

COMMON ADMISSION TEST

SECTION-1

Directions for questions 1 to 5: Arrange sentences A, B, C and D between sentences 1 and 6 to form a logical sequence.

1. Arrange sentences A, B, C and D between sentences 1 and 6 to form a logical sequence.
 1. Clues to the answer lie at your feet, scattered among the rubble.
 - A. Most are only a few inches across.
 - B. The rock here is a crumbling, easily-split sandstone and in it lie thousand upon thousands of coiled shells.
 - C. They are ammonites.
 - D. Some are big as cartwheels.
 6. No ammonite is alive today but a hundred million years ago, they flourished in vast numbers.
 - a. ADCB
 - b. BADC
 - c. CBAD
 - d. DCBA
2. Arrange sentences A, B, C and D between sentences 1 and 6 to form a logical sequence.
 1. A reptile becomes stuck in a swamp and dies.
 - A. Over great periods of time, the peat is compressed and turned to coal.
 - B. As the centuries pass and more vegetation accumulates, the deposit turns to peat.
 - C. Changes in sea level may cause the swamp to be flooded and layers of sand to be deposited on top of the peat.
 - D. Dead vegetation drifts to the bottom and covers them.
 6. The reptile's bones still remain within it.
 - a. DBCA
 - b. BCDA
 - c. CDBA
 - d. DABC
3. Arrange sentences A, B, C and D between sentences 1 and 6 to form a logical sequence.
 1. Voyager-I was very high in the ecliptic plane.
 - A. They are triumphs of human engineering and one of the glories of the American space programme.
 - B. In 1981, it had made a close pass by Titan, the giant moon of Saturn.
 - C. The two Voyager robots have explored four planets and nearly sixty moons.
 - D. Its sister ship, Voyager, was patched on a different trajectory, so she was able to perform her celebrated explorations of Uranus and Neptune.
 6. They will be in the history books when much else about our time is forgotten.
 - a. CBDA
 - b. DACB
 - c. BDCA
 - d. BCDA
4. Arrange sentences A, B, C and D between sentences 1 and 6 to form a logical sequence.
 1. There are, moreover, unconscious aspects of our perception of reality.
 - A. Within the mind they become psychic events.
 - B. The first is the fact that even when our senses react to real phenomena, sights and sounds, they are somehow translated from the realm of reality.
 - C. Not to speak of the fact that every concrete object is always unknown in certain respects.
 - D. Thus every experience contains an indefinite number of unknown factors.
 6. The reason is, we cannot know the ultimate nature of matter itself.
 - a. CBDA
 - b. BADC
 - c. DBAC
 - d. DABC
5. Arrange sentences A, B, C and D between sentences 1 and 6 to form a logical sequence.
 1. The process continued for million of years.
 - A. Tibet, before the collision of the continents, had been a well-watered plain along the southern edge of Asia.
 - B. Nor has this process stopped.
 - C. On the site of the ancient sea there flow stood the highest and newest mountains in the-world.
 - D. It was not only pushed upwards but gradually deprived of its rainfall by the young mountains and so changed into the high cold desert.
 6. India is still moving north at the rate of 5 centimetres a year, and each year the rocky summits of the Himalayas are a millimetre higher.
 - a. CBAD
 - b. DCBA
 - c. BADC
 - d. ADCB

Directions Q. 6 to 10: Choose the alternative which suggests a coherent paragraph.

6. Choose the alternative which suggests a coherent paragraph.
- The open road still softly calls, like a nearly forgotten song of childhood.
 - Even after 400 generations in villages and cities, we haven't forgotten.
 - The appeal has been meticulously crafted by natural selection as an essential element in our survival.
 - We invest far-off places with a certain romance.
- BCAD
 - OCAB
 - CBDA
 - ACDB
7. Choose the alternative which suggests a coherent paragraph.
- The remaining chapters were written by various authors to Jung's direction.
 - The chapter that bears his name is his work and nobody else's.
 - The final editing of the complete work after Jung's death has been done by Dr. Von Franz.
 - It was written, incidentally, in English.
- CBDA
 - ADBC
 - ACDB
 - DCBA
8. Choose the alternative which suggests a coherent paragraph.
- It is beyond our powers to predict the future.
 - Your own life, or your band's, or even your species' might be owed to a restless few.
 - Long summers, mild winters, which harvests, plentiful game — none of them lasts forever.
 - Catastrophic events have a way of sneaking up on us, of catching us unaware.
- ADCB
 - BCDA
 - ACDB
 - BDCA
9. Choose the alternative which suggests a coherent paragraph.
- The quintessence, for example, a lizard is only fully understandable in the light of the particular possibilities and limitations dictated by its reptilian nature.
 - The films we made, tried to document the lives of particular animals showing how each found its food, defended itself and courted etc.

