

OPENMAT (XIV) ENTRANCE TEST FOR MANAGEMENT PROGRAMMES 2004

TEST I GENERAL AWARENESS

1. Match List I (Person) with List II (Well known as) and select the correct answer, using the codes given below the lists :

<i>List I</i> (Person)	<i>List II</i> (Well known as)
I. Karun Chandok	A. Filmmaker
II. Mira Nair	B. Motor race sportsperson
III. Nirad C. Chaudhary	C. Musician
IV. Ronu Mazumdar	D. Writer

Codes:

- (1) I-C, II-A, III-D, IV-B (2) I-C, II-D, III-A, IV-B
(3) I-B, II-D, III-A, IV-C (4) I-B, II-A, III-D, IV-C
2. Who among the following was the winner of the Booker Prize for the book 'Disgrace'?
- (1) Arundhati Roy (2) Amitav Ghosh
(3) Ian McEwan (4) J.M. Coetzee
3. During the Mughal period which traders were the first to come to India?
- (1) Portuguese (2) Dutch
(3) Danish (4) English
4. With reference to Indian Parliament, consider the following statements :
- I. A member of Lok Sabha cannot be arrested by police under any case when the Parliament is in session.
II. Members of the Indian Parliament have the privilege of exemption from attendance as witnesses in the law courts.
- Which of these statements is/are correct?
- (1) I only (2) II only
(3) Both I and II (4) Neither I nor II
5. Who are popularly known as 'Lokahitwadi'?
- (1) G.G. Agarkar (2) R.G. Bhandarkar
(2) M.G. Ranade (4) G.H. Deshmukh
6. In the context of Panchayati Raj, which one of the following is true about Gram Sabha?
- (1) This is the topmost tier of the Panchayati Raj.
(2) It consists of all the voters residing in the jurisdiction of a Village Panchayat
(3) It is the executive body consisting of selected representatives from Village Panchayat
(4) It consists of all adult males of the Village Panchayat
7. The decimal system was first known in India at the beginning of
- (1) 2nd century AD (2) 3rd century AD
(3) 4th century AD (4) 5th century AD
8. With reference to Indian Freedom Struggle, consider the following statements :
- I. C.R. Das and Motilal Nehru formed the Congress Khilafat Swarajya Party.
II. In 1919, Gandhiji was elected President of the Khilafat Conference.
III. The Communist Party of India was banned by the Government in 1934.
- Which of these statements is/are correct ?
- (1) I and II (2) II only
(3) I and III (4) I, II and III
9. Consider the following events :
- I. Gandhi-Irwin Pact
II. First Round Table Conference
III. Simon Commission
IV. Poona Pact
- The correct chronological order of these events is
- (1) I, IV, III, II (2) II, I, III, IV
(3) III, II, I, IV (4) II, III, I, IV
10. Who among the following Delhi Sultans is known for introducing market control mechanism ?
- (1) Iltutmish (2) Balban
(3) Alauddin Khilji (4) Feroze Tughlaq
11. Rabindranath Tagore returned the title of Knighthood to the British Government to protest against the
- (1) Rowlatt Act of 1919
(2) Introduction of Diarchy in the provinces
(3) Partition of Bengal
(4) Massacre in Jallianwalla Bagh
12. Consider the following events :
- I. American War of Independence
II. Industrial Revolution
III. French Revolution
IV. Russian Revolution
- The correct chronological sequence of these events is
- (1) II, I, III, IV (2) I, II, III, IV
(3) IV, II, I, III (4) III, IV, II, I

13. Which one of the following mountain peaks of the Himalayas is *not* in India ?
 (1) Annapurna (2) Nanda Devi
 (3) Mt. Kamet (4) Kanchenjunga
14. Match List I (Type of Natural Region) with List II (Area Associated with the Natural Region) and select the correct answer using the codes given below the lists :
- | <i>List I</i>
(Type of Natural Region) | <i>List II</i>
Area Associated with the
Natural Region) |
|---|---|
| I. Dry Continental | A. Brazil |
| II. Humid Subtropics | B. British Isles |
| III. Marine West Coast | C. Canada |
| IV. Subarctics | D. China |
| | E. Mongolia |
- Codes :**
 (1) I-B, II-D, III-B, IV-C
 (2) I-B, II-C, III-A, IV-E
 (3) I-B, II-C, III-A, IV-C
 (4) I-E, II-C, III-B, IV-D
15. Consider the following statements :
- I. Troposphere varies in its thickness between Equator and Poles.
 - II. Stratosphere does not experience Normal Lapse Rate.
 - III. Ozone layer occurs in the Mesosphere.
 - IV. Ionosphere lies between Stratosphere and Mesosphere.
- Which of these statements are correct ?
 (1) I and II (2) II and III
 (3) II and IV (4) I, II and IV
16. Winter rains in north and north-west India are generally associated with the phenomenon of
 (1) retreating monsoon
 (2) temperate cyclones
 (3) local thunderstorms
 (4) shift in jet stream movement
17. Sal is a very important tree of
 (1) Tropical dry deciduous forest
 (2) Tropical rain forest
 (3) Thorn forest
 (4) Alpine forest
18. Water rises to a height of 15 cm in a capillary tube. If the tube is now dipped further in water so that only 12 cm of it is above the water level, then water will
 (1) emerge as a fountain from the capillary tube
 (2) stay at a height of 12 cm in the capillary tube
 (3) stay at a height less than 12 cm in the capillary tube
 (4) flow down the side of the capillary tube
19. When the moon is near the horizon, it appears bigger because of
 (1) atmospheric refraction
 (2) scattering of light
 (3) diffraction
 (4) total internal reflection
20. The image formed on the retina of a human eye is
 (1) virtual and inverted (2) virtual and erect
 (3) real and erect (4) real and inverted
21. If a clock based on oscillating pendulum is taken from the earth to the moon, it will
 (1) become slow
 (2) become fast
 (3) give same time as on the earth
 (4) stop working
22. The purest form of iron is
 (1) cast iron (2) pig iron
 (3) steel (4) wrought iron
23. Consider the following :
 I. Blood
 II. Bone
 III. Ligaments
 IV. Tendons
- Which of these are connective tissues ?
 (1) III, II, III and IV (2) I and II
 (3) I, III and IV (4) II and IV
24. Who among the following persons has been honoured with the Royal Order of the Polar Star by the Swedish Government in April, 2003 ?
 (1) Ravi Uppal
 (2) Anil Ambani
 (3) Kumaramangalam Birla
 (4) S.K. Singhanian

