## CAT Paper -1995

# **COMMON ADMISSION TEST**

## **SECTION-I**

Directions Question 1 to 10: Pick the odd man out.

- 1. Pick the odd man out.
  - a. peat
  - b. embers
  - c. coke
  - d. coal
- 2. Pick the odd man out.
  - a. custodian
  - b. consignee
  - c. consul
  - d. commissary
- 3. Pick the odd man out.
  - a. expound
  - b. interpret
  - c. elucidate
  - d. infer
- 4. Pick the odd man out.
  - a. cease
  - b. launch
  - c. initiate
  - d. commence
- 5. Pick the odd man out.
  - a. adroit
  - b. adept
  - c. dextrous
  - d. awkward
- 6. Pick the odd man out.
  - a. brink
  - b. hub
  - c. verge
  - d. brim
- 7. Pick the odd man out.
  - a. detest
  - b. abhor
  - c. ardour
  - d. loathe
- 8. Pick the odd man out.
  - a. fanatic
  - b. zealot
  - c. maniac
  - d. rational
- 9. Pick the odd man out.
  - a. sporadic
  - b. frequent
  - c. intermittent
  - d. scarce
- 10. Pick the odd man out.
  - a. taciturn

- b. reserved
- c. clamorous
- d. silent

**Directions Q. 11 to 15:** Each sentence below is followed by four others. Select from the four the one which most complements the idea contained in the given statement.

- 11. One the one hand, capitalism requires the engine of self-interest of greed, if you will-while on the other hand, society requires attention to the general interest-the
  - a. enhancement of greed
  - b. taming of greed
  - c. destruction of greed
  - d. transformation of greed and animosity
- 12. Basically, we like the free market only as long as the trend is up. \_\_\_\_\_
  - a. We refuse to see the long-term benefits of the downward trend.
  - b. What we need to cultivate is an attitude of equanimity.
  - c. We forget for the moment that the things will pick up.
  - d. As soon as the inevitable downturn occurs, we complain bitterly and expect the government top fix the things.
- 13. Since they first became part of living room furniture, television remote controls have become the advertiser's scourge. Some analysts reckon that
  - a. the instruments will make TV advertising completely ineffective.
  - b. as many as a third of all ads are zapped by viewers.
  - c. the instrument greatly interferes with the watching of wholesome TV programmes.
  - d. soon the advertising industry will have no option but to approach the government to ban the instrument.
- 14. The illusion that times that were are better than those that are \_\_\_\_\_
  - a. shatters our belief in future.
  - b. has probably pervaded all ages.
  - c. makes our lives miserable.
  - d. often gives us hope and peace.
- 15. Since children are less convenient to manipulate than guinea pigs \_\_\_\_\_
  - a. educational research is often short of hard data.

- b. doctors have to depend more on the latter than the former.
- c. child psychologists are often compelled to use more data obtained from the latter sources.
- d. the research findings from the latter source are generally considered to be more reliable than that obtained from the former.

Directions Q. 16 to 20: Select the lettered pair that best expresses a relationship similar to the one expressed hi he original pair.

## 16. MAXIM : APHORISM

- a. maximum: optimum
- b. prophecy : doom
- c. theorem : proof
- d. precept : axiom
- 17. EASE: ALLEVIATE
  - a. hint: allocate
  - b. revolt: repudiate
  - c. collapse: rise
  - d. question : interrogate
- 18. SECRET: CLANDESTINE
  - a. overt : furtive
  - b. covert: stealthy
  - c. open : closed
  - d. news : rumour
- 19. LIMPID : MURKY
  - a. dazed : clouded
  - b. obscure : vague
  - c. bright: gloomy
  - d. nebulous : dim
- 20. DRAMA : AUDIENCE
  - a. brawl : vagabonds
  - b. game : spectators
  - c. art : critics
  - d. movie: actors

**Directions Q. 21 to 25**: Select the lettered pair that best expresses a relationship that is least similar 10 the one expressed in the original pair.

- 21. ABDICATE: POWER
  - a. reinstate : power
  - b. forgo: privileges
  - c. renounce : world
  - d. sacrifice : rights
- 22. SAIL: SHIP
  - a. propeller: aeroplane
  - b. radar: satellite
  - c. hydrogen : balloon
  - d. accelerator: car
- 23. CANINE:DOG
  - a. feline : cat

- b. aquiline : parrot
- c. serpentine : cobra
  - d. vdlpine: fox

## 24. COSMIC : UNIVERSE

- a. terrestrial : earth
  - b. lunar: moon
- c. connubial : youth
- d. annular: ring
- 25. GERMANE: PERTINENT
  - a. apt : appropriate
  - b. quick: urgent
  - c. dull : sluggish
  - d. excited : serene

**Directions:** Arrange the sentences in a proper sequence so as to make a coherent paragraph.

- 26. Arrange the sentences in a proper sequence so as to make a coherent paragraph.
  - A. Realists believe that there is an objective reality "out there" independent of ourselves.
  - B. This reality exists solely by virtue of how the world is and is discoverable by application of the methods of science.
  - C. They believe in the possibility of determining whether or not a theory is indeed really true or false.
  - D. I think it is fair to say that this is the position to which most working scientists subscribe.
  - a. ACBD
  - b. CDBA
  - c. DCBA
  - d. BCAD
- 27. Arrange the sentences in a proper sequence so as to make a coherent paragraph.
  - A. There is a strong manufacturing base for a variety of products.
  - B. India has come a long way on the technology front.
  - C. But the technology adopted has been largely of foreign origin.
  - D. There are, however, areas such as atomic energy, space, agriculture and defense where significant strides have been made in evolving relevant technologies within the country.
  - a. ADCB
  - b. DBAC
  - c. BACD
  - d. CBAD
- 28. Arrange the sentences in a proper sequence so as to make a coherent paragraph.
  - A. In emission trading, the government fixes the total amount of pollution that is

acceptable to maintain a desired level of air quality.

- B. Economists argue that this approach makes air pollution control more costeffective than the current practice of fixing air-pollution standards and expecting all companies to pollute below these standards.
- C. The USA uses emissions trading to control air pollution.
- D. It then distributes emission permits to all companies in the region, which add up to the overall acceptable level of emission.
- a. BADC
- b. ACDB
- c. CBAD
- d. DBAC
- Arrange the sentences in a proper sequence so as to make a coherent paragraph.
  - A. The individual companies vary in size, from the corner grocery to the industrial giant.
  - B. Policies and management methods within firms range from formal, well-planned organisations and controls to slipshod dayto-day operations.
  - C. Various industries offer a wide array of products or services through millions of firms largely independent of each other.
  - D. Variety in the form of ownership contributes to diversity in capital investment, volume of business, and financial structure.
  - a. DBCA
  - b. CADB
  - c. BADC
  - d. ADCB
- Arrange the sentences in a proper sequence so as to make a coherent paragraph.
  - A. All levels of demand, whether individual, aggregate, local, national, or international are subject to change.
  - B. At the same time, science and technology add new dimensions to products, their uses, and the methods used to market them.
  - C. Aggregate demand fluctuates with changes in the level of business activity, GNP, and national income.
  - D. The demands of individuals tend to vary with changing needs and rising income.
  - a. CBDA
  - b. DCAB
  - c. BCAD
  - d. ADCB

**Directions for Q. 31 to 40:** Arrange sentences A B, C, and D between sentences 1 and 6, so as to form a logical sequence of six sentences.

- 31. Arrange sentences A B, C, and D between sentences 1 and 6, so as to form a logical sequence of six sentences.
  - 1. Chichen Itza, last outpost of the Mayan civilization, was built in the heat of the arid Yucatan peninsula, unlike most of the earlier Mayan cities, which were built in rain forests.
  - A. If she survived in the dark water until midday, priests hauled her out to ask what the gods had hold her
  - B. In times of crisis, a maiden was hurled at dawn into the 60-ft. deep hole in the limestone rock.
  - C. The city folks drank from one well and used the other as a well of sacrifice.
  - D. It got its water from two wells known as cenotes, fed by underwater streams.
  - 6. The Mayans also threw cherished possessions into the hole-carved jade, gold, nodules of resin uses as incense, copper discs and human skeletons have all been dredged out of it.
  - a. DCBA
  - b. BCAD
  - c. CADB
  - d. ABCD
- 32. Arrange sentences A B, C, and D between sentences 1 and 6, so as to form a logical sequence of six sentences.
  - 1. All human beings are aware of the existence of a power greater than that of the mortals the name given to such a power by individuals is an outcome of birth, education and choice.
  - A. This power provides an anchor in times of adversity, difficulty and trouble.
  - B. Industrial organisations also contribute to the veneration of this power by participating in activities such as religious ceremonies and festivities organized by the employees.
  - C. Their other philanthropic contributions include the construction and maintenance of religious places such as temples or gurudwaras.
  - D. Logically, therefore, such a power should be remembered in good times also.
  - 6. The top management/managers should participate in all such events, irrespective of their personal choice.
  - a. ADBC
  - b. BCAD

29.

30.

