

JMET – 2006  
(Based on Memory)

SECTION – I

VERBAL COMMUNICATION (QUESTION 1 – 40)

**Directions (Qs. 1 to 3):** Refer to the passage below:

To make effective decisions all we have to do is to out-think our opponent. Our decision needs to be better than his, that's all. There is no need to be perfect.

The mistake we make is to think through our intellect. If we ask any successful business leader or CEO these days about what has made them so successful, again and again they claim that their success came from something beyond their intellect; Something beyond logic and facts. Something that gave them the intelligence and guts to take effective decisions. It is simply the intuitive power within them that has helped them make these effective decisions.

We can tune into intuition as part of our regular life. The question therefore is not whether intuition is an inborn quality, but whether we can make ourselves intuitive.

When we step into the present, we step out of time-bound awareness. We step beyond tension. Our body stops producing adrenaline. Time-bound awareness is mass, which is solid. Non time-bound awareness is pure energy, liquid, dynamic, bubbling and creative. We step out of our boundaries. We become free. We become intuitive.

When our thoughts stop, our present vision extends into the past and the future. We become free of time and space constraints. When we meditate deeply, we become intuitive, and can reach cosmic intelligence or enlightenment.

1. According to the passage a successful business leader
  - [1] relies mostly on logic and facts
  - [2] is more intelligent than his/her opponents
  - [3] takes effective decisions
  - [4] is free of time and space constraints
2. Which of the following statements CANNOT be directly inferred from the above passage?
  - [1] Effective decisions are not necessarily perfect decisions
  - [2] Successful CEOs have intuitive powers
  - [3] To be intuitive, we have to step out of our time-boundaries
  - [4] Meditation helps us take effective decisions.
3. The most appropriate title for the passage might be
  - [1] "Beyond intuitive boundaries"
  - [2] "Intuition, the key to effective decisions"
  - [3] "Intuitive leadership"
  - [4] "Intuitive reasoning"

**Directions (Qs. 4 & 5):** Carefully read the sentences given below and identify the grammatically incorrect option to fill in the blank.

4. This strategy has proved very successful for Nike, but to keep ahead of competition they must keep \_\_\_\_\_ new factory sites and sourcing cheap workers.
 

[1] searching	[2] exploring	[3] surveying	[4] scrutinizing
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5. There are more flowers here \_\_\_\_\_ earlier
 

[1] than there used to be	[2] than there was	[3] than there had been	[4] than there were
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**Directions (Qs. 6 & 7):** Choose the option that is closest in meaning to the capitalized word.

6. **INEXPLICABLE**  
[1] Incomprehensible      [2] Indelible      [3] Inextricable      [4] Infallible
7. **GRIT**  
[1] Grjd      [2] Grind      [3] Grin      [4] Grill

**Directions (Qs. 8 to 10):** Questions 8-10 relate to the passage given below:

When I started working during the late 1960s and early 70s I was the proud owner of a slide rule. It was a low-mileage model, as I only knew how to work out percentages on it, but even that was better than struggling with long multiplication or logarithms to do the same work as some of my colleagues were wont to do.

The point is that this was only three decades ago, and the pocket calculator had still not been invented.

I remember, in the early 1970s, sitting in a meeting in the viewing room of the advertising agency I worked for, taking part in a discussion with our client, Procter and Gamble, on whether the commercial which had just been approved should be shot in black and white, or colour. The discussion, as with most discussions with that client, was long and carefully articulated on both sides. The agency, of course, looked to the future, and argued strongly for colour. We were finally overruled, on the grounds that there were; still too few colour TV sets in existence for it to be worth the extra investment in colour film.

At the same period, I recall the excitement of the company's first computer being delivered. The accounts office window was temporarily removed, while the computer was swung into place by a crane especially hired for the purpose. The computer power was probably less than a personal organiser.

Not only was colour television a rarity, any the personal computer still some way off, other everyday objects had still to be invented, like the digital watch or the camcorder. How we existed without such basic everyday tools I now find hard to imagine.

The truth is that we and our parents and grand parents before us – and their forebears before them stretching back over the past two centuries – have seen and accommodated huge technical advances and social changes. Many of these changes have not only been big they've been fast.

8. Which of the following statements is MOST ACCURATE in terms of the passage above?  
[1] Colour commercial was ruled out because colour photography was in its infancy.  
[2] An office window had to be dismantled so as to put the computer inside  
[3] The digital camcorder had not yet been invented in the 1970s  
[4] Slide rules could calculate percentages, multiplication and logarithms.
9. Which of the following preferences is the most appropriate as per the passage above?  
[1] Change is a process of struggling against existing ideas  
[2] The world has changed rapidly since the 1960s and 70s  
[3] Change is exciting especially in the field of technology  
[4] The world has been changing significantly for a long time
10. The most appropriate title for the above passage could be  
[1] "Changes since the 1960s"  
[2] "Accepting change"  
[3] "Change and obsolescence"  
[4] "The changing world"



18. **PIRATE: PIROUETTE**

- [1] Marauder : Dive  
[3] Convict : Spin

- [2] Criminal : Tumble  
[4] Buccancer : Gyrate

19. **PROVINCIALISM: PAROCHIALISM**

- [1] Dilettante : Inexpert  
[3] Meretricious : Sober

- [2] Miscegenation : Mitigation  
[4] Decadent : Resplendent

**Directions (Qs. 20 to 23):** Relate to the passage given below:

Visualisation is the three-dimensional, multicoloured, singing-and-dancing version of affirmations that enables the subconscious to prefigure future achievement or success: It is a basic and fundamental human attribute, and one that can literally be the difference between surviving and not surviving.

When Victor Frankl, the Freudian psychologist, was examining the discriminating factors that enabled him, and many like him, to survive in the hell of the Nazi concentration camps, the key factor was the ability to visualise. All survivors had a vision of something beyond their current suffering, something more worthwhile, and something worth hanging on for.

This underlines the importance of each individual having a vision of something, outside and larger than herself, that gives her life some meaning. The very existence of a mission lifts the eyes to something more meaningful and enduring and in so doing provides something to live for - at times when quiet surrender could be an attractive option. Such a vision gives a further *raison d'être* for integrity, by providing a purpose that binds together the core values that make up self worth.

One of the most powerful-and difficult to achieve - applications of visualisation is to focus your mind daily on the person you intend to become. Create a clear mental picture of that person and see it in full colour, and add sounds and smells, if they are appropriate. The emotional values you add to the visualisation are vital in making the full connection to your subconscious, which acts only on thoughts that are mixed with emotions. These techniques are, of course, widely validated in fields like sport and business, where the peak performers are nearly all visualisers. They all see, feel, and fully experience their success before they achieve it.