- We seldom examined the basic character of its anatomy.
 - One element, however, was missing.
- ACBD
 - BADC
 - ADBC
 - CDAB

10. Choose the alternative which suggests a coherent paragraph.
- These researchers have become so knowledgeable about their subjects that they have been guiding us to the right place at the right time.
 - The great increase during the past decade in the number of scientists actively involved in observing animals in the wild is very important.
 - They have guided us to see exactly that aspect of behaviour that was of particular interest to us.
 - Almost every group of large animals is now being studied by scientists everywhere.
- BDAC
 - CBDA
 - DCBA
 - ACBD

Directions: In Q. 11 to 15, four statement with blanks have been given. These statements are followed by four alternatives. Choose the one which fits into the set of statements the maximum number of times.

11. Four statement with blanks have been given. These statements are followed by four alternatives. Choose the one which fits into the set of statements the maximum number of times.
- Professional studies have become the — of the rich.
 - Every citizen has the _____ to speak, travel and live as he pleases.
 - He has a definite _____ over all his rivals.
 - Sheron no longer has the _____ of the company's bungalow and car.
- advantage
 - privilege
 - right
 - right concession
12. Four statement with blanks have been given. These statements are followed by four alternatives. Choose the one which fits into the set of statements the maximum number of times.
- People sensed _____
 - A bad case had come in — a person with a smashed arm.

- C. And then, without warning, struck.
 D. The dogs were the first to recognise the sings of oncoming ____
 a. tragedy
 b. accident
 c. disaster
 d. calamity
13. Four statement with blanks have been given. These statements are followed by four alternatives. Choose the one which fits into the set of statements the maximum number of times.
 A. The men there have fought ____ and emotional withdrawal, and were more capable of helping Jim.
 B. But ____ does occasionally inflict all the adults.
 C. A person who is deeply hurt feels very ____
 D. It is hard to survive this feeling of ____
 a. dejection
 b. lonely
 c. trouble
 d. depression
14. Four statement with blanks have been given. These statements are followed by four alternatives. Choose the one which fits into the set of statements the maximum number of times.
 A. I have had a small power of ____
 B. Down with a very high fever, he suffers from frequents fits of ____
 C. They are now bitter enemies ____ all because of a small ____
 D. Her ____ is the most creative thing she has ever possessed.
 a. illusion
 b. imagination
 c. hallucination
 d. misunderstanding
15. Four statement with blanks have been given. These statements are followed by four alternatives. Choose the one which fits into the set of statements the maximum number of times.
 A. Communism states that every individual must live for the ____
 B. The ____ of the affairs of the nation is deplorable.
 C. ____ have been laid down by the United States, states The Statesman.
 D. No ____ has succeeded in gaining complete autonomy from the Federal government.
 a. state
 b. nation
 c. government
 d. condition

Directions Q 16 to 18: from the given alternatives, select the one in which the pairs of words have a relationship similar to the one between the bold words.

16. LYING : PERJURY
 a. statement : testimony
 b. seeing : observing
 c. taking : stealing
 d. eating : dining
17. PREHISTORIC : MEDIEVAL
 a. Akbar : British
 b. Present : Future
 c. Shakespeare : Tennyson
 d. Coloussus : Elephant
18. LOUD : STENTORIAN
 a. mild : noisy
 b. painful : prickly
 c. adjective : descriptive
 d. bright : resplendent

Directions: Q 19 to 23, four parts of a sentence have been given. From the alternatives, find the combination which best gives a meaningful sentence.

19. Four parts of a sentence have been given. From the alternatives, find the combination which best gives a meaningful sentence.
 A. there was the hope that in another existence a greater happiness would reward one
 B. previous existence, and the effort to do better would be less difficult too when
 C. it would be less difficult to bear the evils of one's own life if
 D. one could think that they were but the necessary outcome of one's errors in a
 a. CABD
 b. BDCA
 c. BADC
 d. CDBA
20. Four parts of a sentence have been given. From the alternatives, find the combination which best gives a meaningful sentence.
 A. he can only renew him self if his soul
 B. he renews himself and
 C. the writer can only be fertile if
 D. is constantly enriched by fresh experience
 a. CBAD
 b. CADB
 c. BDCA
 d. BACD
21. Four parts of a sentence have been given. From the alternatives, find the combination which best gives a meaningful sentence.
 A. but masterpiece is
 B. untaught genius