- d. DACB
- 33. Arrange sentences A B, C, and D between sentences 1 and 6, so as to form a logical sequence of six sentences.
  - 1. Total forgiveness for a mistake committed generates a sense of complacency towards target achievement among the employees.
  - A. In such a situation, the work ethos gets distorted and individuals get a feeling that they can get away with any lapse.
  - B. The feeling that they develop is 'whether I produce results or not, the management will not punish me or does not have the guts to punish me.'
  - C. Also, excess laxity damages management credibility, because for a long time, the management has maintained that dysfunctional behaviour will result in punishment, and when something goes wrong, it fails to take specific punitive action.
  - D. The severity of the punishment may be reduced by modifying it, but some action must be taken against the guilty so as to serve as a reminder for all others in the organisation.
  - 6. Moreover, it helps establish the management's image of being firmed, fair and yet human.
  - a. DCBA
  - b. BADC
  - c. DBCA
  - d. CABD
- 34. Arrange sentences A B, C, and D between sentences 1 and 6, so as to form a logical sequence of six sentences.
  - 1. Currency movements can have a dramatic impact on equity returns for foreign investors.
  - A. This is not surprising as many developing economies try to peg their exchange rates to the US dollar or to a basket of currencies.
  - B. Many developing economies manage to keep exchange rate volatility lower than that in the industrial economics.
  - C. India has also gone in for the full float on the current account and abolished the managed exchange rate.
  - D. Dramatic exceptions are Argentina, Brazil, and Nigeria.
  - 6. Another emerging-market-specific risk is liquidity risk.
  - a. ADBC
  - b. CDAB
  - c. BDAC

- d. CABD
- 35. Arrange sentences A B, C, and D between sentences 1 and 6, so as to form a logical sequence of six sentences.
  - 1. Managers must lead by example; they should not be averse to giving a hand in manual work, if required.
  - A. They should also update their competence to guide their subordinates; this would be possible only if they keep in regular touch with new processes, machines, instruments, gauges, systems and gadgets.
  - B. Work must be allocated to different groups and team members in clear, specific terms.
  - C. Too much of wall-building is detrimental to the exercise of the 'personal charisma' of the leader whose presence should not be felt only through notices, circulars or memos, but by being seen physically.
  - D. Simple, clean living among one's people should be insisted upon.
  - 6. This would mean the maintaining of an updated organisation chart; laying down job descriptions; identifying key result areas; setting personal targets; and above all, monitoring of performance, to meet organisational goals.
  - a. BDAC
  - b. BCDA
  - c. ADCB
  - d. ACDB
- 36. Arrange sentences A B, C, and D between sentences 1 and 6, so as to form a logical sequence of six sentences.
  - 1. The top management should perceive the true worth of people and only then make friends.
  - A. Such 'true friends' are very few and very rare.
  - B. Factors such as affluence, riches, outward sophistication and conceptual abilities are not prerequisites for genuine friendship.
  - C. Such people must be respected and kept close to the heart.
  - D. Business realities call for developing a large circle of acquaintances and contracts; however, all of them will be motivated by their own self-interest and it would be wrong to treat them as genuine friends.
  - 6. There is always a need for real friends to whom one can turn for balanced, unselfish advice, more so when one is caught in a dilemma.
  - a. ABCD
  - b. ADBC
  - c. ABDC
  - d. ACBD

c. CADB

- 1. Conflicting demands for resources are always voiced by different functions/departments in an organisation.
- A. Every manager examines the task entrusted to him and evaluates the resources required.
- B. Availability of resources in full measure makes task achievement easy, because it reduces the effort needed to somehow make-do.
- C. A safety cushion is built into demand for resources, to offset the adverse impact of any cut imposed by the seniors.
- D. This aspect needs to be understood as the reality.
- 6. Dynamic, energetic, growth-oriented and wise managements are always confronted with the inadequacy of resources with respect to one of the four M's (men, machines, money and materials) and the two T's (time and technology).
- a. DABC
- b. ACBD
- c. ABCD
- d. BCDA
- 38. Arrange sentences A B, C, and D between sentences 1 and 6, so as to form a logical sequence of six sentences.
  - 1. The Ethiopians, who believe that they are God's chosen people have a special legend to justify their confidence.
  - A. According to the legend, God molded the first man from clay.
  - B. He took the second burnt and black, so he threw them away to the South of Africa.
  - C. He took the second batch out too soon and they were pasty and white, so he threw them away to the North, where they became Arabs and Europeans.
  - D. He put the first batch in the oven to bake but left them too long.
  - 6. The third batch came out just right and he put them in Ethiopia.
  - a. ADBC
  - b. DCBA
  - c. BACD
  - d. CBDA
- 39. Arrange sentences A B, C, and D between sentences 1 and 6, so as to form a logical sequence of six sentences.
  - 1. According to Greek myth, Pandora was the first woman. A. Only hope was left.
  - B. She was sent to the rebellious Zeus as a punishment for mankind.

- C. She was given a box to take with her, with instructions not to open it.
- D. Because she was curious, she disobeyed, opened the box and all the evils of the world flew out.
- 6. Pandora's box has since become a symbol for any action whose consequences are dangerously unpredictable.
- a. DCBA
- b. ABCD
- c. BCDA
- d. CADB
- 40. Arrange sentences A B, C, and D between sentences 1 and 6, so as to form a logical sequence of six sentences.
  - 1. Despite the passage of time, a large number of conflicts continue to remain alive, because the wronged parties, in reality or in imagination, wish to take revenge upon each other, thus creating a vicious circle.
  - A. At times, managers are called upon to take ruthless decisions in the long-term interests of the organisation.
  - B. People hurt others, at times knowingly, to teach them a lesson and, at other times, because they lack correct understanding of the other person have stand.
  - C. The delegation of any power, to any person, is never absolute.
  - D. Every ruthless decision will be easier to accept if the situation at the moment of committing the act is objectively analyzed, shared openly and discussed rationally.
  - 6. if power is misused, its effects can last only for a while, since employees are bound to confront it someday, more so, the talented ones.
  - a. BCAD
  - b. ADBC
  - c. DABC
  - d. BADC

**Directions for Q. 41 to 45:** Each of the following questions contains six statements followed by four sets of combinations of three. You have to choose that set in which the statements are logically related.

- 41.
- A. All men are good.
- B. Some men are not good.
- C. A few men do not believe in God.
- D. No good man believes in God.
- E. No man who does not believe in God is good.
- F. Some men do not believe in God.
- a. ABD

- b. ACB
- c. ECB
- d. BED

42.

- A. Rajender is an industrialist.
- B. Ramkumar is Rajender's brother.
- C. Some men are cruel
- D. No industrialist is honest.
- E. Rajender is not honest
- F. Rajender is not cruel.
- a. ACF
- b. ABE
- c. DCE
- d. ADE
- 43.
- A. All dogs are honest.
- B. Dogs are characterized by honesty
- C. Xerox is a dog.
- D. Anish's pet is a dog.
- E. All honest animals are dogs.
- F. Xerox is honest.
- a. BDF
- b. ACF
- c. ADE
- d. CEF
- 44.
- A. Some Asians are Indians.
- B. Some Asians are hardworking.
- C. All Indians are Asians.
- D. Some Indians are Asians.
- E. Some Indians are hardworking.
- F. No Indian is hardworking.
- a. BDE
- b. CEB
- c. CDF
- d. BDF

45.

- A. Some books are funny.
- B. Some books are not funny.
- C. All funny books are best-sellers.
- D. Some bestsellers are not funny.
- E. Some books are not best-sellers.
- F. Some books are best-sellers.
- a. BDE
- b. CDF
- c. ACF
- d. BDF

**Directions Q 46-50:** The questions are based on a short statement preceding them.

46. But because the idea of private property has been permitted to override with its selfishness the common good of humanity, it does not follow that there are no limits within which that idea can function for the general convenience and advantage.

Which of the following is most likely to weaken the argument?

- a. All the people of the society should progress at an equitable rate and there should be no disparities and private property does bring about a tremendous disparity.
- b. One should not strive for the common good of humanity at all; instead one should be concerned with maximizing one's own wealth.
- c. One should learn from the experiences of former communists nations and should not repeat their mistakes at all.
- d. Even prosperous capitalist countries like the USA have their share of social problems.
- 47. The writer can only be fertile if he renews himself and he can only renew himself if his soul is constantly enriched by fresh experience.

Which of the following is most likely to support the above thought?

- a. Only out of fresh experience can the writer get germs for new writing.
- b. The writer can meet new people.
- c. The writer must see new places.
- d. None of these
- 48. Unless you devote your whole life to it, you will never learn to speak the language of another country to perfection; you will never know its people and its literature with complete intimacy.

Which of the following is likely to undermine the above argument?

- a. I can speak ten foreign languages already.
- b. I do not travel to foreign countries.
- c. I am happy with the languages I know and do not need to learn any other language.
- d. I should spend time to understand my own people and literature first, only then can I appreciate other languages and cultures.
- 49. I have been studying it, consciously and subconsciously, for forty years and I still find men unaccountable; people I know intimately can surprise me by some action of which I never thought them capable of, or by the discovery of some trait exhibit a side of themselves that I never even suspected.

The idea in this sentence can be best summarized as

a. Men are inconsistent and therefore one should not be confident even about one's closest friends.

- b. Men are unpredictable; one can never tell what do next hence one should be very careful in one's dealings.
- c. No matter how closely you know somebody there still exists an unknown facet of his personality.
- d. None of these
- 50. Now the audience is a very curious animal. It is shrewd rather than intelligent. Its mental capacity is less than that of its most intellectual members. If these were graded from A to Z, decreasing with succeeding letters to the zero of the hysterical shop girl, I should say its mental capacity would come around about the letter 0.

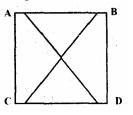
According to the above statements,

- a. Some members in the audience are more intelligent than any of its other members.
- b. The net intelligence of the audience is a little less than average.
- c. a only.
- d. a and b both.