20. "Raison d'être" as it is used in the above passage means
- [1] the most important need
  - [2] the most important inference
  - [3] the most important consequence
  - [4] the most important reason
21. Which of the following statements, in the light of the above passage, is NOT correct?
- [1] Visualisation is the affirmation of the subconscious.
  - [2] Visualisation is three dimensional, multicoloured and auditory.
  - [3] Visualisation is a basic and fundamental quality of human mind.
  - [4] Visualisation can make a significant difference in terms of our very existence.
22. Which of the following observations CANNOT be directly inferred from the above passage?
- [1] Concentration camp survivors visualised beyond their current suffering
  - [2] Emotional values help one's subconscious to connect to visualisation
  - [3] Visualisation involves the ability to focus on the person you want to become
  - [4] The existence of a goal beyond one's current situation gives one a sense of purpose

23. The above passage DOES NOT deal with
- [1] uses of visualisation
  - [2] techniques of visualisation
  - [3] quality of visualisation
  - [4] illustrations of visualisation

**Directions (Qs. 24 to 26):** Identify the grammatically CORRECT option.

24. [1] If you didn't study English at school, you won't understand this paper  
[2] If you don't study English at school, you would understand this paper  
[3] If you didn't study English at school, you wouldn't understand this paper  
[4] If you haven't studied English at school, you wouldn't understand this paper
25. [1] Music - Classical music, was one of her strong points  
[2] Beside art, she also loved Chamber music  
[3] The romantic number, in spite of the rain, was still audible  
[4] The room was empty except the music album
26. [1] The train may be late, as it happened yesterday  
[2] Some people are interested, but the majority doesn't care  
[3] My father, whom we hope will be out of hospital soon, will come  
[4] She works hardest when she's working for her family

**Directions (Qs. 27 to 30):** Read the passage carefully and answer the Questions 28 - 31 which follow

Although broad generalisations always oversimplify complex realities, we find numerous truths in the contrast between hierarchical, industrial manufacturing firms that dominated most of the twentieth century and today's service-based and knowledge-sensitive organisations. When industry meant repeatedly carrying out standard, we-defined tasks and workers were seen metaphorically (and sometimes literally) as parts of a machine, progress could still be made when the social networks and relationships of individual employees were ignored or discouraged. In fact, those firms strongly depended on social capital and sometimes suffered from lack of it. Without some level of trust, respect, and generalised reciprocity, coordinated work of all kind is hard to accomplish. Still, as, Henry' Ford has commented, a certain rough logic lies behind treating people like cogs in a machine when you only expect and want them to do machine-like work.

But very little of the work of today's knowledge firm is repetitive or mechanical. It requires responsiveness, inventiveness, collaboration and attention. Judgement, persuasiveness, shared decisions, the pooling of knowledge, and the creative sparks people strike off one another depend on engagement with the work and one another on the commitment that makes one genuinely a member of an organisation rather than simply an employee. Although we ourselves sometimes fall into the trap of talking about and "employees" - the user and the used - those terms really belong to the model and are inappropriate to the kind of work and working relationships we consider here. Today's most economically productive work is largely voluntary, in the sense that doing it well calls for a willing engagement of the whole self in the task. "Going through the motions" is insufficient when the motions are not prescribed but change as you go along. In our view, the firm is neither a machine with each cog firmly in place performing its clearly defined task nor an unorganized (or self-organising) flock of opportunistic entrepreneurs pursuing their individual destinies. It is - it should be a social organisation of people willingly engaged in a joint enterprise.

27. Based on your reading of the above passage, identify the INCORRECT option.  
[1] A knowledge firm requires participation and collaboration  
[2] A knowledge firm encourages trust and reciprocity  
[3] A knowledge firm does not have employees  
[4] A knowledge firm has flexible work descriptions
28. The above passage implies that  
[1] service-based, knowledge-intensive organisations dominate in today's business scenario  
[2] employees carry out standard, well-defined tasks  
[3] a voluntary worker is likely to be an engaged worker  
[4] industrial firms cannot be economically productive
29. The central idea of the passage relates to  
[1] the key difference between industrial and knowledge-intensive firms  
[2] the key difference between an "employee" and a "member" in an organisation  
[3] "Mechanical" vs. "Voluntary" organisations  
[4] importance of social capital in creating engaged organisations
30. In tile light of your reading of the passage above identify the option that contains the set of words CLOSEST in meaning to the set of words in CAPITAL letters'  
METAPHORICALLY: STANDARD: COG: ENGAGEMENT  
[1] Allegorically: Benchmark: Small Part: Obligation  
[2] Figuratively: Average: Small wheel: Appointment  
[3] Illustratively: Criterion: Small teeth: Undertaking  
[4] Symbolically: Routine: Small Component: Commitment

**Directions (Qs. 31 to 33):** Select the set of words that best expresses a relationship similar to the set in capitals.

31. SKY : BIRD : THUNDER  
[1] Movie: Theatre: Actor  
[2] Night: Stars: Music  
[3] Office: Conversation: Employees  
[4] Paper: Text: Watermark
32. TV : VISION : MOVIES  
[1] Mirror : Reflection: Eye  
[2] Air Conditioner: Feel: Air  
[3] Oven: Food; Smell  
[4] Perfume: Fragrance: Flower
33. PRINTER: INK: PAPER  
[1] Electric Power: Desktop: Monitor  
[2] Vending Machine: Water: Ground Coffee  
[3] Car: Brake Oil: Petrol  
[4] Tree: Clear Polish: Timber Wood

**Directions (Qs. 34 to 36):** Relate to the following article:

Small and Medium Enterprises (SMEs) played a crucial role in the development of India during the past 50 years. This sector constitutes about 95% of industrial units, and about 40 of total industrial output. Its direct and indirect exports potential stand at about 38%. With about :3.6 million SSI (Small Scale Industries) registered units employing close to two crore people. Its employment potential is next only to the agriculture sector. Thus the perfoma of SMEs is important for the economic and social development of the country.

One of the ways by which this sector can he made to grow fast is by tapping both domestic as well as international markets through business linkages between Multinational: Corporations (MNCs) and SMEs. Many OECD (Organisation for Economic Cooperation and Development) countries and some business linkages between SMEs and MNCs. So the SME, sector in .these countries have Witnessed favorable

growth and helped boost their countries exports in a very competitive way For example, Thailand ensured that the state provided industry with physical infrastructure and technological resources. Other Asian governments (Republic of Korea, Malaysia, Province of Taiwan, China) have included various incentives in the form of tax breaks, preference in public contracts and soft credit lines for both Transnational Corporations (TNCs) and SMEs to intensify relations and technology transfer. India, however, has no specific policy guidelines to develop linkages between SMEs and MNCs. Consequently, the vast of majority of SMEs that cannot meet the requirements set by MNCs remain totally de-linked.