- C. a laborious career than as the lucky fluke of
D. more likely to come as the culminating point of
- a. CDAB
b. ADCB
c. CDBA
d. ACDB
22. Four parts of a sentence have been given. From the alternatives, find the combination which best gives a meaningful sentence.
A. what interests you is the way in which you have created the illusion
B. they are angry with you, for it was
C. the public is easily disillusioned and then
D. the illusion they loved; they do not understand that
- a. ACBD
b. BDCA
c. CBDA
d. BCAD
23. Four parts of a sentence have been given. From the alternatives, find the combination which best gives a meaningful sentence.
A. an adequate physical and social infrastructure level
B. the pattern of spatial growth in these towns as also to
C. the failure of the government to ensure
D. the roots of the riots are related to
- a. ACBD
b. DBCA
c. ABDC
d. CBDA

Directions Q 24 to 30: Fill in the blanks

24. Ms. Sutcliffe's helpful notes on her latest wine discoveries and her no-nonsense warnings to consumers about _____ wines provide _____ guide to the numbering array of wines of Burgundy.
- a. excellent ... a useful
b. overrated ..., an inadequate
c. overpriced ... a trusty
d. unsatisfactory ... a spotty
25. We were amazed that a man who had been heretofore the most _____ of public speakers could, in a single speech, electrify an audience and bring them cheering to their feet.
- a. enthralling
b. accomplished
c. pedestrian
d. auspicious
26. If you are trying to make a strong impression on your audience, you can not do so by being understated, tentative, or _____.
- a. hyperbolic
b. restrained
c. argumentative

- d. authoritative
27. The neighbour grabbed the boy, and rolled him on the road to _____ the flames.
- a. smother
b. kill
c. burn out
d. fizz out
28. Sam asked me to keep this secret _____.
- a. secret
b. in myself
c. amongst us
d. between us
29. Sometimes the greatest inventions _____ an idea of startling simplicity.
- a. stumbles upon
b. hinge upon
c. starves without
d. lacks
30. Real friends, genuinely wanting the best for the organisation, _____ different garbs.
- a. come in
b. clad in
c. dressed in
d. clothed in

Directions Q. 31 to 40: from the alternatives, choose the one which correctly classifies the four sentences as a

- F: Fact: If it relates to a known matter of direct observation, or an existing reality or something known to be true,
J: Judgment: If it is an opinion or estimate or anticipation of common sense or intention,
I: Inference: If it is a logical conclusion or deduction about something, based on the knowledge of facts.

31. From the alternatives, choose the one which correctly classifies the four sentences as a
- A. If India has embarked on the liberalisation route, she cannot afford to go back.
B. Under these circumstances, being an active supporter of WTO policies will be a good idea.
C. The WTO is a truly global organisation aiming at freer trade.
D. Many member countries have already drafted plans to simplify tariff structures.
- a. FJFI
b. IFJF
c. IJFF
d. IFIF
32. From the alternatives, choose the one which correctly classifies the four sentences as a
- A. The Minister definitely took the wrong step.
B. Under the circumstances, he had many other alternatives.
C. The Prime Minister is embarrassed due to the Minister's decision.

