   (4) an acute ..... analysis

60. Slander is like _____ money; many people who would not coin it, _____ it without qualms.
     (1) easy ..... waste   (2) borrowed ..... denounced
     (3) counterfeit ..... circulate   (4) safe ..... withdraw

Directions for questions 61 to 65 : Each of these 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. TIRADE : ABUSIVE : :
    (1) monologue : lengthy
    (2) aphorism : boring
    (3) prologue : conclusive
    (4) encomiums : laudatory

62. ANNONATE : TEXT : :
    (1) enact : law
    (2) prescribe : medication
    (3) caption : photograph
    (4) censor : film

63. INDOLENT : WORK : :
    (1) decisive : act
    (2) gullible : cheat
    (3) perceptive : observe
    (4) taciturn : speak

64. TRYST : CLANDESTINE : :
    (1) reverie : dreamy
    (2) acquaintanceship : brief
    (3) expectation : hopeless
    (4) glance : resentful

65. APOCRYPHAL : AUTHENTICITY : :
    (1) nefarious : wickedness
    (2) dogmatic : assertive
    (3) hypocritical : integrity
    (4) deceptive : artifice

Directions for questions 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 per standard written English.

66. Many travellers state unequivocally <u>that the streets of Paris are more beautiful than any other city.</u>
    (1) that the streets of Paris are more beautiful than the streets of any other city
    (2) that Parisian streets of are more beautiful than any other city
    (3) that unlike any city the streets of Paris are more beautiful
    (4) that the streets of Paris are more beautiful than those in any other city

67. <u>The phenomena of public education is another example of the workings of democracy.</u>
    (1) The phenomena of public education is an example of the workings of democracy
    (2) The phenomena of public education is yet another example of democracy at work
    (3) The phenomenon of public education is another example of democracy at work
    (4) Public education, a phenomena, is another working example of democracy

68. She <u>is not and does not intend to run</u> for political office.
    (1) is not running and will not intend to
    (2) has not and does not run
    (3) is not and will not run
    (4) is not running and does not intend to run

69. He disapproves <u>of you insisting that the string of pearls were misplaced on purpose.</u>
    (1) of insisting that the string of pearls were misplaced on purpose
    (2) of you insisting that the string of pearls were misplaced on purpose
    (3) of your insisting that the string of pearls was misplaced on purpose
    (4) of you insisting that she misplaced the string of pearls purposely

70. Suman <u>not only resists learning to correlate new facts but also remembering</u> old lessons.
    (1) not only resists learning to correlate new facts but also to remember
    (2) resists not only learning to correlate new facts but also remembering
    (3) resists not only learning to correlate new facts but also to remember
    (4) resists learning to correlate new facts and remembering

71. <u>Always harshly criticising the competition,</u> the actress was at the ceremony to accept her award.
    (1) Despite her harsh criticism of the competition
    (2) Any competition was criticized, yet
    (3) Saying that all competitions should be harshly criticized
    (4) In spite of criticizing all such competitions

72. The possibility of massive earthquakes <u>are regarded by most area residents with</u> a mixture of skepticism and caution.
    (1) is regarded by most area residents with
    (2) is regarded by most area residents as
    (3) is mostly regarded by most area residents with
    (4) by most area residents is regarded with

73. <u>Unafraid of neither lightening nor thunder</u> during a storm, Mr. Iyer enjoyed walking in the park during heavy downpours.
    (1) Afraid of both lightening and thunder
    (2) Unafraid of neither lightening or thunder
    (3) Unafraid of either lightening or thunder
    (4) Afraid of either lightening nor thunder

74. It is <u>said that to be afraid of the dark is being afraid</u> of all those things we cannot comprehend.
    (1) said, that to be afraid of the dark, is being afraid
    (2) said that to be afraid of the dark is to be afraid
    (3) said being afraid of the dark is to be afraid
    (4) that to be afraid of the dark is being afraid

75. Her lecture was unsuccessful not so much because of her lack of preparation <u>but instead because of</u> her inability to organize her material.
    (1) as   (2) so much as   (3) than   (4) rather than

Directions for questions 76 - 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. Finding Your Feet :
    (1) To become more comfortable in whatever you are doing
    (2) Becoming financially independent
    (3) Locating your shoes
    (4) Attain a balance