In business linkages between SMEs and MNCs, outsourcing and value chain management started to play a key role, since MNCs could not become competitive without a 'competitive supplier base. Thus, to create a capable supplier base, a three-pronged approach to developing supplier linkages is needed. There is a need to develop a technology programme to support research, development and innovation in SMEs by accelerating their rate of technology acquisition through realisation of R & D projects. The government must promote and strengthen the knowledge base and competencies in SMEs in terms of quality, productivity and cost. Hence, there is an urgent need to strengthen the National Entrepreneurship Development Board (NEDB) and formulate a suitable plan for promoting rural entrepreneurship. Substantial investments and physical infrastructure development are needed all over the country. In this regard, a public-private partnership needs to be developed for implementing and reviewing the supportive measures at frequent intervals.

34. The article DOES NOT talk about
- [1] role of business associations in fostering SME-MNC linkages
  - [2] role of developing countries in fostering SME-MNC linkages
  - [3] role of the government in fostering SME-MNC linkages
  - [4] role of MNCs in developing the SME sector
35. According to the article, the Indian government can help facilitate the SME-MNC linkage by:
- [1] selecting potential local firms as suppliers to MNCs.
  - [2] providing technological resources through investments in R & D
  - [3] providing soft credit lines for MNCs
  - [4] training SMEs in outsourcing and value chain management.
36. As per the passage only One of the following statements is correct. Identify the correct statement.
- [1] The government should take the lead in facilitating SME-MNC linkages
  - [2] The only way to facilitate growth of SME sector is through business 'linkages with MNCs
  - [3] The government should help SMEs in improving their knowledge base and competencies
  - [4] SMEs currently export 38% of total industrial output.

**Directions (Qs. 37 to 39):** Read the paragraph below and answer Questions 38-40 which follow:

Confusion is internal and/or external chaos. Faulty implications cognitive distortions, interpersonal disruptions, and complex signs of confusion and conflict promote-a spirit or atmosphere of misinformation, misinterpretations and miscommunication. Where there is considerable friction in the mix of expressive freedom and interpretative response, an atmosphere of uncertainty and commotion will prevail.

37. Which of the following, according to you, is the MOST APPROPRIATE title for the" passage?
- [1] "Causes of uncertainty"
  - [2] "Misinterpretation and commotion
  - [3] "Defining confusion"
  - [4] "Uncertainty the cause of commotion"

38. The MOST APPROPRIATE meaning of “commotion,” as used in the passage, would be  
[1] a state of agitation and disturbance  
[2] a mental condition that leads to emotional break down  
[3] a state of uncertainty leading to depression  
[4] a condition of confusion and faulty implication
39. The passage: implies that  
[1] misinterpretation and miscommunication are promoted to some extent because of confusion  
[2] cognitive distortion and interpersonal disruption cause confusion  
[3] confusion is a result of misinformation, miscommunication and non-expressive freedom  
[4] considerable friction and cognitive distortion necessarily lead to commotion.

## SECTION 2

### LOGICAL REASONING (QUESTION 41 - 80)

40. If the code for the word QUESTION is SWGUVKQP, identify the option which gives the correct code for the word receptionist?  
[1] TGEGRKVQPKUV [2] TGEGRVQKPKUV  
[3] TGEGRVKQPKUV [4] TGEGRVKQKPUV
41. All practicing lawyers have LLB degree, AH MBBS degree holders are doctors. No doctors have LLB degree.  
From the above statement, which one of the options can be logically deduced?  
[1] Every individual is either a practicing lawyer or does not have a MBBS degree  
[2] Every individual is either not a practicing lawyer or does not have a MBBS degree  
[3] Every individual is either not a practicing lawyer or has a MBBS degree  
[4] Every individual is either a practicing lawyer or has a MBBS degree.
42. Harry is younger than Latif. Mahesh is of the same age as Latif; Randeep is exactly five years older than Mahesh, and Sonam is younger than Randeep but older than Harry by at the most four years. What is the minimum difference between the ages of Randeep and Harry? Assume that ages of all persons in this question are integer values  
[1] four years [2] five years [3] six years [4] eight years

**Directions (Qs. 43 to 45):** Read the given passage and answer the questions

Six products, namely U, V, W, X, Y, and Z are to be placed in the display window of a shop. There are six display windows numbered 1, 2, 3, 4, 5, and 6 from left to right in such a way that one product is showcased in one window only. However, U cannot be placed adjacent to V, W must be immediately to the left of X and Z cannot be in window number 6.

**Note:** The direction (left or right) should be determined with respect to the observer/shopper

43. Which of the following products CANNOT be placed in window number 1?  
[1] U [2] V [3] W [4] X
44. If X is placed in window number 3, in which window can W be placed  
[1] 1 [2] 2 [3] 4 [4] 5
45. If U is placed in window number 5, which of the following products must be placed in window number 6?  
[1] V [2] W [3] Y [4] X

46. If C \$ D means C is the brother of D, C \* D means C is the mother of D, and C #D means C is the sister of D, which of the following would mean \*M is the uncle of N?  
 [1] M \$ C # N                      [2] N # M \$ C                      [3] M \$ C \* N                      [4] M # C \* N
47. A family comprises seven members namely M, N, O, P, Q, R and S. Among them four are adults and three are children. Of the three children, only R and S are girls, M and P are brothers and M is a pilot. Q is an airhostess married to one of the brothers and has two children. N is married to P and S is their child, who is O?  
 [1] M's son                      [2] R's father                      [3] Q's daughter                      [4] P's son
48. The Chinese are shorter than the Italians; the Americans are taller than the French; the French are taller than the Chinese.  
 From the information given above, which one of the following statements can be logically inferred?  
 [1] The Italians are shorter than the Chinese  
 [2] The French are taller than the Americans  
 [3] The Chinese are taller than the French  
 [4] The Americans are taller than the Chinese

**Directions (Q. 49):** The following question has a set of five statements. Each statement has three sentences. Choose the alternative where the third sentence can be logically deduced, using both the preceding two, but not just from one of them.

49. i. Mild inflation is good for the economy. It encourages economic growth. Higher economic growth rate leads to higher level of inflation  
 ii. X and Y are friends. X is the enemy of Z. Y is the enemy of Z.  
 iii. Outsourcing of certain jobs improves the focus of the firm in the core area. It also raises productivity and cost efficiency. Firms which outsource experience an increase in their productivity.  
 iv. Global trade is expanding very fast. It is for the benefit of developed countries to expand their trade faster with the developing countries rather than among themselves. Most of such trade is largely confederated among developed countries.  
 v. Forgiveness is a great virtue. Great virtues are rare. Forgiveness is rare  
 [1] Only i                      [2] i and ii                      [3] iii and v                      [4] iv and v

**Directions (Qs. 50 to 52):** Answer Questions 53–55 based upon the following passage. Any additional information provided with a particular question pertains to that individual question only.