#### SECTION-II

- 51. A person who has a certain amount with him goes to the market. He can buy 50 oranges or 40 mangoes. He retains 10% of the amount for taxi fare and buys 20 mangoes, and of the balance he purchases oranges. The number of oranges he can purchase is:
  - a. 36
  - b. 40
  - c. 15
  - d. 20
- 52. Two-fifths of the voters promise to vote for P and the rest promise to vote for Q. Of these, on the last day, 15% of the voters went back on their promise to vote for P and 25% of voters went back of their promise to vote for Q, and P lost by 2 votes. Then the total number of voters is:
  - a. 100
  - b. 110
  - c. 90
  - d. 95
- 53. One liter of water is poured into each of two containers of equal height. The first container A has a circular cross section of radius 2 cm and the other B has a square cross section with side of 4 cm. In which container will the water rise to a greater height?
  - a. Container A
  - b. Container B

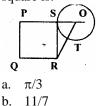
- c. Equal in both
- d. Depends on the rate at which water is poured
- 54. ABCD is a square of area 4, which is divided into four non-overlapping triangles as shown in the figure. The sum of the perimeters of the triangles is:



- a.  $8(1 + \sqrt{2})$
- b.  $8(2 + \sqrt{2})$
- c.  $4(2 + \sqrt{2})$
- d.  $4(1 + \sqrt{2})$
- 55. What is the value of m which satisfies  $3m^2 21m + 30 < 0$ ?
  - a. m < 2, or m > 5
  - b. m > 2
  - c. 2 < m < 5
  - d. m < 5

56. The value of 
$$\frac{55^3 + 45^3}{55^2 - 55 \times 45 + 45^2}$$
 is:

- a. 100
- b. 105
- c. 125
- d. 75
- 57. PQRS is a square. SR is a tangent (at point S) to the circle with centre 0 and TR = OS. The ratio of the area of the circle to the area of the square is:



- 0. 11/
- c. 3/π
- d. 7/11

58.  $5^4 - 1$  is divisible by

- a. 13
- b. 31
- c. 5
- d. none of these
- 59. The sides of a triangle are 5, 12 and 13 units respectively. A rectangle is constructed which is equal in area to the triangle and has a width of 10 units. Then the perimeter of the rectangle
  - is a.
    - . 30
  - b. 26
  - c. 13

- d. None of these
- 60. Which one of the following cannot be the ratio of angles in a right-angled triangle?
  - a. 1:2:3
  - b. 1:1:2
  - c. 1:3:6
  - d. None of these
- 61. Three bells chime at an interval of 18, 24 and 32 minutes respectively. At a certain time they begin to chime together. What length of time will elapse before they chime together again?
  - a. 2 hours 24 minutes
  - b. 4 hours 48 minutes
  - c. 1 hour 36 minutes
  - d. 5 hours
- 62. A, B, C and Dare four towns, any three of which are non-collinear. The number of ways to construct three roads each joining a pair of towns so that the roads do not form a triangle is:
  - a. 7
  - b. 8
  - c. 9
  - d. more than 9
- 63. For the product n(n + 1)(2n + 1), n Î N, which one of the following is necessarily false?
  - a. It is always even
  - b. Divisible by3.
  - c. Always divisible by the sum of the square of first n natural numbers
  - d. Never divisible by 237.

Directions Q. 64 to 67, refer to the following data:

$$\begin{split} & \text{le}(x, y) = | \text{ least of}(x, y) \\ & \text{mo}(x) = |x| \\ & \text{me}(x) \ (x, y) = \text{maximum of}(x, y) \end{split}$$

- 64. Find the value of me(a + mo(le(a, b)); mo(a + me(mo(a), mo(b)), at a = -2 and b = -3.
  - a. 1
  - b. 0
  - c. 5
  - d. 3
- 65. Which of the following must be correct?
  - a.  $mo(le(a, b)^3 (me(mo(a), mo(b)))$
  - b. mo(le(a, b)) > (me(mo(a), mo(b))
  - c. mo(le(a, b)) < (le(mo(a), mo(b)))
  - d. mo(le(a, b)) le(mo(a), mo(b))

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66. For what values of a is me(a^2 - 3a, a - 3) < 0?
a. a < 3 and a < 1
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- b. 1 < a < 3
- c. a < 3 or a < 1
- d. a < 3 or a < 0
- 67. For what values of a is  $le(a^2 3a, a 3) < 0$ ? a. 1 < a < 3

- b. a < 0 and a < 3
- c. a < 0 and a < 3
- d. a < 0 or a < 3
- 68. Ram purchased a flat at Rs. 1 lakh and Prem purchased a plot of land worth Rs. 1.1 lakh. The respective annual rates at which the prices of the flat and the plot increased were 10% and 5%. After two years they exchanged their belongings and one paid the other the difference. Then:
  - a. Ram paid Rs. 275 to Prem
  - b. Ram paid Rs. 475 to Prem
  - c. Ram paid Rs. 2750 to Prem
  - d. Prem paid Rs. 475 to Ram

**Directions Q. 69to 72:** Four sisters Suvarna, Tara, Uma, and Vibha are playing a game such that the loser doubles the money of each of the other players. They played four games and each sister lost one game in the alphabetical order. At the end of fourth game each sister had Rs. 32.

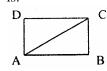
- 69. Who started with the lowest amount?
  - a. Suvarna
  - b. Tara.
  - c. Uma
  - d. Vidha
- 70. Who started with the highest amount?
  - a. Suvarna
  - b. Tara
  - c. Uma
  - d. Vibha
- 71. What was the amount with Uma at the end of the second round?
  - a. 36
  - b. 72
  - c. 16
  - d. None of these
- 72. How many rupees did Suvama start with?
  - a. 60
  - b. 34
  - c. 66
  - d. 28

Directions Q. 73 to 78: Choose the correct option:

- 73. The remainder obtained when a prime number greater than 6 is divided by 6 is:
  - a. 1 or 3
  - b. 1 or 5
  - c. 3 or 5
  - d. 4 or 5
- 74. In a race of 200 meters, A beats S by 20 metres and N by 40 metres. If S and N are running a race of 100 metres with exactly the

same speed as before, then by how many metres will S beat N?

- a. 11.11 metres
- b. 10 metres
- c. 12 metres
- d. 25 metres
- 75. In the adjoining figure, AC + AR = 25 AD and AC AD = 8. The area of the rectangle ABCD is:



- a. 36
- b. 50
- c. 60
- d. Cannot be answered.
- 76. The rate of inflation was 1000%. What will be the cost of an article, which costs 6 units of currency now, two years from now?
  - a. 666
  - b. 660
  - c. 720
  - d. 726
- 77. 72 hens cost Rs.\_96.7\_. What does each hen cost, where numbers at "\_" are not visible or are written in illegible hand?
  - a. Rs. 3.23
  - b. Rs. 5.11
  - c. Rs. 5.51
  - d. Rs.7.22
- 78. Boxes numbered 1, 2, 3, 4, and 5 are kept in a row, and they are to be filled with either a red or a blue ball, such that no two adjacent boxes can be filled with blue balls. How many different arrangements are possible, given that all balls of a given colour are exactly identical in all respects?
  - a. 8
  - b. 10
  - c. 15
  - d. 22

**Directions Q. 79 to 80** are based on the following information:

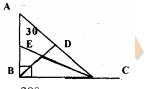
There are three different cable channels namely Ahead, Luck and Bang. In a survey it was found that 85% of viewers respond to Bang, 20% to Luck, and 30% to Ahead. 20% of viewers respond to exactly two channels and 5% to none.

- 79. What percentage of the viewers responded to all three?
  - a. 10
  - b. 12

- c. 14
- d. None of these
- 80. Assuming 20% respond to Ahead and Bang, and 16% respond to Bang and Luck, what is the percentage of viewers who watch only Luck?
  - a. 20
  - b. 10
  - c. 16
  - d. None of these

Directions Q. 81 to 87, choose the correct option:

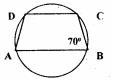
81. AB is perpendicular to BC and BD is perpendicular to AC. CE bisects the angle C;  $\angle A = 30^{\circ}$ . Then, what is  $\angle$ CED?



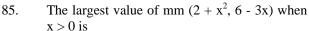
- a. 30°
- b. 60°
- c. 45°
- d. 65°

82. One root of  $x^2 + kx - 8 = 0$  is square of the other. Then, the value of k is:

- a. 2
- b. 8
- c. -8
- d. -2
- 83. AB is diameter of the circle and the points C and D are on the circumference such that  $\angle CAD = 300$ . What is the measure of  $\angle ACD$ ?



- 84. The length of a ladder is exactly equal to the height of the wall it is resting against. If lower end of the ladder is kept on a stool of height 3 m and the stool is kept 9 m away from the wall, the upper end of the ladder coincides with the top of the wall. Then, the height of the wall is:
  - a. 12m
  - b. 15m
  - c. 18m
  - d. 11m



- x > 0
- a. 1
- b. 2
- c. 3
- d. 4

- 86. A man invests Rs. 3000 at a rate of 5% per annum. How much more should he invest at a rate of 8%, so that he can earn a total of 6% per annum?
  - a. Rs. 1200
  - b. Rs. 1300
  - c. Rs. 1500
  - d. Rs. 2000
- 87. Three consecutive positive even numbers are such that thrice the first number exceeds double the third by 2; then the third number is:
  - a. 10
  - b. 14
  - c. 16
  - d. 12

#### Directions Q. 88 to 91, use the following data:

A and B are running along a circular course of radius 7 km in opposite directions such that when they meet they reverse their directions and when they meet, A will run at the speed of B and vice-versa, Initially, the speed of A is thrice the speed of B. Assume that they start from  $M_0$  and they first meet at  $M_1$ , then at  $M_2$ , next at  $M_3$ , and finally at  $M_4$ .

- 88. What is the shortest distance between  $M_1$  and  $M_2$ ?
  - a. 11 km
  - b.  $7\sqrt{2}$  km
  - c. 7 km
  - d. 14 km
- 89. What is the shortest distance between  $M_1$  and  $M_3$  along the course?
  - a. 22 km
  - b.  $14\sqrt{2}$  km
  - c.  $22\sqrt{2}$  km
  - d. 14 km
- 90. Which is the point that coincides with M0?
  - a. M<sub>1</sub>
  - $b. \quad M_2$
  - c. M<sub>3</sub>
  - d. M<sub>4</sub>
- 91. What is the distance travelled by A when they meet at  $M_3$ ?
  - a. 77km
  - b. 66km
  - c. 99km
  - d. 88km

**Directions Q. 92 to 100:** Each of these items has question followed by two statements. As the answer, mark

a. if the questions can be answered with the help of both the statements but not with the help of either statement itself.