77. Go The Extra Mile :
    (1) Take a detour
    (2) Take the longer route
    (3) Go above and beyond whatever is required
    (4) Be extravagant

78. Go Out On A Limb
    (1) Stand on one leg
    (2) Put yourself in a tough position in order to support someone/something
    (3) Extend your arm
    (4) Extend a peace offer

79. Make No Bones About
    (1) care very little about an issue
    (2) to state a fact so there are no doubts or objections
    (3) find fault with everything
    (4) being shameless

80. A Blessing in Disguise
    (1) Something good that isn't recognized at first
    (2) A sudden bonanza
    (3) A camouflaged package
    (4) An enigmatic person

TEST - III

QUANTITATIVE APTITUDE

81. The smallest prime number is :

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

82. Which of the following cannot be the square of a natural number ?

    (1) 30976   (2) 75625   (3) 28561   (4) 143642

83. A boy multiplied 987 by a certain number and obtained 559981 as his answer. If in the answer both the 9 are wrong and the other digits are correct, then the correct answer would be :

    (1) 553681   (2) 555181   (3) 555681   (4) 556581

84. A number n is said to be perfect if the sum of all its divisors (excluding n itself) is equal to n. An example of perfect number is :

    (1) 6   (2) 9   (3) 15   (4) 21

85. Six bells commence tolling together and toll at intervals of 2, 4, 6, 8, 10 and 12 seconds respectively. In 30 minutes, how many times do they toll together ?

    (1) 4   (2) 10   (3) 15   (4) 16

86. $3 \times 0.3 \times 0.03 \times 0.003 \times 30 = ?$

    (1) 0.0000243 (2) 0.000243   (3) 0.00243   (4) 0.0243

87. A tailor has 37.5 meters of cloth and he has to make 8 pieces out of a meter of cloth. How many pieces can he make out of this cloth ?

    (1) 300   (2) 320   (3) 360   (4) 400

88. Two fifth of one fourth of three seventh of a number is 15. What is half of that number ?

    (1) 94   (2) 175   (3) 188   (4) 196

89. The number of students in each section of a school is 24. After admitting new students, three new sections were started. Now the total number of sections is 16 and there are 21 students in each section. The number of new students admitted is :

    (1) 14   (2) 24   (3) 48   (4) 114

A waiter's salary consists of his salary and tips. During one week his tips were $\frac{5}{4}$ of his salary. What fraction of his income came from tips ?

(1) $\frac{4}{9}$ (2) $\frac{5}{4}$ (3) $\frac{5}{8}$ (4) $\frac{5}{9}$

91. What is the smallest number by which 3600 be divided to make it a perfect cube ?

(1) 9   (2) 50   (3) 300   (4) 450

92. In an examination, a pupil's average marks were 63 per paper. If he had obtained 20 more marks for his Geography paper and 2 more marks for his History paper, his average per paper would have been 65. How many papers were there in the examination ?

(1) 9   (2) 10   (3) 11   (4) 12

93. Of the three numbers, the sum of the first two is 45; the sum of the second and third is 55 and the sum of the third and thrice the first is 90. The third number is :

(1) 20   (2) 25   (3) 30   (4) 3

94. A person was asked to state his age in years. His reply was. "Take my age three years hence, multiply it by 3 and then subtract three times my age three years ago and you will know how old I am." What was the age of the person ?

(1) 18   (2) 20   (3) 24   (4) 32

95. If m and n are whole numbers such that $m^n = 121$, then the value of $(m-1)^{n+1}$ is :

(1) 1   (2) 10   (3) 121   (4) 1000

96. If $x\%$ of a is the same as $y\%$ of b, then $z\%$ of b is :

(1) xy/z % of a   (2) yz/x % of a   (3) xz/y % of a   (4) xyz % of a

97. In a certain office, 72% of the workers prefer tea and 44% prefer coffee and if 40 like both, the total number of workers in the office is :

(1) 200   (2) 240   (3) 250   (4) 320

98. Tarun got 30% concession on the labeled price of an article and sold it for Rs. 8750 with 25% profit on the price he bought. What was the labeled price ?