Eight entrepreneurs (J, K, L, M, N, O, P, Q) are selected for excellence awards for their outstanding contributions to business. Besides nurturing their own industries, two of these entrepreneurs, viz., J and L, also patronize the telecom industry while two others, viz., M and P, also patronize the computer industry. In arranging the seats, it was decided that the entrepreneurs who patronize other industries in addition to their own should not be seated together.

50. Which one of the following combinations is possible in the seating arrangements?  
 [1] KMLNJ                      [2] JPQOL                      [3] JKLNM                      [4] JOLPQ
51. In order to ensure a proper seating arrangement, M should sit between  
 [1] N and O                      [2] K and J                      [3] L and N                      [4] O and P
52. Which one of the following can be seated next to O?  
 [1] J only                      [2] Q only                      [3] K only                      [4] Any of the above

53. Ram, Qadir, Sorabji, Charles and Gurdeep all roll the same unbiased dice one after the other and note down their respective numbers. Ram gets an even number; Qadir gets a number greater than that of Gurdeep; Sorabji gets the same number as Charles and the addition of Charles' and Ram's numbers is odd. If Qadir's number is 4, what is the maximum of the addition of the numbers obtained by all five?  
 [1] 22                                      [2] 23                                      [3] 25                                      [4] 27
54. Not only do major diseases afflict the elderly in particular—of which there are more they are generally very expensive diseases to treat. Which one of the following options, if true, MOST STRENGTHENS this statement?  
 [1] Studies reveal that 60% of elderly people suffer from cataract.  
 [2] A dentist's major income comes from fixing artificial teeth for elderly patients  
 [3] Insurance companies do not cover Parkinson's disease because of the expenses involved.  
 [4] Private nursing homes have reported that cancer accounts for 50% of prolonged hospitalization of the elderly.

**Directions (Qs. 55 to 58):** Answer Questions 58–61 based upon the following passage:

U, V, X, Y and Z collected CDs of yesteryears' melodious songs. They collected a total of 100.CDs. None of them have collected less than 10 CDs. No two among them collected the same number of CDs. Also.

- (i) U collected the same number of CDs as V and X put together.  
 (ii) X collected 3 more CDs than the cube of an integer.  
 (iii) The number of CDs collected by U was the square of an integer  
 (iv) The number of CDs collected by V was either the square or the cube of an integer  
 (v) The number of CDs collected by Y and Z are in the ratio 4:3

55. What was the number of CDs collected by U?  
 [1] 19                                      [2] 36                                      [3] 52                                      [4] 64
56. What was the number CDs collected by V?  
 [1] 16                                      [2] 25                                      [3] 46                                      [4] 64
57. What was the difference in the number of CDs collected by X and Y?  
 [1] 5                                      [2] 7                                      [3] 9                                      [4] 11
58. How many of the individual collection(s) of CDs was/were prime numbers?  
 [1] 0                                      [2] 1                                      [3] 2                                      [4] 3
59. Starting from his office, Fernandez drives his car towards the North for 40km. He then takes a right turn and travels for 30km to reach 'VXL Petrol Pump'. From there, he again drives North-West for a distance of 50 km, before traveling North for another 40km. Finally he turns and travels towards South-West for 50 km and stops. What is his direction now with respect to the starting point?  
 [1] South-West                              [2] North-East                              [3] North-west                              [4] South -East

**Directions (Qs. 60 & 61):** Each question contains six statements followed by four sets of combinations of three. Choose the set in which the statements are logically related.

60. (i) Reena and Meena are sisters  
 (ii) Sisters are often known to quarrel  
 (iii) Reena and Meena do not quarrel  
 (iv) All those who quarrel are sisters  
 (v) Reena and Meena quarrel often  
 (vi) Reena and Meena cannot be sisters.  
 [1] (ii) – (iv) – (v)                      [2] (i) – (iv) – (vi)                      [3] (iii) – (iv) – (v)                      [4] (i) – (ii) – (v)

61. (i) All crows are birds  
 (ii) All birds are not crows  
 (iii) All birds are warm blooded  
 (iv) All crows lay eggs  
 (v) All Birds lay eggs  
 (vi) Crows are warm blooded  
**[1]** (i) – (iv) – (v)      **[2]** (ii) – (v) – (iv)      **[3]** (i) – (ii) – (v)      **[4]** (i) – (iii) – (vi)

**Directions (Qs. 62 to 64):** Read the following information and answer the questions. Any additional information provided, with a particular question pertains to that individual question only.

The production, marketing, human resource, finance, and management information system managers of a particular company meet for a round table meeting to discuss the strategy of the company. Out of the five, three are men and the other two are women. The following restrictions apply; to their seating arrangement.

- (i) The two women will not be seated next to each other.  
 (ii) The production manager, a man, will always be seated as far as possible from the marketing manager.  
 (iii) The finance manager will always be seated next to a woman

62. If the human resource manager is a man, which of the following is definitely NOT true?

- [1]** The marketing manager is sitting in between the two women  
**[2]** The marketing manager is sitting in between two men  
**[3]** The finance manager is a man  
**[4]** The marketing manager is a woman

63. If the finance manager always has a woman to his right, in how many different arrangements can the marketing manager be a woman?

- [1]** 2      **[2]** 3      **[3]** 4      **[4]** 5

64. If the management information system manager is sitting just to the right of the production manager, which of the following statement(s) is/are definitely TRUE?

- (i) The marketing manager and the finance manager sit next to each other five times  
 (ii) The human resource manager has to be a woman  
 (iii) The management information system manager has to be a man.  
**[1]** (i) only      **[2]** (i) and (ii)      **[3]** (i) and (iii)      **[4]** (ii) and (iii)

**Directions (Qs. 65 & 66):** Each of the problems in this section contains a question and two statements which are labeled as (1) and (2). Use the information provided in statement (1) and (2) and the corresponding question to decide whether the statements are sufficient to answer the question. For each problem, determine which of the following is the correct alternative

65. Can we find out the value of the eleventh number in a set of eleven numbers, if

- (1) the average of the first ten numbers in the set is given  
 (2) the average of all the eleven numbers is given

- [1]** (1) and (2) together are not sufficient  
**[2]** (1) and (2) taken together are sufficient, but neither (1) alone, nor (2) alone is sufficient  
**[3]** (1) alone is sufficient, but (2) alone is not sufficient  
**[4]** (2) alone is sufficient, but (1) alone is not sufficient.