- b. if the question can not be answered even with the help of both the statements.
- c. if the question can be answered with the help 0 statement II alone
- d. if the question can be answered with the help of statement I alone
- 92. What is the number x if
  - I The LCM of x and 18 is 36.
  - II The HCF of x and 18 is 2.
  - a. if the questions can be answered with the help of both the statements but not with the help of either statement itself.
  - b. if the question can not be answered even with the help of both the statements.
  - c. if the question can be answered with the help 0 statement II alone
  - d. if the question can be answered with the help of statement I alone
- 93. If x, y and z are real numbers, is z x even or odd?
  - I. xyz is odd.
  - II. xy + yz + zx is even.
  - a.
- 94. What is value of x, if x and y are consecutive positive even integers?
  - a. if the questions can be answered with the help of both the statements but not with the help of either statement itself.
  - b. if the question can not be answered even with the help of both the statements.
  - c. if the question can be answered with the help 0 statement II alone
  - d. if the question can be answered with the help of statement I alone
  - I.  $(x y)^2 = 4$ .
  - II.  $(x + y)^2 < 100$
- 95. What is the profit percent?
  - I. The cost price is 80% of the selling price.
  - II. The profit is Rs. 50.
  - a. if the questions can be answered with the help of both the statements but not with the help of either statement itself.
  - b. if the question can not be answered even with the help of both the statements.
  - c. if the question can be answered with the help 0 statement II alone
  - d. if the question can be answered with the help of statement I alone
- 96. What is the length of the rectangle ABCD?
  - I. Area of the rectangle is 48 square units
  - II. Length of the diagonal is 10 units
  - a. if the questions can be answered with the help of both the statements but not with the help of either statement itself.
  - b. if the question can not be answered even with the help of both the statements.

- c. if the question can be answered with the help 0 statement II alone
- d. if the question can be answered with the help of statement I alone
- 97. What is the price of bananas?
  - I. With Rs. 84, I can buy 14 bananas and 35 oranges.
  - II. If price of bananas if reduced by 50% then we can buy 48 bananas in Rs. 12.
  - a. if the questions can be answered with the help of both the statements but not with the help of either statement itself.
  - b. if the question can not be answered even with the help of both the statements.
  - c. if the question can be answered with the help 0 statement II alone
  - d. if the question can be answered with the help of statement I alone
- 98. What is the first term of an arithmetic progression of positive integers?
  - I. Sum of the squares of the first and second term is 116.
  - II. The fifth term is divisible by 7.
  - a. if the questions can be answered with the help of both the statements but not with the help of either statement itself.
  - b. if the question can not be answered even with the help of both the statements.
  - c. if the question can be answered with the help 0 statement II alone
  - d. if the question can be answered with the help of statement I alone
- 99. Is x + y z + t even?
  - I. x + y + t is even.
  - II. tz is odd.
  - a. if the questions can be answered with the help of both the statements but not with the help of either statement itself.
  - b. if the question can not be answered even with the help of both the statements.
  - c. if the question can be answered with the help 0 statement II alone
  - d. if the question can be answered with the help of statement I alone
- 100. What is the area of the triangle?
  - I. Two sides are 41 cm each
  - II. The altitude to the third side is 9 cm long.
  - a. if the questions can be answered with the help of both the statements but not with the help of either statement itself.
  - b. if the question can not be answered even with the help of both the statements.
  - c. if the question can be answered with the help 0 statement II alone
  - d. if the question can be answered with the help of statement I alone

#### SECTION-III

**Directions for Q. 101 to 150:** Read the passages and answer the questions that follow:

#### PASSAGE 1

Darwinian enthusiasts are too quick to read historical purposes into every biological trait. In Stephen Jay Gould's telling phrase, they are overly fond of 'just-so stories", which differ from Kipling's fables only in their lack of good jokes. Mr. Gould's immediate target here is "selfish-gene" theorists like Richard Dawkins, and it is a moot point whether he actually hits that mark. But, whatever you think of Mr. Dawkins, evolutionary psychology is indeed open to the just-so charge. In principle it may seem a good idea for psychology and evolutionary theory to pool their intellectual resources. But given the paucity of hard evidence on each side, the merger often seems to achieve little more than an incitement to fabulation.

The trouble is not just that human brains leave no fossils, though this is certainly one problem. Just as hazardous is the lack of definite knowledge about current mental mechanisms. This makes it all too tempting to put evolutionary speculation in the place of hard psychological evidence, and so conjure mental modules out of historical myth. Take Ms Cosmides's theory about the evolution of a cheater-detection module. This is now widely accepted. But there is no independent evidence, apart from Ms Cosmides's psychological experiments, for this historical story. Moreover, other psychologists now claim to have performed new experiments which show that a cheating factor is not the crucial variable in the Wason selection task after all. Less indulgent critics will say that the flirtation with evolution has simply led Ms Cosmides up a theoretical blind alley.

A similar charge can be leveled at other prize exhibits in the gallery of evolutionary psychology. The theories of human altruism described in Mr. Ridley's "The Origins of Virtue" involve any number of plausible ideas about the social practices of our hominid forefathers. But there is no real historical basis for these parables, and precious little direct evidence that today's humans display any corresponding dispositions. The ideas in Mr. Ridlev's book exhibit game-theoretical sophistication and much ingenuity, and are worth reading for that reason alone, but they scarcely qualify as reliable science.

Then there is sex. Reproduction is central to evolution, but there is room to wonder whether that explains the attention it gets from the more poporiented evolutionary psychologists. The leading light in this area is David Buss, or "The Doctor of Love", as he is fondly termed on "The Evolutionist" web page. His book, "The Evolution of Desire" reports the results of a questionnaire given to 10,000 people in 37 countries. In every country, women like rich men, and men like young attractive women. Mr. Buss also explains that potential pick-ups start looking better as closing-time nears and worse again after sex. Well, maybe that is all so, and perhaps it has something to do with the evolutionary roles of the sexes. But Mr. Buss tells you little about the precise mechanism behind the behaviour. Defenders of evolutionary psychology may reasonably reply that there are better practitioners than Mr. Buss and more impressive examples of Darwinian accounts of human mental phenomena than singles-bar behaviour. Yet even the best samples of the evolutionary approach raise the question of its explanatory goal. Do the different examples, plucked here and there from the vast field of human mental life and behaviour, show promise of ever adding up to a coherent theory of the mind?

That question brings in the second main worry about evolutionary psychology: by emphasizing the modules it leaves out the important part of the mind. Evolutionary psychologists often liken the mind to a Swiss Army knife. It contains a large number of purpose-built tools, each designed for a quite specific purpose. But this picture prompts an obvious question. Who, or what, is deciding when to open which blades? Don't you need some central intelligence to orchestrate the overall operation? Some evolutionary psychologists say no. But, while that may be true of other animals, it makes little sense for humans. For one thing, you seem to need a central intelligence to understand human moral reasoning. Even if your modules incline you towards sexual and racial discrimination, for example, it does not follow that such discrimination is either inevitable or justified. If humans are just a collection of modular reflexes, how is it that they can correct their inclinations? Humans seem to need some mental faculty that can stand back from modular promptings and tell them how to do better.

There are less elevated examples of people monitoring the outputs of their purpose-specific mental modules. You are often quite aware that your visual system is fooling you: for example, when you look at trick drawings, or indeed when you watch television. If it is possible to question modular inclinations in this way, there must be some place in the mind which transcends the modules.

To insist that there is more to the mind than modules is not to deny humans' animal heritage: no doubt a person's central intelligence is itself an evolutionary product of the past. But it does mean that evolutionary psychology, like its predecessors, is in danger of ignoring the very thing that makes humans different from other animals. Perhaps evolutionary psychologists will soon shift their focus away from peripheral modules, and start contributing to an understanding of the really hard biological problem of the structure and function of the central intellectual abilities. Until then, they are unlikely to shed more than a sidelight on the human mind or to show people much about why they live the way they do.

- 101. What is Stephen Jay Gould's main objection to Darwinian theorists?
  - a. that they lack good jokes
  - b. that they are full of "just-so" stories
  - c. that they read meaning into every biological trait
  - d. that they do not see the practical aspects.
- 102. It can be inferred from the first paragraph that the author of the passage
  - a. agrees with Mr. Gould
  - b. disagrees with Mr. Gould
  - c. is neutral about Mr. Gould's argument
  - d. considers the objections objectively
- 103. What is the author trying to convey through the phrase, "incitement to fabulation"?
  - a. inciting theorists to make fabulous claims
  - b. resulting in stories and fables
  - c. resulting in wrong claims
  - d. none of these
- 104. Mr. Cosmides' theory about evolution:
  - a. is now widely accepte
  - b. is just a historical myth
  - c. lacks psychological evidence
  - d. is a theoretical blind alley
- 105. David Buss' contribution to the evolutionary approach:
  - a. is an important contribution to understand evolution
  - b. does not explain much about evolution
  - c. is an example of pop-oriented evolutionary psychology
  - d. has added important statistical research consisting of 10,000 people in 37 countries.
- 106. The problem with treating the mind as a module is that:
  - a. it ignores how the mind actually functions
  - b. it ignores the fact that a mental faculty controls modular prompting
  - c. it treats everything in compartments
  - d. it does not explain visual tricks such as television
- 107. The conclusion of the article is that:
  - a. Evolutionary psychology ignores the very thing that makes humans different from animals
  - b. Evolutionary psychology is unlikely to shed more than a sidelight on the human mind.
  - c. Evolutionary psychology can explain an important aspect if it explains the structure and function of the central intellectual abilities

- d. Evolutionary psychology has a limited future, as of date.
- 108. The article is an attempt to:
  - a. explain evolutionary psychology
  - b. discuss the contribution of evolutionary psychologists
  - c. downgrade the contribution of psychologists
  - d. none of these

#### PASSAGE 2

It sounds pretty obvious: life is all a game. Charles Lamb (1775-1834) put it rather elegantly: "Man is a gaming animal. He must always be trying to get the better in something or other." What John Harsanyi and other economists did was to apply mathematical Logic to this human urge and make game theory, as it is called, part of the ir tool kit. At its humblest level, game theory is useful in saving the players from going mad. In devising a strategy you know that your rival may know what you are planning, and he knows that you know he knows, and soon... even skilled chess-players can feel mentally wounded.