(1) Rs.10000   (2) Rs.12000   (3) Rs.16000   (4) Rs.16650

99. If $x : y = 5 : 2$, then $(8x + 9y) : (8x + 2y)$ is :
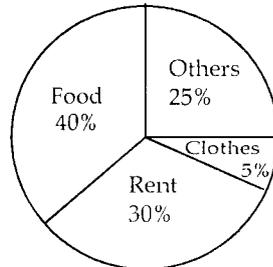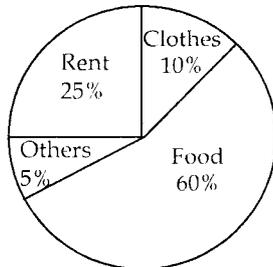
(1)   22 : 29   (2)   26 : 61   (3)   29 : 22   (4)   61 : 26

100. A and B started a business with initial investments in the ratio 14 : 15 and their annual profits were in the ratio 7 : 6. If A invested the money for 10 months, for how many months did B invest his money ?
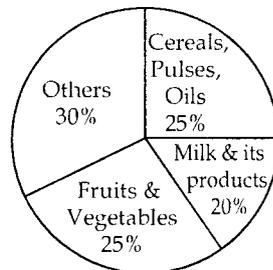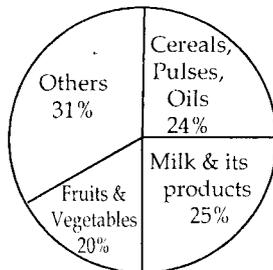
(1)   6   (2)   7   (3)   8   (4)   9

Directions (Qs. 101 - 105) :

Study the pie-charts and answer the questions below them.

Year 1980 : Total income = Rs. 3000 Year 2005 : Total income = Rs. 10,000
(monthly)   (monthly)
(For an average urban employee)

Year 1980 : Food Breakup   Year 2005 : Food Breakup

101. How much extra amount is the availability of spending on other items in, 2005 as compared to 1980 :

(1)   Rs. 2000   (2)   Rs. 3150   (3)   Rs. 2250   (4)   Rs. 2350

102. The ratio of actual spending on food in 2005 to that in 1980 is :

(1)   10 : 7   (2)   20 : 9   (3)   5 : 2   (4)   3 : 1

103. In 1980, people in rural India had 30% less earning and spent 40% on food and out of this, expenditure on milk products was only 10%. Its value is :

(1) Rs. 84   (2) Rs. 92   (3) Rs. 60   (4) Rs. 42

104. How much other food items are available in 2005, in Rs terms ?

(1) Rs. 180   (2) Rs. 93   (3) Rs. 1200   (4) Rs. 558

105. In relative per cent terms, is there an increase or decrease in the expenditure on milk etc. ?

(1) decrease   (2) increase   (3) neither   (4) No change

106. If 6 men and 8 boys can do a piece of work in 10 days while 26 men and 48 boys can do the same in 2 days, the time taken by 15 men and 20 boys in doing the same type of work will be :

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

107. Two pipes A and B can fill a cistern in 37 minutes 30 seconds and 45 minutes respectively. Both the pipes are opened. The cistern will be filled in just half an hour, if the pipe B is turned off after :

(1) 5 min.   (2) 9 min.   (3) 10 min.   (4) 15 min.

108. A is twice as fast as B and B is thrice as fast as C is. The journey covered by C in 54 minutes will be covered by B in :

(1) 18 min.   (2) 27 min.   (3) 38 min.   (4) 9 min.

109. In what ratio must water be mixed with milk to gain $16\frac{2}{3}\%$ on selling the mixture at cost price ?

(1) 1 : 6   (2) 6 : 1   (3) 2 : 3   (4) 4 : 3

110. A man invested $\frac{1}{3}$ of his income at 7%, $\frac{1}{4}$ at 8% and the remainder at 10%. If his annual income is ₹ 561, the capital is :

(1) ₹ 5400   (2) ₹ 6000   (3) ₹ 6600   (4) ₹ 7200

111. $(\log_b a \times \log_c b \times \log_a c)$ is equal to :

(1) 0   (2) 1   (3) abc   (4) $a + b + c$

112. If the radius of a circle is diminished by 10%, then its area is diminished by :

(1) 10%   (2) 19%   (3) 20%   (4) 36%

113. A sphere of maximum volume is cut out from a solid hemisphere of radius r. The ratio of the volume of the hemisphere to that of the cut out sphere is :

(1) $3 : 2$ (2) $4 : 1$ (3) $4 : 3$ (4) $7 : 4$

114. January 1, 2008 is Tuesday. What day of the week lies on January 1, 2009 ?

(1) Monday   (2) Wednesday   (3) Thursday   (4) Sunday

115. How many times in a day the hands of a clock are straight ?

(1) 22   (2) 24   (3) 44   (4) 48

116. If $54y = 36$ what is $9y$?

(1) 4   (2) 6   (3) 9   (4) 18

117. How many words can be formed by using all the letters of the word, "ALLAHABAD" ?

(1) 3780   (2) 1890   (3) 7560   (4) 2520

118. From a pack of 52 cards, one card is drawn at random. What is the probability that the card drawn is a ten or a spade ?