66. Can we find the relative speed of two trains with respect to each other, if

- (1) the speed of the first train is 120% more than the speed of the second train  
 (2) the speed of the second train is 80 km/hr

- [1] (1) and (2) together are not sufficient
- [2] (1) and (2) taken together are sufficient, but neither (1) alone, nor (2) alone is sufficient
- [3] (1) alone is sufficient, but (2) alone is not sufficient
- [4] (2) alone is sufficient, but (1) alone is not sufficient

67. In a meeting of board of directors of a company ridden with financial crisis, one of the directors said "I firmly believe that the only way to tide over the current financial crisis, due to heavy erosion in profit, is to bring out a new series of product versions. Such actions on the part of the company will meet the requirements of various market segments, thus raising the sales volume and profit. I challenge anyone who disagrees with my opinion to prove why this suggestion should not help the company to overcome the crisis.

The MOST EVIDENT logical flaw in the director's statement is that

- [1] It fails to provide any statistical evidence in support of his contention.
- [2] It shifts the onus of proof of those who could object to his opinion
- [3] It does not talk about employee dissatisfaction that might have put the company in the current financial mess
- [4] It works on the assumption that the only reason for erosion in profits is lack of large number of product versions

**Directions (Qs. 68 & 69):** The statements in questions 75–76, when properly sequenced, form a coherent paragraph. Each sentence is labeled with a number. Select the most logical order of the sentences in each case.

68. (i) This is in large part due to the dominance of a-view within the leadership literature, popular management theory and the media that there is something special about leadership.  
(ii) Leadership as a phenomenon, we are often told, transcends the everyday, the mundane and the ordinary  
(iii) Yet few studies have ventured into the everyday doing of leadership-particularly within and educational setting:  
(iv) The need to conduct more details studies of leadership-in-practice has long been recognized in both leadership studies and educational research,  
[1] (iv) – (i) – (ii) – (iii) [2] (iv) – (iii) – (i) – (ii) [3] (ii) – (iii) – (iv) – (i) [4] (ii)–(iv) – (iii) – (i)
69. (i) Studies of successful marriages indicate that periods of fighting and turmoil require a lot of love and passion as compensation for subversive episodes:  
(ii) Closely related is solid evidence that marital satisfaction is positively related to reliance on constructive problem solving strategies, mainly negotiation and compromise  
(iii) A solid and substantial sense of connection with other people requires a healthy balance between positive and negative feelings;  
(iv) In effect, more positive than negative energy is required to sustain intimate relations over time  
[1] (iii)-(i)-(ii)-(iv) [2] (iii)-(ii)-(iv)-(i) [3] (iii)-(i)-(iv)-(iii) [4] (ii)-(iii)-(iv)-(i)
70. A study reveals that software firms that do not make investments in training their employees report high attrition rates and low employees productivity. Which one of the following options, if true, would MOST WEAKEN this statement?  
[1] Studies regarding employee turnover rates in manufacturing organizations have reported similar findings.  
[2] Employee friendly policies in organizations help to improve commitment levels or employees  
[3] A high correlation has been found between high salary levels and high employee productivity  
[4] Organizations regularly lose their highly trained and productive employees to their competitors



79. The angles of a convex hexagon in degrees are integers and in arithmetic progression. L M denote the largest of these 6 angles. Then the maximum value that M can take is:  
 [1]  $125^\circ$  [2]  $150^\circ$  [3]  $175^\circ$  [4]  $179^\circ$
80. A textile manufacturing firm employees 50 looms. It makes fabrics for a branded company. The aggregate sales value of the output of the 50 looms is Rs.5,00,000 and the monthly manufacturing expenses is Rs.1,50,000. Assume that each loom contributes equally to the sales and the manufacturing expenses are evenly spread over the number of looms. Monthly establishment charges are Rs.75,000. If one loom breaks down and remains idle for one month, the decrease in profit is  
 [1] Rs.13000 [2] Rs.10000 [3] Rs.7000 [4] Rs.5500
81. Two straight lines can divide a circular disk into a maximum of 4 parts. Likewise, into how many maximum parts can four straight lines divide a circular disk?  
 [1] 8 [2] 9 [3] 10 [4] 11
82. The currencies in countries X and Y are denoted by  $X_s$ , and  $Y_s$ , respectively. The exchange rate in 1990 was 1  $X_s$ , 0.6  $Y_s$ , The price level in 2006 in X and Y are 150 and 400 respectively with 1990 as a base of 100. The exchange rate in 2006, based solely on the purchasing power parity consideration is 1  $X_s$ :  
 [1] 0.225  $Y_s$  [2] 0.625  $Y_s$  [3] 1.6  $Y_s$  [4] 3.6  $Y_s$
83. In a family of husband, wife and a daughter, the sum of the husband's age, twice the wife's age, and thrice the daughters age is 85; while the sum of twice the husband's age, four times the wife's age, and six times the daughter's age is 170. It is also given that the sum of five times the husband's age, ten times the wife's age-and fifteen times the daughter's age equals 450. The number of possible solutions, in terms of the ages of the husband, wife and the daughter, to this problem is:  
 [1] 0 [2] 1 [3] 2 [4] infinitely many

84. The determinant  $\begin{vmatrix} 1+x_1 & x_1 & x_1 & x_1 \\ x_2 & 1+x_2 & x_2 & x_2 \\ x_3 & x_3 & 1+x_3 & x_3 \\ x_4 & x_4 & x_4 & 1+x_4 \end{vmatrix}$  equals  
 [1]  $1 + x_1 + x_2 + x_3 + x_4$  [2]  $x_1 + x_2 + x_3 + x_4$  [3]  $x_1 x_2 x_3 x_4$  [4]  $1 + x_1 x_2 x_3 x_4$

85. The age of Mr. Chetan in 2002 was  $\frac{1}{90}$  of his birth year. What is his age in 2006?  
 [1] 30 [2] 28 [3] 26 [4] 22
86.  $x^2 - 2x + y^2 - 4y + 5 = 0$  on the xy-plane represents  
 [1] a point [2] a circle [3] an ellipse [4] a hyperbola

**Directions (Qs. 87 & 88):** are based on the following:

The cost of fuel for running the engine of an army tank is proportional to the square of the speed and Rs,64 per hour for a speed of 16 kmph. Other costs amount to Rs.400 per hour. The tank has to make a journey of 400 km at a constant speed.