In chess and comparable real-life games, each side has basic information about the other. The problem of Charles Lamb's gaming animals is that they usually have imperfect knowledge about their opponents. They guessed, or relied on "intuition" or, as Napoleon said of his favorite generals, they were lucky. Until quite recent items, this was the way countries and great companies dealt with their rivals.

Mr. Harsanyi's contribution to game theory was to show that such games need not be played in a fog, or at least not much. It was possible to analyze such games and provide guidance about the probable moves and their outcomes. This advanced game theory was employed, at least by the Americans, in their negotiations with the Soviet Union on arms control. Kennedy and Khrushchev used game theory in their tussle over Cuban missiles in 1962.

Game theory is widely used in commerce, as happened this year when, with great success, the British government sold licenses for mobile phone services in an auction designed by an Oxford economist. Paul Kemmerer. Some economists are watching with fascination the contest between the European Central Bank and the currency market over the future of the Europe, which has at least the look of an exercise in game theory. A Dutch team of economists applied the theory to international football and concluded that a bad team playing at home is more likely to score than a good one playing away. One effect of game theory is to make economists seem quite human.

As often happens when an idea becomes fashionable, there has been some argument about who first thought to game theory. Mr. Harsanyi, who shared a Nobel Prize in 1994 with two other economists in the same field, John Nash and Reinhardt Selten, was happy to acknowledge that game theory had been around in some form for a longtime. Players of poker, and of course chess, had been using game theory without calling it that. Philosophy has a claim: it seeks to rationalize the behaviour of people with conflicting interests. As a young man in Budapest, Mr. Harsanyi had studied philosophy and mathematics and, to please his parents who ran a pharmacy, he added chemistry.

What triggered his interest in game theory appears to have been the work of John von Neumann and Oskar Morgenstern, who in 1944 published a book entitled "The Theory of Games and Economic Behaviour". Von Neumann was an American mathematician who, by coincidence, had also been born in Hungary and had attended the same school as Mr. Harsanyi. He and Morgenstern may have been the first to show how the philosophical idea of rational behaviour could be applied to economics. They did not develop the idea. In his short life, von Neumann especially had much other interest, including work on quantum theory and the design of the first electronic computers. In paper after paper, Mr. Harsanyi and his colleagues took the theory further. It is still being polished.

The philosopher in John Harsanyi saw in game theory means of improving the human condition. He promoted the idea that the rightness or wrongness of an action depended on its consequences. An ethical theory known as utilitarianism. The connection between game theory and ethics is a complex one. His book on this theme, Essays on Ethics. Social Behaviour and Scientific Explanation", is a hard read, just as game theory it self demands lots of tricky mathematics. No one would blame you for sticking to Charles Lamb.

- 109. What is the author meaning to convey when he says, "even skilled chess-players can feel mentally wounded"?
  - a. it saves the players from going mad
  - b. the mathematical logic of the game theory leaves even skilled players wounded
  - c. that the theory is very complicated
  - d. chess players find the theory hard to comprehend
- 110. The author feels that prior to game theory, companies and countries:
  - a. relied on guess work when dealing with each other
  - b. relied on luck rather than scientific analysis
  - c. made imperfect decisions
  - d. had no idea how to deal with each other
- 111. The main contribution of Mr. Harsanyi to game theory is:
  - a. it made economists seem quite human
  - b. games need not be played in fog now

- c. it provided guidance about the probable moves of opponents
- d. it was employed by Americans in dealing with the Soviet Union.
- 112. Why does the author say that one effect of the game theory is to make economists seem quite human?
  - a. because complicated theory could now be applied to real life situations
  - b. because game theory was used in diverse fields like football and politics
  - c. because it brought economics closer to the masses
  - d. because it was a way of adding human element to complicated theories
- 113. How did game theory originate?
  - a. from the works of Harsanyi
  - b. from John Nash and Rein hard Selten
  - c. from John Von Neumann and Oskar Morgemoten
  - d. from games like chess and poter
- 114. The passage is a/an:
  - a. review of a book written by Mr. Harsanyi
  - b. assessment of the work of Mr. Harsanyi
  - c. summation of the game theory
  - d. explanation of the game theory

#### PASSAGE 3

Even as its rivals have been battered by the cyclical downturn in petrochemicals and by Asia's financial troubles, Reliance has gone from strength to strength. Its latest results show a robust 18% rise in net profits and a 37% rise in sales over the same period a year earlier. Average annual growth in the firm's sales since it went public has been over 25%.

The way in which Reliance has achieved such results is, however, rather less impressive. Its success has arisen largely from its iron grip on its home market, source of 05% of its revenues—a grip that it retains in part through close links with Indian politicians.

From its very beginning, Dhirubhai Ambani. the firm's founder, wooed politicians to secure the licences he needed to expand his business from a small textile concern into a big petrochemical one. Many analysts suggest that the Ambani family (Dhirubhai's Sons Mukesh and Anil, who attended American. business schools, run most things today) has advanced largely thanks to such contacts. "The first call the mandarins in Delhi make after every cabinet meeting is to Reliance" claims one

The firm has benefited from a curiously favorable regulatory regime. For example, it pays very little income tax (1997 was the first year in which it paid any). The firm has also long benefited from the Indian structure of import duties. If Reliance owed its success only to such factors, it would be just another oligopolist using influence to compensate for inefficiency. These are, sadly, all too common in India. Shumeet Banerji of Booz, Allen and Hamilton, aconsultancy, calls India 'the Galapagos of capitalism", populated by strangely mutated firms that have adapted to the whims of the "License Ra", and could never survive in an open economy. But Reliance is more than that. The Ambanis have in fact built a thoroughly modern, efficient business.

A visit to Hazira, a parched corner of northwestern India, tells the tale more eloquently than any earnings report. The first thing you notice walking round the Reliance site there is how spiritless it is: no rubbish or legions of people hanging about. You might be in Switzerland or Delaware; not perhaps surprising, since the equipment is all the latest stuff.

In another part of the complex you see fine polyester yarn for weaving into fabrics like sarees. But do not touch: the yarn is so delicate that it is packaged by robots that whistle "Zip-Dee-Dah" as they zoom around doing the work of 700 men. Even more striking are the attitudes at Hazira. Reliance dared to build in this dusty town what was at its inception the world's largest ethylene "cracker". Despite widespread scepticism, boasts the site manger, it did so in record time. Every other employee seems to speak earnestly about how his job is "benchmarked to the wrld's best". It is this pursuit of world standards, not merely those good enough for the cosy local market, that sets Reliance apart from the flaccid family empires that still dominate Indian business. A recent study of competitiveness by Arthur D. Little, a consultancy, ranks Reliance as the most competitive firm in India and among the top ten in Asia. Paul Bernard of Goldman Sachs, an investment bank, thinks that it is the most competitive petrochemicals firm in Asia.

Mr. Ambani had the insight to realize that a firm which helped to foster India's then puny petrochemicals market could come to dominate it. In the 1980s, for example, he built a polyester plant with an annual capacity of 40,000 tons at a time when that was equivalent to India's entire annual consumption. He integrated backwards from textiles to synthetic fibers to petrochemicals themselves. Now Reliance has gone further upstream: it is building a massive new refinery in India and it is exploring for oil.

Another consideration is the skill with which the company manages its finances. Mr. Ambani, often spurned by banks when young, was one of the first Indian industrialists to turn to small invesars for funds. The initial flotation of Reliance and its rise to capitalization of over \$ 3 billion today, have made him the hero of millions of small shareholders.

It is curious that Reliance should be so well run, given that it need not be. Part of the explanation lies in the fact that the Ambanis are not like other established dynasties. Dhirubhai Ambani started out as a lowly yarn trader, and through decades of hard work forged his empire. His sons still work 12-14 hours a day, including weekends. Unlike many family firms, they have an experienced and long-serving team of professional mangers: over 100/0 have worked overseas, and half have worked outside the firm. Reliance pays well and, unusually for India, poaches from rival firms.

In other words, Reliance has what it taken to be a world- class player. Yet ask the Ambanis about their ambitions and they do not once stray from their home turf, Mukesh Ambani talks grandly of his "endgame" of turning Reliance into an "Indian energy major". He has new ventures in telecommunications and power generation, and hopes to expand into roads, ports and other infrastructure, The only common thread, argues Manoj Badale of Monitor, an Amercan consultant who knows the firm well, is a focus on capital-intensive industries in which success turns on the ability to get round regulators—and that, it seems, is what the Ambanis reckon is Reliance's core competence.

That is a pity, and it may turn out to be bad news for Reliance. As India's petrochemicals sector liberalizes—high tariffs and other trade barriers have been falling slowly, prodded by commitments to the WTO—the day will come when Reliance must face foreign rivals on something resembling a level playing- field. Remaining ensconced in India may provide' a few more years of fat profits such as those announced recently. But it may not help to prepare Reliance for a more serious endgame: unfettered global competition.