25. World Heritage Day was observed on
 (1) April 26, 2003 (2) April 18, 2003
 (3) April 12, 2003 (4) April 5, 2003
26. The 19th International Ramayana Conference was held in April 2003 in Lusaka, which is the capital of
 (1) Nigeria (2) Morocco
 (3) Zambia (4) Namibia
27. Which of the following films won six Oscar Awards, including the Best Film at the 75 Annual Academy Awards?
 (1) Chicago (2) The Pianist
 (3) The Hours (4) Adaptation
28. Which of the following statement about INSAT-3A which was launched by India in April, is *not* true ?
 (1) It will support telecommunications, broadcasting and weather forecasts
 (2) It has 25 transponders which will help bounce signals to and from the earth
 (3) It was launched from Kourou, French Guyana
 (4) It will be in service for 15 years after being placed in its final geo-stationary orbit
29. According to the World Economic Outlook Report released by International Monetary Fund (IMF) in April 2003, the growth projection for India for 2003 and 2004 are _____ and _____ respectively.
 (1) 5.1 per cent; 5.9 per cent
 (2) 4.7 per cent; 5.5 per cent
 (3) 6.5 per cent; 6.0 per cent
 (4) 6.5 per cent; 7.0 per cent
30. Who among the following was the commander in charge of the allied forces in Iraq ?
 (1) Hans Blix (2) Peter Williams
 (3) Tommy Franks (4) Alexander Graham

TEST II

English Language

Directions for Q. Nos. 31 to 45. Given below are two passages (I and II) followed by the questions based on the contents of the passages. Answer the questions based on the contents of the passage.

PASSAGE I

We are constantly told that information technology will take us to a gleaming, gigabyte infested other world called Cyberspace. Baloney ! The Industrial Revolution did not take us to Motorspace; it brought motors into our lives. The Information Revolution will do the same, introducing new tools which we will use to serve our ancient human needs. This new movement is not about multimedia, virtual reality or even the mighty World Wide Web. It is about an emerging information marketplace in which computers and their users everywhere will buy, sell and freely exchange information and “information work”.

When people talk about information they think of the traditional content of books, newspapers, television and radio which represent about 5% of the U.S. economy. No one talks about information work — the activity people and machines perform when they transform information which accounts for 60% of the U.S. economy. Information work will take many guises in the information marketplace. Imagine a doctor in Sri Lanka examining a homeless person in a San Francisco clinic who is connected by means of a few electrodes to a diagnostic kiosk with a nurse standing by. The doctor provides human information work — his medical diagnostic skill for \$2.00 a visit. The information marketplace will bring this and many other new tools into our lives through electronic bulldozers and electronic proximity.

In the industrial era, mechanical bulldozes allowed workers to throw away their shovels and offload their muscle work on machines. Today we squint our eyes and scorch our brains in front of inscrutable mail headers and pages of impenetrable text. We are still shovelling with our eyes and brains but dismiss the drudgery because our silicon-studded shovels make us feel modern. It is time we shed the shovels and exploited electronic bulldozers.

New tools like e-forms will make this easier than it sounds. To fill in a travel-form for example, all I have to type or say out loud is “Computer take us to Athens this weekend”. My machine knows that us means two and that we prefer business class. It calls the airline computer and after a few exchanges, the machines complete the booking. It takes me three seconds to give my command and it takes the machines ten minutes to finish the job — a 20,000% productivity gain. Electronic bulldozer tools like this will get much of our information work done. We will increase our productivity further by making our machines truly easier to use. One good way is to speak to them. Speech understanding systems are finally becoming technologically mature and affordable.

The changes arising from the second major new force — electronic proximity will be just as large. As the information marketplace develops we will be closer to a thousand times more people than we were with the automobile. Within a decade, half a billion people and machines will be squeezed into one gigantic electronic city block. The closeness will lead to powerful

benefits through groupwork and telework but also to info predators and new kinds of crimes. I don't expect the ratio of good to bad will change; the angels and devils are within us, not in our machines.

Electronic proximity will strengthen tribalism. Ethnic groups scattered across the globe will have a way to unite, perhaps even extending the meaning of a nation from a land mass to an ethnic network. At the same time, electronic proximity will strengthen diversity, because when people from different ethnic groups meet within a "tribe" of classical music buffs for example, they will get to know one another within that subgroup. This won't lead to a universal global culture but a thin veneer of shared norms. It will also give rise to new projects that have worthy human purposes like a Virtual Compassion Corps which could match the providers of human help with those worldwide who need it. Electronic proximity will ultimately lead to increased democratization not so much because information will traverse national borders but because even totalitarian nations will want to participate in the major new economic force of the 21st century. To do so they will have to play by the rules of engagement made by the predominantly democratic nations that will establish information marketplace.

The information marketplace will create problems too. Unless we intervene, it will increase the gap between rich and poor nations because the rich will be able to afford the electronic bulldozers while the poor will not. Electronic proximity will inundate us with info junk, creating a need for human intermediaries who can help us find what we want. And electronic proximity will be perceived by some as a license to attack cultures that took thousands of years to build. National leaders will not doubt use politics and technology to protect their cultures against such info-assaults. They will also need to negotiate how to handle cross border information violations as they did earlier with international crime and trade. Because of the widespread changes it will foster, the Information Revolution will earn its place in history as the socio-economic movement, following Agrarian and Industrial Revolution. May be then, having understood the plough, the motor and the computer, we will dare to go beyond artifacts and embark upon the fourth revolution — striving to understand ourselves.