87. The most economical speed for this journey is:  
 [1] 20 kmph [2] 30 kmph [3] 35 kmph [4] 40 kmph
88. The total cost for the Journey at this most economical speed is :  
 [1] Rs.6000 [2] Rs.8000 [3] Rs.10000 [4] Rs.11000

89.  $4^{\log} + 6^{\log}$  is divided by 25, the remainder is:  
 [1] 20 [2] 10 [3] 5 [4] 0
90. If  $\frac{1}{x} + \frac{1}{z} + \frac{1}{x-y} + \frac{1}{z+y} = 0$ , which of the following statements is TRUE?  
 [1]  $x, y, z$  are in HP or  $x, \frac{y}{2}, z$  in AP [2]  $x, y, z$  are in AP or  $x, \frac{y}{2}, z$  in HP  
 [3]  $x, \frac{y}{2}, z$  are in HP or  $x, y, z$  are in GP [4]  $x, \frac{y}{2}, z$  are in GP or  $x, y, z$  are in AP
91. Area (In sq units) bounded by the line  $y = x$  and the parabola  $y = x(x - 2)$  is :  
 [1]  $\frac{19}{6}$  [2]  $\frac{9}{2}$  [3]  $\frac{35}{6}$  [4]  $\frac{43}{6}$
92. Ramesh has two examinations on Wednesday-Engineering Mathematics in the morning and Engineering Drawing in the afternoon. He has a fixed amount of time to read the textbooks of both these subjects on Tuesday. During this time he can read 80 pages of Engineering Mathematics and 100 pages of Engineering Drawing. Alternatively, he can also read 50 pages of Engineering Mathematics and 250 pages of Engineering Drawing. Assume that the amount of time it takes to read one page of the textbook of either subject is constant. Ramesh is confident about Engineering Drawing and wants to devote full time to reading Engineering Mathematics. The number of Engineering Mathematics text book pages he can read on Tuesday is:  
 [1] 500 [2] 300 [3] 100 [4] 60
93.  $\frac{1}{1} + \frac{1}{3} + \frac{1}{6} + \frac{1}{10} + \frac{1}{15} + \dots$  equals  
 [1] 2 [2] 3 [3] 5 [4]  $\infty$
94. A circular table is pushed to the corner of a room touching two perpendicular walls. If a point on the edge of the table facing the corner is 8 and 9 cm from the two walls then the radius of the table (in cm) is:  
 [1] 29 [2] 17  
 [3] 5 [4] undeterminable from above

**Directions (Qs. 95 & 96):** are based on the following:

A bucket is in the shape of an inverted truncated right-circular cone with a base radius of 20 cm, and height 35 cm. The base angles, of a vertical cross sections through the centre of the base, are  $130^\circ$  each. It contains water whose height is 10 cm. A solid iron ball of radius  $5\sqrt{74}$  cm is dropped into the bucket.

95. The amount of water in the bucket (in cc) is  
 [1]  $7000 \frac{\pi}{3}$  [2]  $8000 \frac{\pi}{3}$  [3]  $19000 \frac{\pi}{3}$  [4]  $27000 \frac{\pi}{3}$
96. After the ball is dropped into the bucket, the height of the water in the bucket becomes:  
 [1] 35 cm [2] 30 cm [3] 25 cm [4] 20 cm
97. The function  $f(x) = mx + \sin x$  will have an inverse if and only if  
 [1]  $-1 \leq m \leq 1$  [2]  $m < -1$  [3]  $m > 1$  [4]  $|m| > 1$

98. P and Q start running in opposite directions (towards each other) on a circular track starting at diametrically opposite points. They first meet after P has run for 75 meters and then they next meet after Q has run 100 meters after their first meeting. Assume that both of them are running a constant speed. The length of the track (in meters) is:  
 [1] 70                      [2] 175                      [3] 250                      [4] 350
99. A filter paper of the form of a right circular cone of base radius 20 cm and altitude 40 cm is placed with its axis vertical and the vertex downwards. Water flows out at the rate of 22.5 cc. The rate at which the level of the water falls when the depth of the water is 30 cm is :  
 [1]  $\frac{1}{10\pi}$                       [2]  $\frac{1}{100\pi}$                       [3]  $\frac{10}{\pi}$                       [4]  $\frac{100}{\pi}$
100. An aeroplane flying horizontally 1km above the ground is observed by a person on his right side at an elevation of  $60^\circ$ . If after 10 seconds the elevation is observed to be, from the same point and in the same direction,  $30^\circ$ , the uniform speed per hour (in km) of the aeroplane is (neglect the height of the person for computations)  
 [1]  $360\sqrt{3}$                       [2]  $\frac{720}{\sqrt{3}}$                       [3] 720                      [4]  $720\sqrt{3}$
101. An antenna stands in the middle of a square tower. A man on the ground, opposite the middle of the face of the tower and at a distance of 100 m from its foot, just sees the top of the antenna, on receding another 100m, the tangents of elevation of the top of the tower and the antenna are found to be  $\frac{1}{2}$  and  $\frac{5}{9}$  respectively. The ground being horizontal, the height of the antenna (in meters) is neglect the height of the persons for computations.  
 [1]  $\frac{1000}{9}$                       [2] 25                      [3] 50                      [4]  $\frac{550}{9}$
102. For non-zero real numbers a, b and c the set of possible values the quantity  $\frac{a}{|a|} + \frac{b}{|b|} + \frac{c}{|c|} + \frac{abc}{|abc|}$  can take is:  
 [1] {0}                      [2] {-4, 0, 4}                      [3] {-4, -2, 2, 4}                      [4] {4, -2, 0, 2, 4}
103. A certain sum of money is invested at an interest rate of 5% per annum and a second sum, twice as large as the first, is invested at 5.5% per annum. The total amount of interest earned from the two investments together is Rs. 1000 per year and the interest is withdrawn every year. The second sum invested is:  
 [1] Rs.6250                      [2] Rs.10500                      [3] Rs.12500                      [4] Rs.15000
104. What is the digit in the units place of 10251?  
 [1] 2                      [2] 4                      [3] 6                      [4] 8
105. IN  $\Delta PQR$ ,  $m\angle PQR = 45^\circ$ ,  $m\angle PQR = 60^\circ$  and  $\overline{PR} = 15\sqrt{\frac{3}{2}}$  cm, QS is median and T is the mid-point of QS. PT extended meets QR at U. Then  $\overline{QU}$  equals  
 [1] 5 cm                      [2] 6 cm                      [3] 7.5 cm                      [4] 10 cm
106. The number of distinct real number x for which  $\frac{8}{4x - x^2}$  is a positive integer is:  
 [1] 3                      [2] 4                      [3] 5                      [4] 8

107. The minimum attainable value of the function  $f(x, y) = \sqrt{x^2 + 1} + \sqrt{(x - y)^2 + 4} + \sqrt{(12 - y)^2 + 4}$  is:  
 [1] 12                                      [2] 13                                      [3]  $3 + \sqrt{148}$                                       [4]  $4 + \sqrt{145}$
108. The number of ordered triplets  $(x, y, z)$  such that  $x, y, z$  are primes and  $xy + 1 = z$  is :  
 [1] 0                                      [2] 1                                      [3] 2                                      [4] Infinitely many
109. In a right angled triangle  $\triangle PQR$  with  $\overline{PQ} \neq \overline{QR}$ , M is point on its hypotenuse PR. L and N are feet of the perpendiculars from M on PQ and QR respectively.  $\overline{LN}$  will be minimized when:  
 [1]  $\triangle PQM$  and  $\triangle PQR$  are similar                                      [2] M is the mid-point of PR  
 [3]  $m\angle PQM = m\angle MQR = 45^\circ$                                       [4]  $\overline{PM} : \overline{MR} = \overline{PQ} : \overline{QR}$
110. Laila drives to the station each day to pick up her husband Manju, who usually arrives on a train at 6 O'clock. Last Monday, Manju finished work earlier, caught an earlier train and arrived at the station at 5 O'clock. He started to walk home and eventually met Laila who drove him the rest of the way, getting home 20 minutes earlier than usual. On Tuesday, he again finished early and found himself at the station at 5.30. Again he began to walk home again he met Laila on the way, and she drove him home the rest of the way. Assume constant speed throughout with no wasted time, for waiting, backing of the car etc. How much earlier than the usual time were they home on Tuesday?  
 [1] 6 minutes                                      [2] 8 minutes                                      [3] 10 minutes                                      [4] 12 minutes