- 115. Why does the author say that Reliance's achievement is less impressive?
  - a. it has an iron grip on its home market and has operated in monopoly conditions
  - b. it has 95% of its revenue from the home market
  - c. the firm has benefited from the Indian structure of import duties
  - d. it has used political influence for its success
- 116. Which of the following statements are directly made by the author?
  - a. the Ambani family has advanced largely due to political contacts
  - b. bureaucrats in Delhi call Reliance after every meeting
  - c. Reliance has benefited from a regulatory regime
  - d. all of the above
- 117. The latest results of Reliance show that:
  - a. it performed better than most years
  - b. it performed worse than most years
  - c. its performance has been more or less average
  - d. cannot say

- 118. What does the author mean by "curiously favourable regulatory regime"?
  - a. the system of control in India
  - b. the regulatory regime is strange
  - c. the control favours some and not others
  - d. none of the above
- 119. By going further upstream, Reliance:
  - a. went against the general thinking
  - b. set up units which provided raw materials
  - c. built plants in river towns like Hazira
  - d. none of the above
- 120. Why does the author say that Reliance need not be well-run?
  - a. it is not like other established dynasties
  - b. it could survive without being efficient
  - c. it is in the core sector and would make profits anyway
  - d. it could have followed traditional methods
- 121. The long-term future prospects of Reliance, according to the author, are:
  - a. reasonably bright
  - b. it can make fat profits for a few more years
  - c. it faces great challenges ahead
  - d. it may not do so well after a few years
- 122. The difference between Reliance and other family business is that:
  - 1. they have a team of professional mangers
  - 2. they still work 12-14 hours a day
  - 3. it has created world class operations.
  - a. 1 and 2
  - b. 1 and 3
  - c. 2 and 3
  - d. 1, 2 and 3
- 123. Which of the following statements are true about Reliance?
  - a. it is 20 years old
  - b. it is worth \$ 3 billion today
  - c. it is the hero of millions of shareholders
  - d. none of the above
- 124. What does the author feel about Indian bureaucrats?
  - a. they are sold out
  - b. they are dishonest people
  - c. they use the regulatory regime to help certain people
  - d. none of the above
- 125. On the visit to Hazira, the author was most impressed with:
  - a. the cleanliness at the plant
  - b. the latest technology
  - c. the yarn is packaged by robots
  - d. the highly motivated work-force

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## PASSAGE -4

Whatever philosophy may be, it is in the world and must relate to it. It breaks through the shell of the world in order to move into the infinite. But it turns back in order to find in the finite its always unique historical foundation. It pushes into the furthest horizons beyond being-in-the-world in order to experience the present in the eternal. But even the profoundest meditation acquires its meaning by relating back to man's existence here and now. Philosophy glimpses the highest criteria, the starry heaven of the possible, and seeks in the light of the seemingly impossible the way o man's dignity in the phenomenon of his empirical existence. Philosophy addresses itself to individuals. It creates a free community of those who rely on each other in. their will for truth. Into this community the philosophic man would like to enter. It is there in the world at anytime, but cannot become a wordily institution without losing the freedom of its truth. He cannot know whether he belongs to it. No authority decides on his acceptance. He wants to live in his thinking in such a way as to make his acceptance possible. But how does the world relate to philosophy? There are chairs of philosophy at the universities. Nowadays they are an embarrassment. Philosophy is politely respected because of tradition, but despised in secret. The general opinion is: it has nothing of importance to say. Neither has it any practical value. It is named in public but does it really exist? Its existence is proved at least by the defense measures it provokes. We can see this from comments like: "Philosophy is too complicated. I don't understand it. It's beyond me. It's something for professionals. I have no gift for it. Therefore it doesn't concern me." But that is like saying: I don't need to bother about the fundamental questions of life: I can diligently bury myself in some special field of work or scholarship without thinking or questioning .its meaning, and, for the rest, have "opinions" and be content with that. The defense becomes fanatical. A benighted vital instinct hates philosophy. It is dangerous. If I understood it I-should have to change my life. I would find myself in another frame of mind, see everything in a different light, and have to judge anew. Better not think philosophically! Then come the accusers, who want to replace the obsolete philosophy by something new and totally different. It is mistrusted as the utterly mendacious end product of a bankrupt theology. The meaninglessness of philosophical propositions is made fun of. Philosophy is denounced as the willing handmaiden of political and other powers. For many politicians, their wretched trade would be easier if philosophy did not exist at all. Masses and functionaries are easier to manipulate when they do not think but only have a regimented intelligence. People must be prevented from becoming serious. Therefore it is better for philosophy to be boring. Let the chairs of philosophy rot. The more piffle is taught, the sooner people will be blinkered against the light of philosophy. Thus philosophy is

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surrounded by enemies, most of whom are not conscious of being such. Bourgeois complacency, conventionality, the satisfactions of economic prosperity, the appreciation of science only for its technical achievements, the absolute will to power, the bonhomie of politicians, the fanaticism of ideologies, the literary self-assertiveness of talented writers - in all these things people parade their anti- philosophy. They do not notice it because they do not realize what they are doing. They are unaware that their anti- philosophy is itself a philosophy, but a perverted one, and that this anti-philosophy, if elucidated, would annihilate itself.

- 126. A suitable title for the passage would be:
  - a. Man and Philosophy
  - b. Philosophical angst
  - c. A Defence of Philosophy
  - d. The Enemies of Philosophy
- 127. Which of the following is not mentioned as a function of philosophy in the passage?
  - a. It shows the way to man's dignity in the face of his empirical existence.
  - b. it breaks through the shell of the world in order to move into the infinite.
  - c. It pushes into the furthest horizons beyond being in the world.
  - d. It makes the world a better place to live in.
- 128. Which of the following is true, keeping the passage in mind?
  - a. Philosophy is evidently respected
  - b. Philosophy is secretly despised
  - c. Both (a) and (b)
  - d. Neither (a) nor (b)
- 129. The word 'chairs', in the context of the passage, means:
  - a. wooden faced people
  - b. departments
  - c. separate chairs for philosophers
  - d. reserved seats for students of philosophy
- 130. Which of the following is not a charge against philosophy?
  - a. that it is obsolete
  - 2. that it is mendacious
  - 3. that it is the handmaiden of political power
  - 4. that it is immoral
- 131. According to the author, the existence of philosophy is proved by:
  - a. the fact that there re still' chairs of philosophy in universities
  - b. the defense measures it provokes
  - c. the polite respect jt gets
  - d. the fact that it answers the fundamental questions of life.
- 132. Why, according to the passage, would politicians be happy if philosophy did not exist?

- a. Masses would be easier to manipulate as they would not think for themselves.
- b. They would not have to make false allegiances to ideologies.
- c. They would not have to face allegations of ignoring philosophy.
- d. They would not have to be philosophical about losing an election.

#### PASSAGE 5

Among those who call themselves Socialists, two kinds of persons may be distinguished. There are, in the first place, those whose plans for a new order of society, in which private property and individual competition are to be superseded and other motives to action substituted, are on the scale of a village community or township, and would be applied to an entire country by the multiplication of such self-acting units; of this character are the systems of Owen, of Fourier, and the more thoughtful and philosophic Socialists generally. The other classes, who are more a product of the Continent than of Great Britain and may be called the revolutionary Socialists, propose to themselves a much bolder stroke. Their scheme is the management of the whole productive resources of the country by one central authority, the general government. And with this view some of them avow as their purpose that the working classes, or somebody on their behalf, should take possession of all the property of the country, and administer it for the general benefit.

Whatever be the difficulties of the first of these two forms of Socialism, the second must evidently involve the same difficulties and many more. The former, too, has the great advantage that it can be brought into operation progressively, and can prove its capabilities by trial. It can be tried first on a select population and extended to others as their education and cultivation permit. It need not, and in the natural order of things would not, become an engine of subversion until it had shown itself capable of being also a means of reconstruction. It is not so with the other: the aim of that is to substitute the new rule for the old at a single stroke, and to exchange the amount of goods realized under the present system, and its large possibilities of improvement, for a plunge without any preparation into the most extreme form of the problem of carrying on the whole round of the operations of social life without the motive power which has always hitherto worked the social machinery. 'It must be acknowledged that those who would play this game on the strength of their own private opinion, unconfirmed as yet b' any experimental verification - who would forcibly deprive all who have now a comfortable physical existence of their only present means of preserving it, and would brave the frightful bloodshed and misery that would ensue if the attempt was resisted - must have a serene confidence in their own wisdom on the one hand and a recklessness of other people's sufferings on the other, which Robespierre and St Just, hitherto the typical instances of those united attributes, scarcely came up to. Nevertheless, this scheme has great elements of popularity which the more cautious and reasonable form of Socialism has not: because what it professes to do, it promises to do quickly, and holds out hope to the enthusiastic of seeing the whole of their aspirations realized in their own time and at a blow.

- 133. According to the author, the difference between the two kinds of socialists is that:
  - a. one consists of thinkers and the others are active people.
  - b. the first have a definite philosophy and the second don't have any definite philosophy.
  - c. the first believe in gradual change while the others believe in revolutionary change.
  - d. the first are the products of Britain, while the others are products of Russia.
- 134. Which of the following is not a socialist?
  - a. Robespierre
  - b. Fourier
  - c. Owen
  - d. All are socialists
- 135. According to the philosophy of revolutionary socialism:
  - a. The government takes over the villages first and then, gradually the whole country.
  - b. The government takes over all productive resources of the country at one stroke.
  - c. The government declares a police state and rules by decree.
  - d. There is no government as such; the people rule themselves by the socialist doctrine.
- 136. Which of the following, according to the author, is true?
  - a. The second form of socialism has more difficulties than the first
  - b. The second form of socialism has the same difficulties as the first.
  - c. The second form of socialism has less difficulties than the first
  - d. The author has not compared the difficulties of the two
- 137. Which of the following were characteristics of St. Just and Robespierre?
  - a. Unconcern for others' suffering
  - b. Full confidence in their own wisdom.
  - c. Both a) and b).
  - d. Neither a) nor b).
- 138. It may be inferred from the passage that the author's sympathies are on:
  - a. neither side.
  - b. the side of the socialist doctrine.