(1) $\dfrac{4}{13}$ (2) $\dfrac{1}{4}$ (3) $\dfrac{1}{13}$ (4) $\dfrac{1}{52}$

119. If a quarter kilogram costs Rs. 60 then how much will cost for 150 grams ?

(1) Rs. 30   (2) Rs. 24   (3) Rs. 36   (4) Rs. 40

120. Insert the missing number 5, 10, 13, 26, 29, 58, 61, (_____).

(1) 122   (2) 64   (3) 125   (4) 128

121. If one third of a tank holds 80 litres of water, the quantity of water that half of the tank holds is :

(1) $\dfrac{80}{3}$ (2) 100   (3) 120   (4) 240

122. A total of 324 coins of 20 paisa and 25 paisa make a sum of Rs. 71. The number of 25 paisa coins are :

    (1) 120   (2) 124   (3) 144   (4) 200

123. The height of a cone and its base diameter are equal. If the base radius is 'r' what is its slant height ?

    (1) 3r   (2) 4r   (3) 5r   (4) 6r

124. A person lost 10% when he sold goods at Rs. 153. For how much should he sell them to gain 20% ?

    (1) 204   (2) 250   (3) 240   (4) 210

125. The difference between 6 times and 8 times of a figure is 14. What is the figure ?

    (1) 12   (2) 9   (3) 7   (4) 6

126. What is the chance of getting a 2 or 4 in rolling a die ?

    (1) $\dfrac{2}{3}$ (2) $\dfrac{1}{6}$ (3) $\dfrac{1}{3}$ (4) ½

127. The angle between the hour hand and minute hand of a clock at 4 PM :

    (1) 90°   (2) 120°   (3) 150°   (4) 240°

128. Which among the following is the point of intersection of the medians of a triangle ?

    (1) Circumcentre   (2) Centroid   (3) Orthocenter   (4) Incentre

129. What is a real number approximately equal to e, the mathematical constant also known as Euler's number :

    (1) 2.71   (2) 2.51   (3) 3.14   (4) 6.023

130. My grill pan holds three slices of bread when I make toast. Each slice has to be toasted on both sides, of course, and it takes one minute to toast a side, including "turning over time". I can therefore make three slices of toast in two minutes. How long would it take for four slices ?

    (1) 2 min.   (2) 3 min.   (3) 4 min.   (4) 6 min.

TEST - IV
REASONING

131. Complete the given series by finding the missing term

4, 8, 28, 80, 244

(1) 278   (2) 428   (3) 628   (4) 728

132. In the series 7, 14, 28, what would be the 10th term ?

(1) 1792   (2) 2456   (3) 3584   (4) 4096

133. In the following series one term in the series is wrong. Find out the wrong term

5, 27, 61, 122, 213, 340, 509

(1) 27   (2) 61   (3) 122   (4) 509

134. Choose the missing terms out of the given alternatives

C, Z, F, X, I, V, L, T, O, ?, ?

(1) O, P   (2) P, Q   (3) R, R   (4) S, R

135. Choose the missing term out of the given alternatives

N5V, K7T, ?, E14P, B19N

(1) H 9 R   (2) H 10 Q   (3) H 10 R   (4) I 10 R

136. Choose an alternative to show the relationship as the words of the given pair bear

Pituitary : Brain : : Thymus : ?