**Directions (Qs. 111 & 112):** are based on the following:

Two men are walking towards each other alongside a railway track. A freight train overtakes one of the them in 20 seconds and exactly 10 minutes later meets the other man coming from the opposite direction. The train passes this man in 18 seconds. Assume the velocities are constant throughout.

111. How long after the train has passed the second man will the two men meet?  
 [1] 89.7 minutes                                      [2] 90 minutes  
 [3] 90.3 minutes                                      [4] Cannot be determined from above
112. The ratio of the velocities of the first man to the second man is :  
 [1] -10:9                                      [2] 10:9  
 [3] 9:10                                      [4] undeterminable from above.
113. In  $\triangle PQR$ ,  $\overline{PQ} = \overline{PR}$  and  $m\angle QPR = 20^\circ$  S is a point on PR such that  $m\angle SQR = 60^\circ$  and T is a point on PQ such that,  $m\angle TRQ = 50^\circ$ . Then  $m\angle STR$  equals:  
 [1]  $60^\circ$                                       [2]  $70^\circ$                                       [3]  $80^\circ$                                       [4]  $90^\circ$

**SECTION 4**

**DATA INTERPRETATION**

**Direction (Qs. 114 to 121):** Questions 121– 128 are based on the following tables and line graph about GNP and trade for select countries

**Trends in National Product and Trade for Large Countries  
GNP per Capita in US\$**

Countries	2000	2001	2002	2003	2004
China	930	1,000	1,100	1,270	1,500
Germany	25,510	24,000	23,030	25,700	25,500
India	450	460	470	540	620
Japan	35,140	35,670	33,640	33,860	37,050
U.S.A	34,400	34,800	35,230	37,780	41,440

**Merchandise Trade as % of GNP**

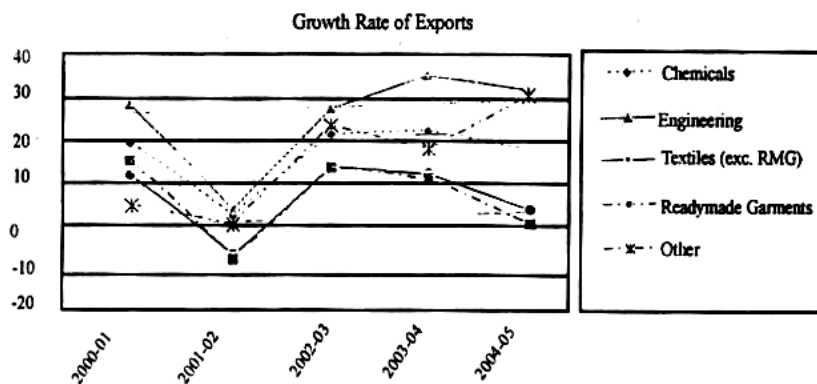
	2000	2001	2002	2003	2004
China	40	38	43	52	60
Germany	55	56	55	56	59
India	21	20	21	21	25
Japan	18	18	19	20	20
U.S.A	21	19	18	19	20



114. In which year did all countries show growth in terms of increase in GNP per capita compared to the previous year?  
 [1] 2001                                      [2] 2002                                      [3] 2003                                      [4] 2004
115. Which of the following two countries have show n consistent growth in GNP per capita during 2000 to 2004?  
 [1] China and Germany    [2] China and Japan    [3] Germany and Japan    [4] India and U.S.A
116. What was the approximate percentage increase in GNP per capital from 2000 to 2004 for the country that achieved the maximum percentage jump in GNP per capita in any year?  
 [1] 40                                      [2] 50                                      [3] 65                                      [4] 80

117. What was the approximate ratio in 2004 of total GNP for India to the country with the lowest average merchandize trade as percentage of GNP, if ratio of population between the two countries in 2004 was 10:1?  
 [1] 1:2                                      [2] 1:4                                      [3] 1:6                                      [4] 1:8
118. If India's GNP was about Rs.28,00,000 crore in 2004, what was approximate value of India's merchandize trade in US\$ billion in the same year (assume US 1\$ = Rs.50)?  
 [1] 130                                      [2] 140                                      [3] 150                                      [4] 160
119. What was the ratio of exports to imports to merchandize trade for India in 2004, if exports were about US\$ 60 billion, given that India's GNP was about Rs.28,00,000 crore? (assume US 1\$ = Rs.50)  
 [1] 1 : 2                                      [2] 3 : 4                                      [3] 5 : 6                                      [4] 1 : 1
120. What was the approximate difference in dollar value of high-tech exports between China and India in 2004, if their exports of merchandize products were US\$ 500 billion and US\$ 60 billion respectively?  
 [1] 130                                      [2] 137                                      [3] 140                                      [4] 145
121. Which of the following is TRUE?  
 [1] U.S.A has consistently shown decline in the merchandise trade as percentage of GNP  
 [2] Japan has consistently shown growth in GNP per capita  
 [3] Germany has consistently shown growth in high-tech exports as percentage of merchandise exports  
 [4] Chian has consistently shown growth in high-tech exports as % of merchandise trade and GNP per capita.