31. According to the passage, if the information marketplace develops, how many times more people are we likely to be closer to ?
- (1) Hundred times
 - (2) Thousand times
 - (3) Twenty thousand times
 - (4) Ten thousand times
32. Which of the following will *not* be strengthened by electronic proximity ?
- (1) Tribalism
 - (2) Democratization
 - (3) Diversity
 - (4) Universal global culture
33. As inferred from the passage, the first major socio-economic movement was
- (1) Industrial Revolution
 - (2) Information Revolution
 - (3) Agrarian Revolution
 - (4) Electronic Revolution
34. Which of the following is *not* true, according to the passage ?
- (1) Travel e-form gives a productivity gain of 20,000%
 - (2) We have not fully understood ourselves
 - (3) Books, TV and Radio account for 5% of the US economy
 - (4) Within a decade half a billion people will form an electronic city block
35. In the passage, the author wishes to go to
- (1) Rome
 - (2) San Francisco
 - (3) Athens
 - (4) Sri Lanka
36. The fourth revolution will concern
- (1) Virtual compassion
 - (2) Mastering the mystery of life and death
 - (3) Self discovery
 - (4) Overcoming the gap between poor and rich
37. According to the passage the information technology movement is all about
- (1) advent of World Wide Web in our lives
 - (2) fulfilling our needs more productively
 - (3) an emerging information marketplace
 - (4) virtual reality
38. One good way to increase our productivity would be to
- (1) use electronic bulldozers
 - (2) use voice activated machines
 - (3) use electronic forms for everyday life
 - (4) create universal work cultures

PASSAGE II

Dr. D'Costa died twice. The first time was in an ambulance as he rushed to the hospital after suffering a heart attack. His heart had stopped beating for several minutes before the paramedics were able to revive him. Afterwards, he described a vision he had as he lay without a pulse in the speeding ambulance. He saw his brother Joe, who had passed away some years earlier, dressed in flowing white robes sitting on a kind of throne at the top of a hill. As Dr. D'Costa approached, Joe was laughing uproariously and waving his hand, urging him to turn around and go back. The second time Dr. D'Costa died was about three years later. Again it was his heart that failed him. This time, though his brother Joe wasn't there to wave him back to this world.

Dr. D'Costa encountered in the back of that ambulance was a classic example of a near death experience (NDE). According to statistics compiled by the International Association for Near-Death Studies, some 35 – 40% of people who have had a close brush with death later report a NDE. They commonly tell of a feeling that the self has left the body, a sensation of moving through a dark space or tunnel, a vision of golden or white light and the receipt in some form of the message "your time has not yet come".

Are NDEs evidence for life after death or are they just the last, desperate projections of the dying brain? While modern science can explain why we age, it tells us very little about why we die, much less about what happens, if anything, after death. "In death, science is pitted against an impenetrable information barrier", says David Darling, an astronomer and physicist who has written several books on death and dying. "When we die, each of us makes a solo flight across that barrier and gives up all possibility of sending back news of what we find."

Many people don't require hard evidence about what's on the other side. They are satisfied with the explanations provided for millennia by the world's religions. But for those not blessed with religious faith, science may never be able to prove whether the NDE is a news flash from the hereafter or just one of the mind's grandest illusions. Dalring suggests, there are two events that approximate death; the near death experience itself and memory loss suffered by victims of Alzheimer's disease and traumatic brain injury. "Losing your memory is perhaps as close as we can come to death without actually dying", he says. "The person is dead because the memories are gone. And memories are the only things that give meaning and identity to our lives."

If the difference between life and death is a question of memory, could death's sting be parried by replacing the fragile human memory with an infallible computerized one? In his book, 'Design for Dying' completed earlier this year before he died from prostate cancer, psychologist and LSD guru Timothy Leary explored various strategies for achieving immortality. One of the most promising tactics, he suggested is to transfer an individual's consciousness into a supercomputer before death. This could be done by using multimedia technologies (video, audio, CDs) to record all your thoughts, feelings and experience onto a computer equipped with artificial intelligence. The result — a real life ghost in the machine. Endowed with all your memories, the new computerized you would be able to chart and interact with people just as you would — except it would be doing so long after you had died.

The idea is not as far out as it seems. According to Chris Winter, Peter Cochrane and Ian Pearson, futurologists at British Telecom's Advanced Research Department, computers (or soulcatchers) with storage and processing capacities equivalent to the human brain, will be developed within the next 20 years. "We will be able to transfer human minds into some machine form", says Pearson. Perhaps our only chance of making full use of such technology is to become part of the technology itself.

But are these imitations of immortality real? The silicon soul described by Leary is actually not a captured consciousness at all, but an elaborate interactive home video of history. As useful and entertaining as that might be, it's a far cry from life after death. And how big an improvement is it over, say, the good old-fashioned book? We can already make contact with some of the world's great lost simply by dipping into the novels of James Joyce or the poems of John Donne.

In his book 'Dancing on the Grave', British anthropologist Nigel Barely describes a trip to Africa during which a group of tribal elders explain their idea of reincarnation by visiting a local brewery. You could see returned bottles through a plate glass window, Barely writes, entering via one door, whirling from machine to machine being endlessly refilled with squirting beer, relabelled and pushed out through another door ... Life, death, spirit and body. Now you have seen, the elders said. Though it comes from Africa, this little episode is a fitting metaphor for Western attitudes towards death; the body is a machine and death is a spanner in the works. But you don't have to postulate the existence of an eternal soul to acknowledge that there may be some things in the universe, like death, that we just can't fix. Let's not be too proud that our technological prowess may one day bring immortality. Never send to know for whom the computer crashes, it crashes for thee.

39. Which of the following persons is *not* mentioned in the passage?

- (1) Peter Cochrane (2) Timothy Leary
(3) David Darling (4) Chris Pearson

40. According to the passage, the computers with storage and processing capacities equivalent to the human brain will be developed in the

- (1) next ten years (2) next year
(3) next twenty years (4) next fifty years

41. The only things that give meaning and identity to our lives are
 (1) reincarnation
 (2) powers to overcome mortality
 (3) memories
 (4) computers
42. A person who has an NDE, experience all of the following *except*
 (1) a sensation of moving in a tunnel
 (2) a message that your time has come
 (3) the self leaving the body
 (4) a vision of golden light
43. The silicon soul is
 (1) a microchip
 (2) a CD
 (3) a 'real life' replicating chip
 (4) a computer into which an individual's consciousness has been transferred
44. In the passage, Leary's idea of replacing human memory has been compared with
 (1) an old fashioned movie
 (2) a meticulous journal
 (3) James Joyce's poems
 (4) poems of John Donne
45. According to the passage we just *cannot* fix
 (1) immortality (2) life after death
 (3) death (4) All of the above

Directors for Q. Nos. 46 to 50. Each of these questions consists of a capitalized word followed by four alternatives. Choose the alternative that is most similar in meaning to the capitalized work, in each case.