(1) Larynx   (2) Spinal cord   (3) Throat   (4) Chest

137. Which number is like the given set of numbers ? Given set (3, 11, 31)

(1) 5   (2) 15   (3) 45   (4) 49

138. In certain code language OPERATION is written as NODQBUJPO. How is INVISIBLE written in that code ?

(1) JOWJTJCMF   (2) JOWJTHAKD   (3) HMUHTJCMF   (4) HMUHTHAKD

139. In a certain code language CLOUD is written as GTRKF. How is SIGHT written in that code ?

(1) UGHHT   (2) UHJFW   (3) WFJGV   (4) WGJHV

140. In a code language, SOLID is written as WPSLPIMFHA. What does the code word ATEXXQIBVO refer to ?
    (1) WATER   (2) WAGER   (3) EAGER   (4) WAFER

141. If 'black' means 'pink', pink means 'blue', blue means 'white', white means 'yellow', yellow means 'red' and red means 'brown' then what is the colour of clear sky ?
    (1) Brown   (2) Red   (3) Blue   (4) Pink

Directions (Questions 142 - 144) : According to certain code.
(A) 'min fin bin gin' means trains are always late
(B) 'gin din cin hin' means drivers are always punished
(C) 'bin cin vin rin' means drivers stopped all trains and
(D) 'din kin fin vin' means all passengers were late

142. 'Drivers were late' would be written as :
    (1) min cin din   (2) fin cin din   (3) fin din gin   (4) gin hin min

143. Which word is represented by 'vin' ?
    (1) all   (2) late   (3) trains   (4) driver

144. 'hin min kin' would mean :
    (1) Always late trains   (2) Passengers are punished
    (3) All passenger trains   (4) Passengers are late

145. Pointing to a lady in the photograph Shaloo said, "Her son's father is the son-in-law of my mother." How is Shaloo related to the lady :
    (1) Aunt   (2) Sister   (3) Mother   (4) Cousin

Directions (Questions 146 - 150) :
Read the following information carefully and answer the questions given below it.

In a family, there are six members. A, B, C, D, E and F. A and B are married couple, A being the male member. D is the only son of C, who is the brother of A. E is the sister of D. B is the daughter-in-law of F, whose husband has died ?

146. How is F related to A ?
    (1) Mother   (2) Sister-in-law (3) Sister   (4) Mother-in-law

147. How is E related to C ?
    (1) Sister   (2) Daughter   (3) Cousin   (4) Aunt

148. Who is C to B ?
   (1) Brother   (2) Brother-in-law (3) Nephew   (4) Son-in-law

149. How many male members are there in the family ?
   (1) One   (2) Two   (3) Three   (4) Four

150. How is F related to C ?
   (1) Mother-in-law (2) Sister-in-law   (3) Mother   (4) Aunt

151. Deepak is brother of Ravi. Reena is sister of Atul. Ravi is son of Reena. How is Deepak related to Reena ?
   (1) Son   (2) Brother   (3) Nephew   (4) Father

Read the following information carefully and answer the questions from 152 - 156.

(i) Five persons P, Q, R, S, and T travelled to five different cities of Chennai, Kolkata, Delhi, Bangalore and Hyderabad by different modes of transport of Bus, Train, Aeroplane, Car and Boat from Mumbai

(ii) The person who travelled to Delhi did not travel by Boat

(iii) R went to Bangalore by Car and Q went to Kolkata by Aeroplane

(iv) S travelled by boat whereas T travelled by train

(v) Mumbai is not connected by bus to Delhi and Chennai

152. Which of the following combinations of persons and mode is not correct ?
   (1) P-Bus   (2) Q-Aeroplane (3) R-Car   (4) T-Aeroplane

153. Which of the following combinations is true for S ?
   (1) Delhi-Bus   (2) Chennai-Bus (3) Chennai-Boat (4) Data inadequate

154. Which of the following combination of place and mode is not correct ?
   (1) Delhi-Bus   (2) Kolkata-Aeroplane
   (3) Bangalore-Car   (4) Chennai-Boat

155. The person travelling to Delhi went by which of the following mode ?
   (1) Bus   (2) Train   (3) Aeroplane   (4) Car

156. Who among the following travelled to Delhi ?
   (1) R   (2) S   (3) T   (4) Data inadequate

Read the following information carefully and answer the questions given below.

(i)   A, B, C, D, E, F and G are sitting around a circle and are facing the centre

(ii)   G is second to the left of C who is to the immediate left of F.