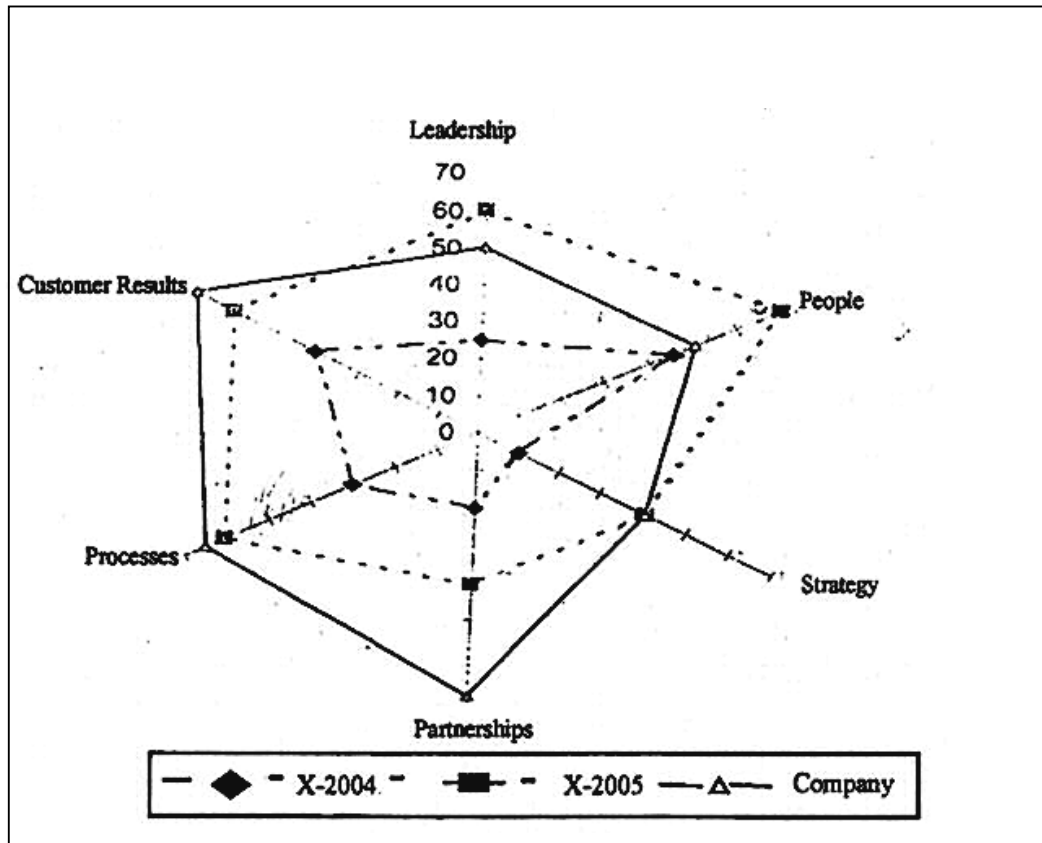
**Directions (Qs. 122 to 127):** are based on the following line graph displaying growth rates of exports of key manufacturing commodities from India:



122. Overall export growth for all commodities was the lowest during  
 [1] 2001-02                                      [2] 2002-03                                      [3] 2003-04                                      [4] 2004-05
123. Which commodity reported rising growth rate of exports for two consecutive years?  
 [1] Engineering                                      [2] Readymade Garments  
 [3] Textiles                                      [4] Other
124. Which commodity has shown alternating (rising and falling) pattern of growth rate of exports from 2000-2001 to 2004-2005?  
 [1] Chemicals                                      [2] Engineering                                      [3] Textiles                                      [4] Other

125. Which commodity has shown the highest fluctuation in the growth rate of exports?  
 [1] Engineering                      [2] Chemicals                      [3] Textiles                      [4] Other
126. Which commodities reported decline in the growth rate of exports for two consecutive years?  
 [1] Readymade Garments and Chemicals                      [2] Engineering and Textiles  
 [3] Textiles and Chemicals                      [4] Textiles and Readymade Garments
127. Which commodity has shown maximum improvement in the growth rate from 2000-2001 to 2004-2005?  
 [1] Readymade Garments                      [2] Engineering  
 [3] Textiles                      [4] Other

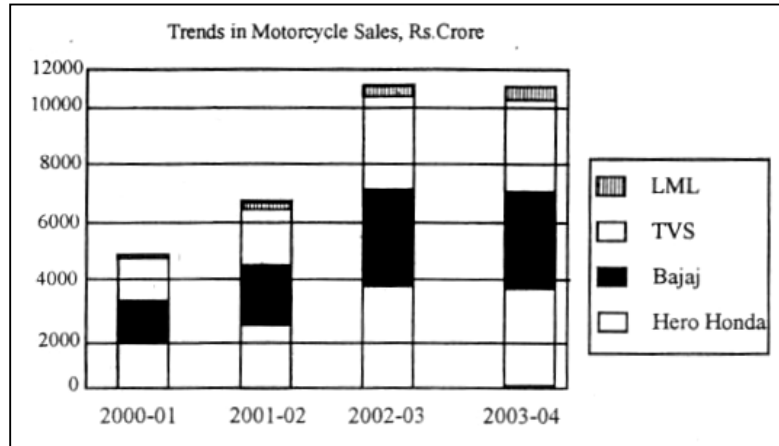
**Directions (Qs. 128 to 131):** are based on the following radar chart displaying benchmarking scores on various parameters related to business excellence being pursued by a plant X of company Y for two years (2004 and 2005). For this purpose assume that the Company Y's chart is the benchmark X is striving to achieve.



128. On which of the two parameters there exists comparatively less gap between X-2004 and Company?  
 [1] People and Leadership                      [2] People and strategy  
 [3] Strategy and Leadership                      [4] People and Customer results
129. Beyond 2005, to achieve the Company Y benchmark X should focus on  
 [1] Customer Results                      [2] People                      [3] Leadership                      [4] Partnerships
130. The maximum improvement achieved by X in 2005 compared to 2004 was in  
 [1] Customer Results                      [2] Strategy                      [3] Leadership                      [4] Partnerships

131. The only partner in which X could reach the closest to the Company Y's benchmark in 2004 was:  
 [1] People [2] Strategy [3] Customer Results [4] Processes

**Directions (Qs. 132 to 137):** are based on the following bar chart of trends in sales of motorcycles in India and the table of **Trends in sales for Bajaj**



**Trends in Sales (Rs. In crores) for Bajaj**

Product	2000-01	2001-02	2002-03	2003-04
<b>Motorcycles</b>	1277	1893	2608	3185
<b>Scooters</b>	998	1037	750	527
<b>Three wheelers</b>	880	975	1154	1443

132. Which company had experienced minimum percentage growth rate in motorcycle sales from 2001-02 to 2003-04?  
 [1] Bajaj [2] LML [3] TVS [4] Hero Honda
133. In which year, the percentage growth compared to the previous year in total sales for motorcycles was the maximum;  
 [1] 2000-01 [2] 2001-02 [3] 2002-03 [4] 2003-04
134. What was the approximate ratio of growth of sales of motorcycles for Hero Honda to that Bajaj from the year 2001-02 to 2002-03?  
 [1] 1:2 [2] 6:7 [3] 5 : 4 [4] 7:6
135. What was the approximate share of three wheelers in the three products manufactured by Bajaj in the year during which the company experienced maximum rise in the sales of motor cycles compared to the previous year?  
 [1] 40% [2] 25% [3] 26% [4] 20%
136. For Bajaj, in which year, the motorcycle sales overtook the combined sales of scooters and three wheelers?  
 [1] 2001-02 [2] 2002-03 [3] 2003-04 [4] None