46. PHLEGMATIC
 (1) calm (2) cryptic
 (3) practical (4) dishonest
47. COPIOUS
 (1) cheating (2) plentiful
 (3) inspired (4) adventurous
48. MORATORIUM
 (1) delay (2) refusal
 (3) burial (4) suspicion
49. BUCOLIC
 (1) diseased (2) rustic
 (3) repulsive (4) cold
50. AMELIORATE
 (1) reprove (2) acquire
 (3) avert (4) improve

Directions for Q. Nos. 51 to 55. Each one of these questions consists of a word in capitalized letters followed by four alternatives. Choose the alternative that is most nearly opposite in meaning to the capitalized word, in each case.

51. DESICCATE
 (1) lengthen (2) exonerate
 (3) saturate (4) anaesthetize
52. CAVIL
 (1) discern (2) object
 (3) commend (4) disclose
53. UNASSUAGED
 (1) deceptive (2) soothed
 (3) ruffled (4) presumed
54. JETTISON
 (1) salvage (2) anchor
 (3) accelerate (4) smoothen
55. FETTER
 (1) liberate
 (2) diminish
 (3) obstruct
 (4) heal

Directions for Q. Nos. 56 to 60. Each of these questions consists of a sentence two blank spaces. Beneath the sentence are four alternatives. Choose the set of words from among the alternatives given, which when inserted in the sentence best suit the meaning of the sentence.

56. The _____ of evidence was on the side of the plaintiff since all but one witness testified that his story was _____.
- (1) paucity, accurate
 (2) propensity, far-fetched
 (3) accuracy, insufficient
 (4) preponderance, correct
57. The child was so _____ by her indulgent parents that she pouted and became _____ when she did not receive all their attention.
- (1) spoiled, sullen (2) protected, insecure
 (3) sheltered, elated (4) pampered, tranquil
58. The _____ pittance that the destitute receive from the government cannot keep them from _____.
- (1) indulgent, desolation (2) meticulous, despair
 (3) meagre, poverty (4) small, crime
59. We were amazed that a man who had so far been the most _____ of public speakers could _____ the audience and bring them cheering to their feet.
- (1) enthralling, anger
 (2) accomplished, humour
 (3) pedestrian, electrify
 (4) masterful, bore
60. The _____ of time had left the castel _____, it towered high, looking much the same as it must have done centuries ago.
- (1) repairs, destroyed (2) lack, defended
 (3) ravages, untouched (4) status, lonely

Directions for Q. Nos. 61 to 70. Each of these questions consists of a sentence with four underlined parts, one of which is incorrect as per standard use of English Language. Identify the part which is incorrect.

61. The teacher was tense when he entered the class which comprised of a hundred students.
- (1) (2) (3) (4)
62. There is no rule regarding the length of a precis with with relation to that of the original passage.
- (1) (2) (3) (4)
63. Had I realized your house was such a long way off I would take a taxi.
- (1) (2) (3) (4)
64. Scarcely we had reached the office when it started raining cats and dogs.
- (1) (2) (3) (4)
65. When I will get back, I shall pay back the money that I borrowed from you last month.
- (1) (2) (3) (4)
66. Choose only such friends that you can trust.
- (1) (2) (3) (4)
67. The book is well illustrated and attractively bound, making altogether an attractive volume.
- (1) (2) (3) (4)
68. He had no sooner arrived than he was asked to leave again.
- (1) (2) (3) (4)
69. If your jogging clothes were't made of permeable fibre you will drown in your own sweat.
- (1) (2) (3) (4)
70. The perquisites attached to this job make it even more attractive than the salary indicated.
- (1) (2) (3) (4)

Directions for Q. Nos. 71 to 75. Each of these questions consists of an idiom followed by four alternative words or phrases giving the possible meaning of the idiom. Select the alternative which gives the closest meaning of the idiom.

- 71.** To eat crow
 (1) to become a non-vegetarian
 (2) to quieten down
 (3) made to feel small
 (4) to swallow one's own words
- 72.** In mint condition
 (1) flavoured with mint
 (2) green in colour
 (3) shining like new
 (4) feeling envious
- 73.** Feathering one's nest
 (1) taking adequate precaution against danger
 (2) enriching oneself at the expense of the public
- (3) buying insurance in time
 (4) making a new house
- 74.** In apple pie order
 (1) last in the sequence
 (2) by government order
 (3) everything in its place
 (4) neatly demolished
- 75.** Removing the cobwebs
 (1) cleaning up the house
 (2) throwing away waste material
 (3) clearing one's mind of misunderstanding
 (4) disinfecting everything

Directions for Q. Nos. 76 to 80. Each of the following questions consists of a capitalized pair of words followed by alternative pairs of words. Select the pair that best expresses a relationship similar to that expressed in the capitalized pair.

- 76.** MUSTER : CRES
 (1) convene : committee (2) demobilize : troops
 (3) cheer : team (4) dismiss : jury
- 77.** STICKLER : INSIST
 (1) trickster : risk (2) haggler : concede
 (3) braggart : boast (4) laggard : outlast
- 78.** PERJURY : OATH
 (1) plagiarism : authority
 (2) embezzlement : trust
 (3) disrespect : age
 (4) jury : vow
- 79.** TIRADE : ABUSIVE
 (1) monologue : lengthy
 (2) aphorism : boring
 (3) encomium : laudatory
 (4) critique : insolent
- 80.** DELICATE : FASTIDIOUS
 (1) hardworking : deligent
 (2) altruistic : mercenary
 (3) demonstrative : effusive
 (4) deceptive : false

TEST III QUANTITATIVE APTITUDE

- 81.** A "CD" player having a price tag of Rs. 900 is sold for Rs. 729 after two successive discounts. If the first discount was 10%, what was the second discount.
 (1) 8% (2) 10%
 (3) 12% (4) 20%
- 82.** If $a + b + c = 0$, then the value of $a(c + a)(a + b) - b(a + b)(b + c)$ is equal to
 (1) 1 (2) abc
 (3) $\frac{a+b}{c}$ (3) 0
- 83.** The ratio of the area of a square to that of the square drawn on its diagonal is always
 (1) 4 : 5 (2) 3 : 4
 (3) 1 : 2 (4) 2 : 3
- 84.** A person's present age is two-fifth of the age of his mother. After 8 years, he will be one-half of the age of his mother. How old is the mother at present?
 (1) 32 years (2) 40 years
 (3) 36 years (4) 48 years