- D. If he has put the government in jeopardy, the Minister must resign.
- JFFI
 - IFJI
 - FFJI
 - IFJI
33. From the alternatives, choose the one which correctly classifies the four sentences as a
- The ideal solution will be to advertise aggressively.
 - One brand is already popular amongst the youth.
 - Reducing prices will mean trouble as our revenues are already dwindling.
 - The correct solution will be to consolidate by aggressive marketing.
- JFIJ
 - FJJI
 - IJFF
 - JJIF
34. From the alternatives, choose the one which correctly classifies the four sentences as a
- If democracy is to survive, the people must develop a sense of consumerism.
 - Consumerism has helped improve the quality of goods in certain countries.
 - The protected environment in our country is helping local manufacturers.
 - The quality of goods suffers if the manufacturers take undue advantage of this.
- IJFJ
 - JFJI
 - IJFJ
 - IFJJ
35. From the alternatives, choose the one which correctly classifies the four sentences as a
- Unless the banks agree to a deferment of the interest, we cannot show profits this year.
 - This would not have happened had we adopted a stricter credit scheme.
 - The revenues so far cover only the cost and salaries.
 - Let us learn a lesson: we cannot make profits without complete control over credit.
- IJFJ
 - IJFI
 - FJIF
 - FJFI
36. From the alternatives, choose the one which correctly classifies the four sentences as a
- Qualities cannot be injected into one's personality.
 - They are completely dependent on the genetic configuration that one inherits.
 - Hence changing our inherent traits is impossible as the genes are unalterable.
 - The least one can do is to try and subdue the "bad qualities".
- FIJI
 - JFFI
 - JFIJ
 - JIFI
37. From the alternatives, choose the one which correctly classifies the four sentences as a
- Everything is purposeless.
 - Nothing before and after the existence of the universe is known with certainty.
 - Man is a part of the purposeless universe, hence man is also purposeless.
 - There is only one way of adding purpose to this universe: Union with Him.
- JFIJ
 - FJJI
 - JFFI
 - IJFJ
38. From the alternatives, choose the one which correctly classifies the four sentences as a
- Everyday social life is impossible without interpersonal relationships.
 - The root of many misunderstandings has been cited in poor relations among individuals.
 - Assuming the above to be true, social life will be much better if people understand the importance of good interpersonal relations.
 - A study reveals that interpersonal relations and hence life in general can be improved with a little effort on the art of individuals.
- FJJI
 - JFIF
 - FIFJ
 - IFFJ
39. From the alternatives, choose the one which correctly classifies the four sentences as a
- The prices of electronic goods are falling.
 - Since we have substantial reductions in import duties, this is obvious.
 - The trend is bound to continue in the near future.
 - But the turnover of the electronic industry is still rising, because consumers are increasing at a rapid rate.
- IFJF
 - FJII
 - FIJF
 - JIFF
40. From the alternatives, choose the one which correctly classifies the four sentences as a
- In the past, it appears, wealth distribution, and not wealth creation has dominated economic policy.
 - Clearly, the government has not bothered to eradicate poverty.

- C. Today's liberalisation is far from the hitherto Nehruvian socialism.
 D. Results are evident in the form of a boom in the manufacturing sector output and turnover of all industries.
- a. FJIF
 b. FIFJ
 c. LJIF
 d. JIFF

Directions Q41 to 50: Each question contains six statements followed by four sets of combinations of three. Choose the set in which the combinations are logically related.

41. Each question contains six statements followed by four sets of combinations of three. Choose the set in which the combinations are logically related.
 A. All vegetarians eat meat.
 B. All those who eat meat are not vegetarians.
 C. All those who eat meat are herbivorous.
 D. All vegetarians are carnivorous.
 E. All those who eat meat are camivorous.
 F. Vegetarians are herbivorous.
- a. BCE
 b. ABE
 c. ACD
 d. ACF
42. Each question contains six statements followed by four sets of combinations of three. Choose the set in which the combinations are logically related.
 A. All roses have thorns.
 B. All roses have nectar.
 C. All plants with nectar have thorns.
 D. All shrubs have roses.
 E. All shrubs have nectar.
 F. Some roses have thorns.
- a. BEF
 b. BCF
 c. BDE
 d. ACF
43. Each question contains six statements followed by four sets of combinations of three. Choose the set in which the combinations are logically related.
 A. No spring is a season.
 B. Some seasons are springs.
 C. Some seasons are autumns.
 D. No seasons are autumns.
 E. Some springs are not autumns.
 F. All springs are autumns.
- a. DFA
 b. BEF
 c. CEB
 d. DEB

44. Each question contains six statements followed by four sets of combinations of three. Choose the set in which the combinations are logically related.
 A. All falcons fly high.
 B. All falcons are blind.
 C. All falcons are birds.
 D. All birds are yellow.
 E. All birds are thirsty.
 F. All falcons are yellow.
- a. ABC
 b. CDF
 c. DEF
 d. BCA
45. Each question contains six statements followed by four sets of combinations of three. Choose the set in which the combinations are logically related.
 A. No wires are hooks.
 B. Some spring are hooks.
 C. All springs are wires.
 D. Some hooks are not wires.
 E. No hook is a spring.
 F. All wires are springs.
- a. AEF
 b. BCF
 c. BEF
 d. ACE
46. Each question contains six statements followed by four sets of combinations of three. Choose the set in which the combinations are logically related.
 A. Some abra are dabra.
 B. All abra are cabra.
 C. All dabra are abra.
 D. All dabra are abra.
 E. Some cabra are abra.
 F. Some cabra are dabra.
- a. AEF
 b. BCF
 c. ABD
 d. BCE
47. Each question contains six statements followed by four sets of combinations of three. Choose the set in which the combinations are logically related.
 A. No plane is a chain.
 B. All manes are chains.
 C. No mane is a plane.
 D. Some manes are not planes.
 E. Some planes are manes.
 F. Some chains are not planes.
- a. ACD
 b. ADF
 c. ABC
 d. CDF
48. Each question contains six statements followed by four sets of combinations of three.