(iii)   A is third to the left of E

(iv)   B is between D and E

157. Which of the following is false ?

(1)   A is fourth to the right of E   (2)   G is to the immediate right of D

(3)   F is third to the right of D   (4)   B is to the immediate left of D

158. Which of the following is true ?

(1)   C is fourth to the left of B   (2)   A is to the immediate right of G

(3)   D is second to the left of E   (4)   B is second to the right of G

159. Which of the following pairs has the first person sitting to the immediate left of second person ?

(1)   BE   (2)   CA   (3)   GD   (4)   DG

160. Which of the following is the position of F ?

(1)   Fourth to the right of D   (2)   To the immediate left of C

(3)   Between A and E   (4)   To the immediate right of A

161. A, P, R, X, S and Z are sitting in row. S and Z are in centre and A and P are at the ends. R is sitting on the left of A. Then who is sitting on the right of P ?

(1)   A   (2)   S   (3)   X   (4)   Z

Directions (Questions 162-166) : Study the following information and answer the questions given below it.

A blacksmith has five iron articles A, B, C, D and E each having a different weight.

(i)   A weighs twice as much as B

(ii)   B weighs four and a half times as much as C

(iii)   C weighs half as much as D

(iv)   D weighs half as much as E

(v)   E weighs less than A but more than C

162. Which of the following is the lightest in weight ?

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

163. E is lighter in weight than which of the other two articles ?

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

164. E is heavier than which of the following two articles ?

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

165. Which of the following articles is the heaviest in weight ?

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

166. Which of the following represents the descending order of the weights of the articles ?

(1) A, B, E, D, C   (2) B, D, E, A, C   (3) E, C, D, A, B   (4) C, A, D, B, E

Directions (Questions 167-171) : Study the following information carefully and answer the questions given below it.

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.

(i) She must visit M before N and Q   (ii) She visit N before M

(iii) She visit P before M   (iv) She visit P before S

167. Which of the following must be true of the sale's 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

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

(1) M   (2) N   (3) P   (4) R

169. The sales representative could visit any of the following companies after P except.

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

170. 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

171. Which of the following could be the order in which the sales representative visit the six companies ?

(1) M, S, P, N, R, Q   (2) Q, N, P, R, S, M   (3) M, R, N, Q, P, S   (4) P, S, M, R, Q, N

Directions (Questions 172 - 175) : Study the following information given below and answer the questions that follows :

A, B, C, D, E and F are cousins. No two cousins are of the same age, but all have birthdays on the same date. The youngest is 17 years and the oldest E is 22 years. F is some where between B and D in age. A is older than B. C is older than D.

172. Which of the following is not possible ?

(1) D is 20 years old   (2) F is 18 years old

(3) F is 19 years old   (4) F is 20 years old

173. Which of the following could be the ages of D and C respectively, if B is 17 years old ?
    (1) 18 and 19   (2) 19 and 21   (3) 18 and 20   (4) 18 and 21

174. Which of the following must be true if exactly two of the cousins are between C and F in age ?
    (1) A is between F and D in age   (2) B is 17 years old
    (3) B is younger than D   (4) F is 18 years old

175. Which of the following must be true if C is 19 years old ?
    (1) A is 19 years old and D is 21   (2) B is 19 years old and A is 20
    (3) B is 20 years old and A is 21   (4) D is 17 years old and B is 21

176. Find the two letters in the word EXTRA which have as many letters between them in the words as in the alphabet. If these two letters are arranged in alphabetical order which letter will come second ?
    (1) A   (2) E   (3) R   (4) T

177. Unscramble the letters in the given words and find the odd one out :
    (1) EIWNTR   (2) UMRSME   (3) PIGRSN   (4) LCUOD

178. If it is possible to make a meaningful word from the second, the seventh, the ninth and the eleventh letters of the word ORGANISATION using each letter only once, then which would be the third letter of that word ? If no such word can be formed your answer should be X.
    (1) R   (2) S   (3) T   (4) X

Directions (Questions 179 - 181) : Answer these Questions based on the set of numbers given below :

738, 429, 156, 273, 894

179. Which of the following will be the last digit of the second highest number after the positions of the digits in each number is reversed ?
    (1) 1   (2) 2   (3) 4   (4) 7

180. What will be the difference between the first digit of the highest number as well as of the lowest number after the positions of the first two digits in each number are reversed ?
    (1) 4   (2) 5   (3) 6   (4) 7

181. Which of the following will be the second digit of the third number from the top when they are arranged in descending order, after the first digit in each number is changed to its next higher digit ?
    (1) 2   (2) 3   (3) 5   (4) 7

182. Rohit is seventeenth from the left end of a row of 29 boys and Karan is seventeenth from the right end in the same row. How many boys are there between them in the row ?