85. A frog tries to come out of a dried well 9 m deep with slippery walls. Every time the frog jumps 60 cm, he slides back 30 cm. How many jumps will the frog have to take to come out of the well ?
 (1) 20 (2) 29
 (3) 30 (4) 31
86. An uneducated retailer marks all his goods at 50% above the cost price and thinking he will still make 25% profit, offers a discount of 25% on the marked price. What is his actual profit on sales ?
 (1) 25% (2) 15%
 (3) 12.5% (4) 20%
87. A jogger running at 9 km per hour alongside a railway track is 240 metres ahead of the engine of a 120 metre long train running at 45 km per hour in the same direction. In how much time will the train pass the jogger ?
 (1) 36 seconds (2) 3.6 seconds
 (3) 72 seconds (4) 18 seconds
88. Zinc and copper are melted together in a furnace of a die casting machine fabricating utensils in the ratio of 9 : 11. What is the weight of the melted mixture, if 28.8 kg of zinc has been consumed in it ?
 (1) 60 kg (2) 70 kg
 (3) 64 kg (4) 58 kg
89. Sanjeev cycles to his college at an average speed of 12 km/hr. It takes him 20 minutes to reach the college. If he wants to reach his college in 15 minutes, what should be his average speed ?
 (1) 15 km/hr (2) 18 km/hr
 (3) 20 km/hr (4) 16 km/hr
90. Two trains approach each other at 30 km/hr and 27 km/hr from two places 342 km apart. When will they meet ?
 (1) 5 hours (2) 7 hours
 (3) 12 hours (4) 6 hours
91. How much time will it take for an amount of Rs. 450 to yield Rs. 81 as interest at 4.5% per annum of simple interest?
 (1) 5 years (2) 3.5 years
 (3) 4 years (4) 4.5 years
92. Reduce $\frac{128352}{238368}$ to its lowest term.
 (1) $\frac{3}{4}$ (2) $\frac{5}{13}$
 (3) $\frac{7}{13}$ (4) $\frac{9}{13}$
93. A can do a certain work in the same time in which B and C together can do it. If A and B together could do it in 10 days and C alone in 50 days, in what time could B alone do it ?
 (1) 25 days (2) 50 days
 (3) 30 days (4) 40 days
94. How many cubes of 30 cm edge can be cut out of a cube of 18 cm edge ?
 (1) 36 (2) 432
 (3) 218 (4) 216
95. A path of uniform width surrounds a rectangular field 45 m x 35 m and occupies 900 sq. m. Find the width of the path.
 (1) 2.5 m (2) 3 m
 (3) 5 m (4) 4 m
96. The areas of two circular fields are in the ratio 16 : 49. If the radius of the latter is 14 m, what is the radius of the former ?
 (1) 32 m (2) 8 m
 (3) 18 m (4) 4 m
97. A man sold two pens at Rs. 20 each. He sold one at a loss of 10% and the other at a gain of 10%. His loss or gain in % is
 (1) loss 1% (2) gain 1%
 (3) no loss no gain (4) loss 5%
98. Find the number whose square root is twice its cube root.
 (1) 27 (2) 64
 (3) 125 (4) 81
99. The length of a room is 5.5 m and width is 3.75 m. Find the cost of paving the floor by slabs at the rate of Rs. 800 per sq. m.
 (1) Rs. 15,600
 (2) Rs. 16,500
 (3) Rs. 15,550
 (4) Rs. 15,000
100. The average score of a cricketer for ten matches is 38.9 runs. If the average for the first six matches is 42, find the average of the last four matches.
 (1) 33.25 (2) 33.50
 (3) 34.25 (4) 35.00
101. The area of a square field is 6050 sq. m. Find the length of its diagonal.
 (1) 120 m (2) 135 m
 (3) 110 m (4) 112 m

- 102.** A man earns Rs. 20 on the first day and spends Rs. 15 on the next day. He again earns Rs. 20 on the third day and spends Rs. 15 on the fourth day. If he continues to save like this, how soon will he have Rs. 60 in hand ?
 (1) 30th day (2) 40th day
 (3) 27th day (4) 17th day
- 103.** Simplify $\frac{7+7+7/7}{(7+7+7)/7}$
 (1) $\frac{15}{21}$ (2) 5
 (3) $14\frac{2}{3}$ (4) $15\frac{1}{3}$
- 104.** Find the value of $4.7 \times 13.23 + 4.7 \times 9.43 + 4.7 \times 77.34$.
 (1) 4700 (2) 47
 (3) 47000 (4) 470
- 105.** Find the ratio in which rice at Rs. 7.20 a kg be mixed with rice at Rs. 5.70 to produce a mixture worth Rs. 6.30 a kg.
 (1) 1 : 3 (2) 2 : 3
 (3) 3 : 4 (4) 4 : 5
- 106.** Income of C is 20% more than of B and income of B is 25% more than of A. Find out by how much % is the income of C more than of A.
 (1) 25% (2) 75%
 (3) 50% (4) 100%
- 107.** Out of a class of 38 girls, 3 were absent. 20% of the remainder failed to do home work. Find the number of girls that did the home work.
 (1) 23 (2) 24
 (3) 29 (4) 28
- 108.** It costs Re. 1 to photocopy a sheet of paper. However, 2% discount is allowed on all photocopies done after first 1000 sheets. How much will it cost to photocopy 5000 sheets of paper ?
 (1) Rs. 4,920 (2) Rs. 3,920
 (3) Rs. 4,900 (4) Rs. 3,980
- 109.** A shopkeeper had stock worth Rs. 1,000 and Rs. 100 in cash in the morning. He gave Rs. 20 to his son and contributed Rs. 11 for Puja. At the end of the day he found that he had stock of Rs. 750 and Rs. 450 in cash. What is his net revenue for the day ?
 (1) Rs. 319 (2) Rs. 121
 (3) Rs. 69 (4) Rs. 131
- 110.** The value of $\sin 54^\circ \cos 37^\circ + \sin 37^\circ \cos 53^\circ$ is
 (1) 1 (2) 0
 (3) 3 (4) 2
- 111.** The value of $2 \sin^2 30^\circ - 3 \cos^2 45^\circ + \tan^2 60^\circ$ is
 (1) 1 (2) 4
 (3) 2 (4) 5
- 112.** The sum of squares of three numbers which are in the ratio of 2 : 3 : 4 is 725. What are these numbers ?
 (1) 20, 30, 40 (2) 20, 15, 30
 (3) 10, 15, 20 (4) 14, 21, 28
- 113.** Successive discounts of 10% and 20% are equivalent to a single discount of
 (1) 30% (2) 29%
 (3) 31% (4) 28%
- 114.** Akash starts in a car from Delhi to Agra at 11 am. He travelled at 60 km an hour and covered half the distance in two hours. At what speed should he travel to reach Agra by 4 pm ?
 (1) 40 km/hr (2) 50 km/hr
 (3) 60 km/hr (4) 55 km/hr
- 115.** If $A : B = 3 : 4$ and $B : C = 5 : 6$ then $A : B : C$ equals
 (1) 20 : 25 : 30 (2) 15 : 20 : 24
 (3) 15 : 20 : 28 (4) 21 : 28 : 30
- 116.** The population of a town was 1,60,000 three years ago. If it has increased by 3%, 2.5% and 5% in the last three years, the present population is
 (1) 1,77,000 (2) 1,77,596
 (3) 1,77,366 (4) 1,77,461
- 117.** The sum of two numbers is 2490. If 6.5% of one number is equal to 8.5% of the other, the numbers are
 (1) 1411, 1079
 (2) 1401, 1089
 (3) 1011, 1479
 (4) 989, 1501
- 118.** If Rs. 1,380 is divided between Rinku, Jaishree and Pallavi in such a manner that Rinku gets 5 times as much as Pallavi and 3 times as much as Jaishree, how much will each get ?
 (1) Rs. 900, Rs. 400, Rs. 80
 (2) Rs. 900, Rs. 300, Rs. 180
 (3) Rs. 800, Rs. 400, Rs. 180
 (4) Rs. 900, Rs. 200, Rs. 280