- c. the side of the second type of socialism
- d. the first type of socialism.
- 139. The word 'avow' in the context of the passage means:
  - a. proclaim
  - b. vow
  - c. affirm
  - d. deny
- 140. Which of the following, according to the author, may not be the result of not verifying the desirability of socialism experimentally first?
  - a. bloodshed
  - b. deprivation of current comfortable existence
  - c. corruption in high places
  - d. misery caused by resisting change

#### PASSAGE 6

Experts in human behaviour argue that ethics and values are learned as a natural part of human development, derived from school, religion and other influences. Some authorities say that ethics is the innate notion of right and wrong and cannot be taught to an adult. This means that an individual has to have been shaped as honest and upstanding (or devious and venal) long before he or she sets foot in the corporate sector. Perhaps as a result of this belief, the corporate that form an integral part of a country's economy try to avoid dealing with the value based issues that they are confronted with on a day to day basis, unless forced to do so. Over time these practices become precedents and the fundamental value of dealing with ethics upfront loses its importance. After all, we have done it before and it has worked, so why not now?' is the general attitude. To the individual manager, value based conflicts tend to be largely personal, seldom corporate in nature or intensity. It turns corporate only when the espoused value is real and happening in the company. In performing these value based roles, managers are often trained to see its application on a commercial basis. Problems arise when the decisionmaker is unable to cope with commercial conflicts as differentiated from personal conflicts.

Part of being a good manager is being aware of the normal dimensions of one's role in the network and in the organisation. Managers can unwittingly engage in a wide range of role- related acts that are ethically questionable. A larger question before us is whether managers see this dissonance between what is perceived as unethical, and what is being practiced. For instance, a survey of HBR subscribers in 1981 revealed that the biggest issue is not defining sexual harassment but recognizing it when it occurs. Similarly, it was not until 1990 that the US government enacted the Americans with Disabilities Act that restricts employers from using medical tests to reveal a physical or mental impairment, except under special circumstances. Peter Drucker argues that business professionals are no different from other professionals, and should abide by the principle of nonmale-ficence. This involves studying the impact of acts on the good of the individual, the firm, the business community, and society as a whole. Crossing horizons of definitiveness is real in any pursuit of a meaningful debate on ethics. In fact it is essential for reaching a sense of conclusion, if possible. While it does not concentrate on the obligations of a person as a private individual and a citizen, these creep into the socio-economic system which governs business.

Laura Nash deals with twelve issues of ethics, addressing the basic question: "Is my business decision also an ethical decision?" Nash provides a framework that demonstrates the importance of critical thinking in business ethics where the goal is a corporate practice that does not foster unnecessary social harm. She emphasizes that her programme works in a concrete setting; that it is not utopian, philosophical abstraction. A person accepts certain special obligations when he/she becomes a part of the world of commerce. These obligations necessitate a reciprocal behavioral pattern in sync with individual values and beliefs viewed concurrently with those of the firm. Ethical congruence is the alignment of an organization's stated values, the decisions of its leaders, the behaviors that are encouraged by its systems and the values of its employees. The leader's responsibility is to give employees guidance as to what values employees are expected to demonstrate, in what priority and how absolute those priorities are.

Before a business can reach ethical congruence it must be clear on what it truly values. There must be a clear definition and articulation of values, beliefs, core philosophies, norms and ideals that the organisation chooses to follow, to practice in good times and bad, and to stand by under any circumstance. Once stated, agreed upon and articulated, this core operational and exceptional philosophy has to be tested for compatibility and acceptability with business vision, mission, core strategy and tactics, short and long term goals and objectives and expected behavioral outcomes.

It would be appropriate to comment here on the necessity for managerial courage. Donald F VanEynde defines it as "the willingness to do what is right in the face of risk". Risk here means a real or perceived danger to oneself, one's reputation or one's career; and includes such actions as confronting the status quo, embracing change in the face of resistance and opposing a popular but unhealthy idea. It means doing what is right, arid what needs to be done. The determining factors are the values and the power and position that the incumbent has, to do what he believes in. Ethics calls upon our courage to act upon what we believe in, and our willingness to sacrifice for the cause. Managerial responsibilities and roles in the commercial field outline a broad range of activities, goals and standards created to sustain the performance of a business organisation. In performing roles not congruent with the traditional organisational practices, managers could engender ethical dissonance. There are primarily five role acts, (which may overlap), involved in ethical decision making in a commercial environment.

Self-enhanced ethical dilemma role acts are any acts that involve direct gains for the actor at the expense of the firm; they are managerial only in the sense that they take place in organisations and frequently involve those who happen, by title, to be called managers. Ethically questionable acts of this type, such as expense account cheating, insider trading, nexus with brokers and middlemen, embezzlement, receiving kickbacks from vendors, short changing petty cash accounts, transferring company information for a price, using/selling patents, formulations, new product development information and stealing supplies, are committed against the firm and in the self-interest of the individual. They are essentially unethical practices not in consonance with the purpose of the firm.

The Indian financial services industry scam of the early I 990s, that unearthed the active involvement of individuals misusing their authority limits and conniving with brokers, is an example. Financiers have a fiduciary responsibility to be honest and to protect their clients' assets. At the corporate level there are several examples of inter corporate espionage. Just when Palm electronic organizer of 3Com, a runaway hit, was making huge headway, Microsoft decided to call handheld devices based on its Windows CE operating system Palm PCs. 3Com sued, claiming it owned the Palm name.

Myopic mania occurs in large and small role situations and is common among practicing managers. The behaviour is seldom random, is typically repetitive, has strong overtones of dominance and makes use of control and power. Role failure acts are directly related to managerial roles, and can be acts of commission or omission, such as superficial performance appraisals, not providing a fair and honorable feedback to employees on their performance and using leadership roles to enhance power through critical control over people.

Managers with myopic mania may hire and fire employees to show contempt towards process and system; they may not confront expense account cheating; may appease blackmailing employees to win personal favours against the company's interest; and may palm off a poor performer on to another department. At a heightened level of corruption they may systematically cheat the organisation intellectually

Typically, such a manager would, at regular intervals, convey his desire to leave the current

assignment for a better career opportunity, and seek a monetary/career favour in return for his loyalty. He would demonstrate his unhappiness at the current state of organisational performance and would show deep anguish over managerial inaction on unresolved problems. These managers have unrealistic selfperceptions and are often schizophrenic. Gullible top management is often taken in by their seemingly logical, rational approach. Deception is key to their unethical practice. These acts involve direct personal advantage (not necessarily financial gain) at the expense of the firm. A culture that fosters high performance driven job insecurity could make employees more susceptible to this ethical encounter.

The case of a large Indian business house that had to forcibly retire some of its top management and their consequent outburst to the media on the company could well mean this type of an ethical act.

Power is the potential to influence others for good or evil, to be a blessing or a scourge. Power pervades every aspect of life. Principle centered power, based on honour extended bilaterally, leads to influence that lasts over extended periods of time and can even outlive the person from whom it omanates.

In contrast, distortion, while appearing straight in its actions and motives, involves the use of power and authority, through goals. It also involves conduct that creates direct advantages for the firm in the short run while indirectly providing gains to the individual actors. This in turn displaces direct costs onto selected stakeholders outside and inside the organisation in the long run.

Power usage is evident in actions involving ethics. In some instances the stated positioning of the corporation makes it easy for elimination or avoidance of distortion. In other cases, the actions of a superior or a person with authority invariably appear right to the younger managers, who may actually believe that the decision was right and beneficial to the company. According to Jay Rohrlich, a psychiatrist, "Susceptible people will be seduced by that kind of magical power. Money is a magical commodity, in the sense that it does transform reality." Rohrlich also talks about a personality style that combines risk taking with. a grandiose sense of personal power. Such behaviour eventually leads to an organisational freeze status, given low visibility between what is right and what is not.

Bribery, price fixing and manipulation of supplies are some examples of managerial role distortion that benefit organisations in the short run. Cross holding patterns of shareholding are another example of this ethical issue. While capital is obtained for a stated purpose and cash flow generated, the surplus is often used up to lend to a sister company, often a losing proposition. In all such cases, it is necessary to attribute ethical ownership directly to the decision-maker.

- 141. The author is of the opinion that:
  - a. ethics and values are learned as a natural part of human development, derived from school, religion and other influences.
  - b. ethics is the innate notion of right and wrong and cannot be taught to an adult.
  - c. value based conflicts tend to be largely personal, seldom corporate in nature or intensity.
  - d. none of the above
- 142. Which of the following would be closest in meaning to the line in the passage, "the biggest issue is not defining sexual harassment but recognizing it when it occurs"
  - a. managers do not recognize sexual harassment when it occurs
  - b. though sexual harassment is well defined, companies do not how how do deal with it
  - c. there is a difference between what is perceived as unethical in the corporate world, as opposed to what is practiced
  - d. none of these
- 143. What, according to the author, is "ethical congruence"?
  - a. Reciprocal behavioral pattern in sync with individual values and beliefs viewed concurrently with those of the firm.
  - b. congruence of leader's responsibility to give employees guidance as to what values employees are expected to demonstrate, in what priority and how absolute those priorities are.
  - c. congruence of stated values, decisions of its leaders, the behaviours that are encouraged by its systems and the values of its employees.
  - d. all of the above
- 144. The example of Microsoft naming its hand.held devices as Palm PCs is given in the passage to highlight:
  - a. myopic mania
  - b. managerial courage
  - c. a point
  - d. an unethical practice
- 145. Younger managers may not be in a position to act ethically because:
  - a. they are unable to deal with power distortion
  - b. they lack the judgment to distinguish between ethical and unethical practices
  - c. ethical thinking comes only with age and experience
  - d. none of these
- 146. The passage is most likely taken from:
  - a. a newspaper
  - b. a management journal
  - c. a book

- d. an Internet site
- 147. What is "managerial distortion" according to the author?
  - a. use of power and authority to create advantage for the firm as well as individuals in the short run while disguising costs
  - b. distorting the meaning of certain unethical practices so that they appear ethical
  - c. relying on distorted models of behaviour to deal with unethical behaviour
  - d. conveying wrong instructions to subordinates as the senior managers misuse their power and authority
- 148. Which of the following statements is true in the context of the passage?
  - a. business and managers should largely act ethically
  - b. acting unethically is harmful to the business in the long run
  - c. being ethical is largely a matter of the individual, not of the corporate
  - d. none of these
- 149. Which of the following is not necessitated when an individual becomes part of the commercial world?
  - a. synchronization between individual values and beliefs with those of the firm
  - b. an obligation to act ethically, no matter what
  - c. articulation of the corporation's core values and beliefs and the understanding of the individual of these
  - d. none of these
- 150. Which of the following is a result of myopic mania?
  - a. short sightedness of the manager
  - b. inability to deal with long term strategy
  - c. contempt towards the process and systems
  - d. a logical, rational approach which does not gel with the company

## **SECTION-IV**

**Directions 151-155:** The following table gives data of some students. However, some data has been spoilt and cannot be read on the computer floppy.