(1) 3   (2) 5   (3) 6   (4) none of these

183. If the 25th of August in a year is Thursday, the number of Mondays in that month is :

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

184. Five children take part in a tournament. Each one has to play every other one. How many games they must play ?

(1) 8   (2) 10   (3) 24   (4) 30

185. In an examination, a student scores 4 marks for every correct answer and losses 1 mark for every wrong answer. If he attempts in all 60 questions and secure 130 marks, the number of questions he attempts clearly is :

(1) 35   (2) 38   (3) 40   (4) 42

186. Reena is twice as old as Sunita ? Three years ago she was three times as old as Sunita. How old is Reena now ?

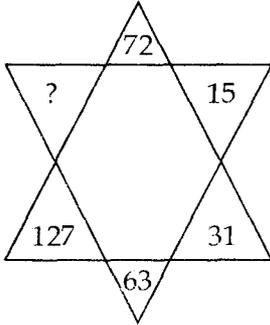(1) 6 years   (2) 7 years   (3) 8 years   (4) 12 years

Directions (Question 187 - 189) : Read the following information to answer these questions.

Seven poles A, B, C, D, E, F and G are put in such a way that the distance between the next two decreases by 1 metre. The distance between first two poles, A and B is 10 metres.

187. What is the distance between the first pole A and the last pole G ?

(1) 40 m   (2) 45 m   (3) 49 m   (4) none of these

188. If a monkey hops from pole G to C, then how much distance did it cover ?

(1) 19 m   (2) 22 m   (3) 26 m   (4) none of these

189. If the authorities decide to remove one pole and place the remaining on equal distances among the poles then each set of poles would be _____ metres apart.

(1) $7\frac{1}{2}$ (2) $8\frac{1}{2}$ (3) 9   (4) none of these

190. Two bus tickets from city A to B and three tickets from city A to C costs Rs. 77, but three tickets from city A to B and two tickets from city A to C cost Rs. 73. What are the fares for cities B and C from A ?

(1) Rs. 4, Rs. 23   (2) Rs. 13, Rs. 17   (3) Rs. 15, Rs. 14   (4) Rs. 17, Rs. 13
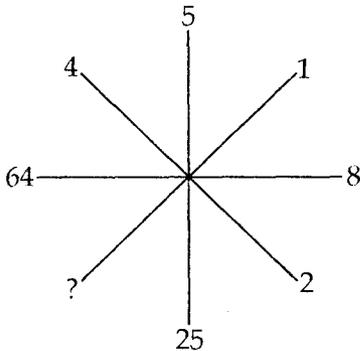
191.

(1)   190   (2)   221   (3)   236   (4)   255

192.

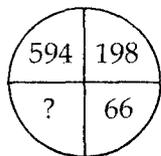(1)   1   (2)   2   (3)   3   (4)   4
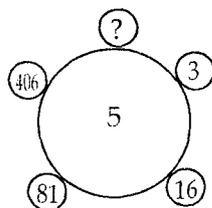
193.

(1)   11   (2)   12   (3)   22   (4)   33

194.

(1)   1   (2)   731   (3)   1625   (4)   2031

Directions : (Questions 195 - 198) A cube is coloured red on all the faces. It is cut into 64 smaller cubes of equal size. Answer the following questions based on the above facts.

195. How many cubes have no face coloured ?

    (1)   24   (2)   16   (3)   8   (4)   0

196. How many cubes are there which have only one face coloured ?

    (1)   4   (2)   8   (3)   16   (4)   24

197. How many cubes have two red opposite faces ?

    (1)   0   (2)   8   (3)   16   (4)   24

198. How many cubes have 3 faces coloured ?

    (1)   24   (2)   16   (3)   8   (4)   4

199. Ostrich is related to Antelope in the same way as Egret is related to .... ?

    (1)   Cow   (2)   Buffalo   (3)   Camel   (4)   Zebra

200. Choose a pair in which the words bear the same relationship to each other as the words of the given pair bear ?

    Energy : Joule

    (1)   Axe : Grind   (2)   Ammeter : Current

    (3)   Power : Ampere   (4)   Resistance : Ohm

-oOo-