- 119.** What amount of money does John get on selling 14% debentures worth Rs. 16,000 at 10% discount when the face value of each debenture is Rs. 100 and brokerage is 1.5% ?
 (1) Rs. 14300 (2) Rs. 15184
 (3) Rs. 14384 (4) Rs. 14184
- 120.** If each side of an equilateral triangle is 4 cm, its area will be
 (1) $8\sqrt{3} \text{ cm}^2$ (2) $4\sqrt{3} \text{ cm}^2$
 (3) $6\sqrt{3} \text{ cm}^2$ (4) $10\sqrt{3} \text{ cm}^2$
- 121.** If value of $[5(8^{1/3} + 27^{1/3})3]^{1/4}$ is
 (1) 125 (2) 625
 (3) 25 (4) 5
- 122.** The value of $1.5^3 - 0.9^3 - 0.6^3$ is
 (1) 2.430 (2) 24.30
 (3) 1.430 (4) 14.30
- 123.** A shopkeeper offers 2.5% discount on cash purchases. What cash amount would Pinky pay for a cycle, the marked price of which is Rs. 650 ?
 (1) Rs. 635
 (2) Rs. 633.75
 (3) Rs. 633.25
 (4) Rs. 634
- 124.** By how much is two-fifth of 200 greater than three-fifth of 125 ?
 (1) 15 (2) 10
 (3) 5 (4) 8
- 125.** $a^2 + b^2 + c^2 = 20$ and $a + b + c = 0$, then $ab + bc + ca$ is
 (1) -10 (2) -20
 (3) 10 (4) 15

Directions for Q. Nos. 126 to 130. Answer the questions on the basis of the following information.

Year	No. of loans sanctioned	Total value of loans in crore Rs.
2000-01	4345	2607
2001-02	6431	5032
2002-03	5273	7305

- 126.** What is the % increase in number of loans sanctioned during 2001-02 as compared to 2000-01 ?
 (1) 32% (2) 44%
 (3) 48% (4) 52%
- 127.** What is the total value of loans sanctioned by authorities during 2000-01 to 2002-03 ?
 (1) 16049 (2) 15004
 (3) 14804 (4) 14944
- 128.** What is the average number of loans sanctioned annually during the period under consideration ?
 (1) 5350 (2) 8029
 (3) 5400 (4) 5300
- 129.** What is the average value of loans during 2002-03 ?
 (1) Approx Rs. 1.3 crores
 (2) Approx Rs. 1.4 crores
 (3) Approx Rs. 1.2 crores
 (4) Approx Rs. 1.8 crores
- 130.** The number of loans sanctioned in 2002-03 is what % less than in 2001-02 ?
 (1) 17%
 (2) 20%
 (3) 18%
 (4) 25%

TEST IV REASONING

Directions for Q. No. 131 to 134. Consider the following information.

Each of exactly six objects — S, T, U, V, W and X — is to be placed in one of six slots numbered consecutively one through six. Each slot must have one of the objects placed in it. The arrangements of these objects in the six slots is subject to the following conditions :

- (i) If S is to be in a lower-numbered slot than U, then T must be in a lower-numbered slot than X.
- (ii) If T is to be in a lower-numbered slot than V, then W must be in a lower-numbered slot than X.
- (iii) If X is to be in a lower-numbered slot than S, then U must be in a lower-numbered slot than V.

131. Which of the following arrangements of the objects in slots one through six, beginning with slot one, conforms to the conditions ?

- (1) S, U, T, W, V, X (2) S, X, W, U, T, V
- (3) V, U, T, X, W, S (4) W, S, T, V, X, U

132. If the six objects have erroneously been placed in slots one through six in the order W, X, S, U, T, V and if the error is to be rectified by reversing the placement of exactly two objects in two immediately adjacent slots, those objects are the ones in slots

- (1) one and two (2) two and three
- (3) three and four (4) four and five

133. If X, S and U are to be in the first, the second, and the third slot, respectively, the other three objects must be in which of the following orders, beginning with slot four ?

- (1) T, V, W (2) T, W, V
- (3) V, T, W (4) V, W, T

134. If V is to be in the first slot, each of the following could be in the sixth slot *except*

- (1) S (2) T
- (3) U (4) W

135. Three of the following four are alike in a certain way and so form a group. Which of the following does *not* belong to that group ?

- (1) Carrot (2) Potato
- (3) Beetroot (4) Cabbage

136. A clock is so placed that at 12 noon, the minute hand points towards north-east. In which direction does its hour hand point at 1.30 p.m. ?

- (1) East (2) West
- (3) North (4) South

Directions for Q. Nos. 137 to 140.

(i) Six boys A, B, C, D, E and F play a game of cards. Each has ten cards.