	Performance			Total
	Average	Good	Excellent	
Male		10		
Female				32
Total		30		

It is also known that:

- 1. Half the students were either excellent or good.
- 2. 40% of the students were females.

- 3. One-third of the male students were average. Based on the above answer the following questions.
- 151. How many students are both female and excellent?
  - a. 0
  - b. 8
  - c. 16
  - d. 32
- 152. What proportion of good students are male? a. 0
  - b. 0.73
  - c. 0.4
  - d. 1.0
- 153. What proportions of female students are good? a. 0
  - b. 0.25
  - c. 0.5
  - d. 1.0
- 154. How many students are both male and good?
  - a. 10
  - b. 16
  - c. 22
  - d. 48
- 155. Among average students, what is the ratio of male to female?
  - a. 1:2
  - b. 2:1
  - c. 3:2
  - d. 2:3

**Directions: Q. 156 to 160** are based on the table given below:

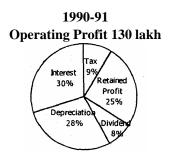
Market Shares in Four Metropolitan Cities.

manner Snares in Four might opolitait entest					
Period/	Bombay	Calcutta	Delhi	madras	
Products	1993-94	1993-94	1993-94	1993-94	
HD	20-15	35-30	20-15	20-30	
CO	20-25	30-15	15-10	20.15	
BN	45-40	25-35	35-35	10-10	
MT	15-20	10-20	10-10	50-45	

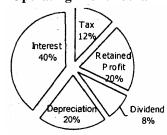
- 156. The market shares of which products did not decrease between 1993-94 in any city?
  - a. HD
  - b. CO
  - c. RN
  - d. None of these
- 157. The number of products which doubled their market shares in one or more cities is
  - a. 0
  - b. 1
  - c. 2
  - d. 3
- 158. The largest percentage drop in market shares is

- a. 60%
- b. 50%
- c. 53.3%
- d. 20%
- 159. The number of products which had 100% market share in four metropolitan cities is:
  - a. 0
  - b. 1
  - c. 2
  - d. 3
- 160. The city in which the minimum number of products increased their market shares in 1993-94 was:
  - a. Bombay
  - b. Delhi
  - c. Calcutta
  - d. Madras.

Directions: For Q. 161 to 165 refer to the following pie-chart



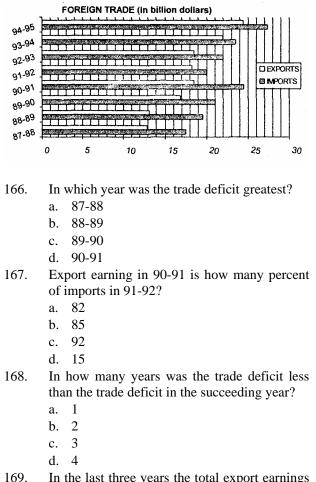
1991-92 Operating Profit 160 lakh



- 161. The operating profit in 1991-92 increased over that in 1990-91 by
  - a. 23%
  - b. 22%
  - c. 25%
  - d. 24%
- 162. The Interest burden in 1991-92 was higher than that in 1990-91 by:
  - a. 50%
  - b. 25 lakh
  - c. 90%
  - d. 41 lakh
- 163. If, on an average, 20% rate of interest was charged on borrowed funds, then the total borrowed funds used by this company in the given two years amounted to:

- a. 221 lakh
- b. 195 lakh
- c. 368 lakh
- d. 515 lakh
- 164. The retained profit in 1991-92, as compared to that in 1990-91 was:
  - a. higher by 2.5%
  - b. higher by 1.5%
  - c. lower by 2.5%
  - d. lower by 1.5%
- 165. The equity base of these companies remained unchanged. Then the total dividend earning (in lakh rupees) by the share holders in 1991-92 is:
  - a. 10.4 lakh
  - b. 9 lakh
  - c. 12.8 lakh
  - d. 15.6 lakh

**Directions: Q. 166 to 170** are based on the folioing graph:

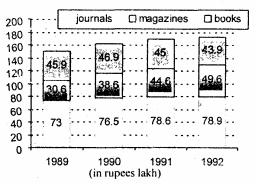


- 169. In the last three years the total export earnings have accounted for how many percent of the value of the imports?
  - a. 80
  - b. 83
  - c. 95

- d. 89
- 170. Which of the following statements can be inferred from the graph?
  - 1. In all the years shown in graph, the trade deficit in less than the export earning.
  - 2. Export earnings increased in every year between 89-90 and 91-92.
  - 3. In all the years shown in the graph, the earning by exports is less than the expenditure on imports in the preceding year.
  - a. 1 only
  - b. 2 only
  - c. 3 only
  - d. 1 and 3 only

**Directions: Q. 171 to 175** are based on the graph given below:

Revenue obtained by a publishing house by selling books, magazines, and journals.



- 171. Which year shows the least change in revenue obtained from journals?
  - a. '89
  - b. '90
  - c. '91
  - d. '92
- 172. The growth in total revenue from '89 to '92 is
  - a. 21%
  - b. 28%
  - c. 15%
  - d. 11%
- 173. In '92, what percent of the total revenue came from books?
  - a. 45%
  - b. 55%
  - c. 35%
  - d. 25%
- 174. If '93 were to show the same growth as '92 over '91, the revenue in '93 must be
  - a. 194.5
  - b. 186.6
  - c. 172.4
  - d. 176.7

- 175. The number of years in which there was an increase in revenue from at least two categories is
  - a. 1
  - b. 2
  - c. 3
  - d. 4

**Directions: Q 176 to 180** are based on the table given below:

Machine M1 as well as Machine M2 can independently produce either Product P or Product Q. The times taken by machines M1 and M2 (in minutes) to produce one unit of product P and Q are given in the table below: (Each machine works 8 hours per day).

Product	M1	M1
Р	10	8
Q	6	6

- 176. What is the maximum number of units that can be manufactured in one day?
  - a. 140
  - b. 160
  - c. 120
  - d. 180
- 177. If the number of units of P is to be 3 times that of Q, what is the minimum idle time for maximum total units manufactured?
  - a. 0 minutes
  - b. 24 minutes
  - c. 1 hour
  - d. 2 hours
- 178. If equal quantities of both are to be produced, then out of the four choices given below, the least efficient way would be:
  - a. 48 of each with 3 minutes idle
  - b. 64 of each with 12 minutes idle
  - c. 53 of each with 10 minutes idle
  - d. 71 of each with 9 minutes idle.
- 179. If M1 works at half its normal efficiency, what is the maximum number of units produced, if at least one unit of each must be produced?
  - a. 96
  - b. 89
  - c. 100
  - d. 119
- 180. What is the least number of machine hours required to produce 30 pieces of P and 25 pieces of Q?
  - a. 6 hours 30 minutes
  - b. 7 hours 24 minutes
  - c. 5 hours 48 minutes
  - d. 4 hours 6 minutes

**Directions: Q. 181 to 185** are based on the information given below:

A company produces five types of shirts - A, B, C, D, E - using cloth of three qualities - High, Medium and Low - using dyes of three qualities - High, Medium, and Low. The following tables give, respectively:

- 1. The number of shirts (of each category) produced, in thousands.
- 2. The percentage distribution of cloth quality in each type of shirt, and
- 3. The percentage distribution of dye quality in each type of shirt.

	Note. Each shift requires 1.5 metres of cloth.								
		Distribution of cloth (%)			Distribution of day (%)			%)	
Shirt	Number	Shirt	High	Medium	Low	Shirt	High	Medium	Low
Туре	(000)	Туре				Туре			
Α	20	Α	80	20	-	А	70	15	15
В	30	В	30	40	30	В	20	50	30
С	30	С	-	70	30	С	-	60	40
D	10	D	-	60	40	D	-	40	60
Е	10	Е	-	10	90	Е	-	20	80

Note: Each shirt requires 1.5 metres of cloth

- 181. What is the total requirement of cloth?
  - a. 150,000 m
  - b. 200,000 m
  - c. 225,000 m
  - d. 250,000 m
- 182. How many metres of high quality cloth is consumed by A-shirts?
  - a. 8,000 m
  - b. 112,000m
  - c. 24,000 m
  - d. 30.000m
- 183. What is the ratio of low-quality dye used for C-shirts to that used for D-shirts?
  - a. 3:2
  - b. 2:1
  - c. 1:2
  - d. 2:3
- 184. How many metres of low-qu3lity cloth is consumed?
  - a. 22,500
  - b. 46,500
  - c. 60,000
  - d. 40,000
- 185. What is the ratio of the three qualities of dyes in high-quality cloth?
  - a. 2:3:5
  - b. 1:2:5
  - c. 7:9:10
  - d. None of the above.