(ii) F borrows two cards from A and gives away five to C who in his turn gives three to B, while B gives six to D, who passes on one to E.

137. How many cards does A have ?

- (1) 8 (2) 9
- (3) 11 (4) 12

138. How many cards does B have ?

- (1) 7 (2) 11
- (3) 12 (4) 13

139. How many cards does C have ?

- (1) 7 (2) 9
- (3) 12 (4) 16

140. How many cards does D have ?

- (1) 8 (2) 11
- (3) 13 (4) 15

Directions for Q. Nos. 141 to 145.

Access to XRT computer's data sets is obtained by entering job names into the computer. Each job name must consist of a three-word sequence that conforms to the following rules :

- (i) Each word must consist of three, five, or seven letters.
- (ii) The letters R, T and X must appear exactly one in each job name, not necessarily in that order.
- (iii) The third word must contain more letters than the second word.
- (iv) Each word must begin with a different letter.

- 141.** Which of the following could be a job name for the XRT computer ?
 (1) AXE DIVER BOAST
 (2) BOX ROAM NEVER
 (3) CALLS EXERT WINDOWS
 (4) EXPECT ONE PICUTRE
- 142.** If BOXER is the second word in a job name for the XRT computer, which of the following could be the first and third words, respectively ?
 (1) ARM, RUNNING
 (2) BID, TAMES
 (3) CAMPS, TRAINER
 (4) DID, STEAMED
- 143.** If EXTRA is the third word in a job name for the XRT computer, which of the following *cannot* be the second word ?
 (1) ACE
 (2) BEE
 (3) END
 (4) FOE
- 144.** The sequence of words MOTHS, VEX, MAR is not a possible job name for the XRT computer. Which of the following procedures if performed on the sequence produces a sequence that could be a job name for the XRT computer?
 (1) Reversing the order of the letter in a specific word and removing a specific letter from the longest word
 (2) Reversing the order of the letters in a specific word and reversing the order of the three words
 (3) Reversing the order of the letters in a specific word
 (4) Reversing the order of the three words
- 145.** How many letters can the second word in job names for the XRT computer have ?
 (1) Three, but they cannot have five or seven
 (2) Five, but they cannot have three or seven
 (3) Seven, but they cannot have three or five
 (4) Three or five, but they cannot have seven

Directions for Q. Nos. 146 to 150. Unscramble the letters in the following words and find the odd man out.

- 146.** (1) EIWNTR (2) UMRSME
 (3) PIGRSN (4) LCUOD
- 147.** (1) UPJM (2) WKLA
 (3) PEELS (4) UNR
- 148.** (1) HHGI (2) SUTOH
 (3) OTRNH (4) ETSW
- 149.** (1) MLNOE (2) RNEGOA
 (3) OOTTAP (4) PPALE
- 150.** (1) RNAI (2) RIQA
 (3) AIRYS (4) AAPJN
- 151.** Which letter be 8th from the right of the 3rd letter of the second half of the English alphabet ? (Letters A to Z arranged from left to right)
 (1) V (2) W
 (3) X (4) Y
- 152.** If 1st and 26th, 2nd and 25, 3rd and 24th and so on, letters of English alphabet are paired, which of the following pairs is correct ?
 (1) GR
 (2) CW
 (3) IP
 (4) EV

Directions for Q. Nos. 153 to 158.

Four persons — A, B, C and D — are camping at four separate campsites — E, F, G and H, not necessarily in that order. The campsites are located on four separate lakes — I, J, K and L, not necessarily in that order — which are in four separate states — M, N, O and P, not necessarily in that order.

- (i) B is camping on K lake.
 (ii) H campsite is on J lake, which is in N.
 (iii) The person at I lake, a native of P, camps only in that state.
 (iv) D is at F compsite.
 (v) A is camping in O.

- 153.** Where must B be camping ?
 (i) In M (2) On L lake
 (3) At F campsite (4) In N
- 154.** I lake is the site of
 (1) F campsite (2) A's camp
 (3) The camp in O (4) C's camp

155. On the basis of the information given, it is possible to deduce that

- I. A is not at H campsite
 II. C is in P
 III. D is not at E campsite
 (1) I only (2) II only
 (3) III only (4) I and III only

156. O is the site of

- I. L lake
 II. F campsite
 III. J lake
 (1) I only (2) II only
 (3) III only (4) I and II only

157. Which statement is true of L lake ?

- (1) C is camping there (2) D is camping there
 (3) It is in M (4) A is camping there

158. Which *cannot* be determined on the basis of the information given ?

- (1) What state is K lake in
 (2) Who is at E campsite
 (3) What campsite is in P
 (4) Who is camping in N

159. A is taller than B but shorter than C. D is taller than A but shorter than C. E is taller than B but shorter than A. Who is the tallest ?

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

160. How many 7's are there which has a 7 preceded by it and 7 following it in the following sequence ?

- 7787778777776777977877778
 (1) 8 (2) 2
 (3) 6 (4) 4

Directions for Q. Nos. 161 and 162.

If FRANCE is coded as 9-21-4-17-6-8, code the following:

161. INDIA

- (1) 12-19-3-12-4
 (2) 11-16-6-11-3
 (3) 12-17-7-12-4
 (4) 12-19-7-12-6

162. PERU

- (1) 19-8-21-24 (2) 19-9-21-24
 (3) 18-8-21-24 (4) 19-8-20-23

Directions for Q. Nos. 163 to 165.

A commercial grower raises flowers in each of three different growing seasons every year — spring, summer and winter, with the year beginning in spring. Exactly seven different kinds of flowers — Q, R, S, T, W, X and Z — are grown every year. Each kind of flower is grown at least once a year. The flowers are grown according to the following rules:

- (i) No more than three different kinds of flowers are grown in any one growing season.
 (ii) No kind of flower can be grown for two growing seasons in a row.
 (iii) Q can be grown neither in the winter season nor in the same growing season as W or X.
 (iv) S and T are always grown in the same growing season as each other.
 (v) R can be grown in a growing season only if Q was grown in the preceding growing season.

163. Which of the following is an acceptable schedule for the three growing seasons ?

- | | <u>Spring</u> | <u>Summer</u> | <u>Winter</u> |
|-----|---------------|---------------|---------------|
| (1) | Q | S, T, R | Q, X, Z |
| (2) | S, X | Q, T, Z | R, W |
| (3) | W, X | Q | Z, S, T R |
| (4) | Q, S, T | R, W, X | Z |

164. If Z and R alone are grown in the winter season, which of the following must be grown in the preceding spring ?

- (1) Q (2) R
 (3) T (4) W

165. If Z is grown in the spring and W in the summer of one year, which of the following can also be grown in the summer ?

- (1) X (2) Q
 (3) S (4) T

Directions for Q. Nos. 166 to 171.

Three local companies — F, G and H — and three out-of-state companies — X, Y and Z — must each be scheduled for a different one of six consecutive days from Monday through Saturday to make their presentations.

- (i) F's presentation must be made earlier than H's presentation
 (ii) X's presentation must be made earlier than Z's presentation, but not on the day immediately preceding Z's presentation.

(iii) The three presentations by the local companies cannot all be made before any presentation by an out-of-state company is made, nor can the three presentations by the out-of-state companies all be made before any presentation by a local company is made.

- 166.** Which of the following is a list of the six companies in an order in which they could be scheduled to make their presentations ?
- (1) F, H, G, X, Y, Z
 - (2) F, H, Z, G, Y, X
 - (3) G, Y, F, X, Z, H
 - (4) X, G, Y, F, H, Z

- 167.** If F's presentation is to be made on Friday, the companies making their presentations in the three-day period Monday through Wednesday must include
- (1) G and X
 - (2) G and Y
 - (3) H and Z
 - (4) X and Y

- 168.** If X's presentation is to be made on Thursday, Friday's presentation must be made by either
- (1) F or Y
 - (2) F or Z
 - (3) G or H
 - (4) G or Z

- 169.** Which of the following is a list of all those days, and only those days, on which Z could make its presentation ?
- (1) Wednesday, Friday
 - (2) Wednesday, Thursday, Friday, Saturday
 - (3) Thursday, Friday, Saturday
 - (4) Tuesday, Wednesday, Friday, Saturday

- 170.** If F is to make its presentation after Z makes its presentation, which of the following is a day on which X could make its presentation ?
- (1) Tuesday
 - (2) Wednesday
 - (3) Thursday
 - (4) Friday

- 171.** If H is to make its presentation on Wednesday and Y's presentation is to be made earlier than H's presentation, then G must make its presentation on
- (1) Monday
 - (2) Tuesday
 - (3) Thursday
 - (4) Friday

Directions for Q. Nos. 172 to 180. Find the number that comes next in the sequence.

- 172.** 10, 4, 14, 18, 32, _____
- (1) 40
 - (2) 50
 - (3) 48
 - (4) 52

- 176.** 6, 18, 3, 21, 7, 56 _____
- (1) 8
 - (2) 64
 - (3) 9
 - (4) 63

- 173.** 7, 9, 13, 19, _____
- (1) 27
 - (2) 21
 - (3) 31
 - (4) 23

- 177.** $1, \frac{1}{8}, -\frac{3}{4}, \text{_____}$
- (i) $-\frac{4}{7}$
 - (2) $\frac{1}{3}$

- 174.** 32, 27, 30, 29, 28, 31, _____
- (1) 34
 - (2) 38
 - (3) 26
 - (4) 40

- (3) $-\frac{13}{8}$
- (4) -1

- 178.** 2, 12, 36, _____
- (1) 72
 - (2) 60
 - (3) 66
 - (4) 80

- 175.** 4, 6, 9, $13\frac{1}{2}$, _____
- (1) 19
 - (2) $17\frac{1}{2}$
 - (3) $20\frac{1}{2}$
 - (4) $22\frac{3}{4}$

- 179.** 1.001, 0.991, 0.971, 0.941, 0.901, _____
- (1) 0.851
 - (2) 0.861
 - (3) 0.871
 - (4) 0.841

- 180.** 165, 195, 255, 285, _____
- (1) 310
 - (2) 325
 - (3) 345
 - (4) 225

- 189.** L
 (1) is owned by F (2) is the Boxer
 (3) is the Collie (4) wins third price
- 190.** On the basis of statements (i), (ii), (iii), (iv) and (vii) only, which of the following may be deduced ?
- I. M is the Boxer.
 II. The Doberman is K or L.
 III. J wins third prize.
- (1) I and II only (2) I and III only
 (3) II and III only (4) I, II and III

- 191.** On the basis of statements (i), (ii), (iii), (iv) and (vii) only, which of the following may be deduced ?
- I. G's dog is J or L.
 II. E's dog wins first or second prize.
 III. K is the Collie
- (1) I only (2) II only
 (3) I and II only (4) I, II and III

Directions for Q. Nos. 192 to 195. In each of the following questions, four groups of letters, marked (1) to (4) are given, of which three are alike in some way or the other and one is different. Find the one which is different.

- 192.** (1) ONP (2) LKM
 (3) IHJ (4) STR
- 193.** (1) JIK (2) CDB
 (3) MNL (4) PQO
- 194.** (1) PSRQ (2) UXWV
 (3) MLNO (4) RUTS
- 195.** (1) XVTR (2) LJHF
 (3) WUSQ (4) PNMJ

Directions for Q. Nos. 196 to 200.

The only persons who attended a meeting were four ship captains and the first mates of three of those captains. The captains were R, S, T and W; the first mates were L, N and V. Each person in turn delivered a report to the group as follows :

- (i) Each first mate present spoke immediately after his or her captain.
 (ii) S was the first captain to speak, and T was the second captain to speak.

- 196.** All of the following are possible orders of speakers *except*
- (1) S, L, T, V, W, R, N (2) S, N, T, V, R, W, L
 (3) S, T, L, R, N, W, V (4) S, T, V, N, W, R, L
- 197.** If R spoke after L, and L was the third of the first mates to speak, all of the following statements could be true *except*
- (1) W spoke immediately after V
 (2) L was the fourth speaker after S
 (3) W's first mate was present
 (4) The captains spoke in the order S, T, W, R
- 198.** If L spoke immediately after R and immediately before W, and W was not the last speaker, R spoke
- (1) second (2) third
 (3) fourth (4) sixth
- 199.** If V is S's mate, N could be the person who spoke immediately
- (1) before T
 (2) before L
 (3) before V
 (4) after T
- 200.** If L was the third of the first mates to speak, and R was the captain whose first mate was not present, which of the following must be true.
- (1) L spoke some time before R
 (2) N spoke some time before W
 (3) R spoke some time before W
 (4) W spoke some time before R