Choose the set in which the combinations are logically related.

- A. All dolls are nice.
- B. All toys are nice.
- C. All toys are dolls.
- D. Some toys are nice.
- E. Some nice things are dolls.
- F. No doll is nice.

- a. CDE
- b. CEF
- c. ACD
- d. BEF

49. Each question contains six statements followed by four sets of combinations of three. Choose the set in which the combinations are logically related.

- A. Some building are not sky-scrapers.
- B. Some sky-scrapers are not buildings.
- C. No structure is a sky-scrafer.
- D. All sky-scrapers are structures.
- E. All sky-scrapers are buildings.
- F. Some structures are not buildings.

- a. ACE
- b. BDF
- c. CDE
- d. ACF

50. Each question contains six statements followed by four sets of combinations of three. Choose the set in which the combinations are logically related.

- A. All bins are buckets.
- B. No bucket is a basket.
- C. No bin is a basket.
- D. Some baskets are buckets.
- E. Some bins are baskets.
- F. No basket is a bin.

- a. BDE
- b. ACB
- c. CDF
- d. ABF

SECTION-2

Directions: Q. 51, choose the best alternative.

51. The number of votes not cast for the Praja Party increased by 25% in the National General Elections over those not cast for it in the previous Assembly Polls, and the Praja Party lost by a majority twice as large as that by which it had won the Assembly Polls. If a total 2,60,000 people voted each time, how many voted for the Praja Party in the Assembly Elections?

- a. 1,10,000
- b. 1,50,000
- c. 1,40,000
- d. 1,20,000

Directions: Q. 52 to 54 are based on the following information: Ghoshbabu is staying at Ghosh Housing Society, Aghosh Colony, Dighoshpur, Calcutta. In Ghosh Housing Society 6 persons read daily Ganshakit and 4 read Anand Bazar Patrika: in his colony there is no person who reads both. The total number of persons who read these two newspapers in Aghosh Colony and Dighoshpur is 52 and 200 respectively. The number of persons who read Ganashakti in Aghosh Colony and Dighoshpur is 33 and 121 respectively; while the persons who read Anand Bazar Patrika in Aghosh Colony and Dighoshpur are 32 and 117 respectively.

52. Number of persons in Dighoshpur who read only Ganashakti is:
- a. 121
 - b. 83
 - c. 79
 - d. 127

53. Number of persons in Aghosh Colony who read both these newspapers is:
- a. 13
 - b. 20
 - c. 19
 - d. 14

54. Number of persons in Aghosh Colony who read only one newspaper is:
- a. 29
 - b. 19
 - c. 39
 - d. 20

Directions Q. 55 to 62: Choose the best alternative.

55. If $\log_7 \log_5 (\sqrt{x} + 5x + \sqrt{x}) = 0$; find the value of x.
- a. 1
 - b. 0
 - c. 2
 - d. None of these

56. A right circular cone, a right circular cylinder and a hemisphere, all have the same radius, and the heights of the cone and cylinder equal their diameters. Then their volumes are proportional, respectively to:

- a. 1:3:1
- b. 2:1:3
- c. 3:2:1
- d. 1:2:3

57. Two towns A and B are 100 km apart. A school is to be built for 100 students of Town B and 30 students of Town A. Expenditure on transport is Rs 1.20 per km. If the total expenditure on transport by all 130 students is to be as small as possible, then the school should be built at:

- a. 33 km from Town A

- b. 33 km from town B
c. Town A
d. Town B
58. One man can do as much work in one day as a woman can do in 2 days. A child does one-third the work in a day as a woman. If an estate-owner hires 39 pairs of hands, men, woman and children in the ratio 6 : 5 : 2 and pays them in all Rs 1113 at the end of the day's work. What must the daily wages of a child be, if the wages are proportional to the amount of work done?
a. Rs. 14
b. Rs. 5
c. Rs. 20
d. Rs. 7
59. A right circular cone of height h is cut by a plane parallel to the base and at a distance $h/3$ from the vertex, then the volumes of the resulting cone and frustum are in the ratio:
a. 1 : 3
b. 8 : 19
c. 1 : 4
d. 1 : 7
60. If $a + b + c = 0$, where $a \neq b \neq c$, then what is the value of:
$$\frac{a^2}{2a^2 + bc} + \frac{b}{2b^2 + ac} + \frac{c^2}{2c^2 + ab}$$

a. zero
b. 1
c. -1
d. abc
61. If the harmonic mean between two positive numbers is to their geometric mean as 12 : 13, then the numbers could be in the ratio:
a. 12 : 13
b. 1/12 : 1/13
c. 4 : 9
d. 2 : 3
62. If one root of $x^2 + px + 12 = 0$ is 4, while the equation $x^2 + px + q = 0$ has equal roots, then the value of q is:
a. 49/4
b. 4/49
c. 4
d. $\frac{1}{4}$

Directions: Q. 63 and 64 are based on the following information.

If $md(x) = |x|$,
 $mn(x, y)$ = minimum of x and y , and
 $ma(a, b, c)$ = maximum of a, b, c

63. The value of $ma(a)[md(a), mn(md(b), a), mn(ab, md(ac))]$ where $a = -2, b = -3, c = 4$ is:
a. 2
b. 6

- c. 8
d. -2
64. Given that $a > b$, then the relation $ma[md(a), mn(a, b)] = mn[a, md(ma(a, b))]$ does not hold if:
a. $a < 0, b < 0$
b. $a > 0, b > 0$
c. $a > 0, b < 0, |a| < |b|$
d. $a > 0, b < 0, |a| > |b|$

Directions for questions 65 to 73: Choose the best alternative.

65. A water tank has three taps A, B, and C. A fills four buckets in 24 min, B fills 8 buckets in 1 hour and C fills 2 buckets in 20 minutes. If all the taps are opened together a full tank is emptied in 2 hours. If a bucket can hold 5 litres of water, what is the capacity of the tank?
a. 120 litres
b. 240 litres
c. 180 litres
d. 60 litres
66. Shyam went from Delhi to Simla via Chandigarh by car. The distance from Delhi to Chandigarh is $3/4$ times the distance from Chandigarh to Simla. The average speed from Delhi to Chandigarh was half as much again as that from Chandigarh to Simla. If the average speed for the entire journey was 49 kmph, what was the average speed from Chandigarh to Simla?
a. 39.2 kmph
b. 63 kmph
c. 42 kmph
d. None of these
67. The fourth term of an arithmetic progression is 8. What is the sum of the first 7 terms of the arithmetic progression?
a. 7
b. 64
c. 56
d. cannot be determined
68. It takes a pendulum of a clock 7 seconds to strike 4 o'clock. How much time will it take to strike 11 o'clock?
a. 18 seconds
b. 20 seconds
c. 19.25 seconds
d. 23.33 seconds
69. Along a road lie an odd number of stones placed at intervals of 10 m. These stones have to be assembled around the middle stone. A person can carry only one stone at a time. A man carried out the job starting with the stone in the middle, carrying stones in succession, thereby covering a distance of 4.8 km. Then the number of stones is:

- a. 35
b. 15
c. 29
d. 31
70. What is the smallest number, which when increased by 5 is completely divisible by 8, 11 and 24?
a. 264
b. 259
c. 269
d. None of these
71. A man buys spirit at Rs. 60 per litre, adds water to it and then sells it at Rs. 75 per litre. What is the ratio of spirit to water if his profit in the deal is 37.5%?
a. 9 : 1
b. 10 : 1
c. 11 : 1
d. None of these
72. Four friends start from four towns, which are at the four corners of an imaginary rectangle. They meet at a point which falls inside the rectangle, after travelling distances of 40, 50, and 60 metres. The maximum distance that the fourth could have travelled is (approximately):
a. 67 metres
b. 52 metres
c. 22.5 metres
d. Cannot be determined
73. A and B walk from X to Y, a distance of 27 km at 5 kmph and 7 kmph respectively. B reaches Y and immediately turns back meeting A at Z. What is the distance from X to Z?
a. 25 km
b. 22.5 km
c. 24 km
d. 20 km

Direction: Q. 74 to 76, refer to the following information:

Alphonso, on his deathbed, keeps half his property for his wife and divides the rest equally among his three sons Ben, Carl and Dave. Some years later Ben dies leaving half his property to his widow and half to his brothers Carl and Dave together, shared equally. When Carl makes his will, he keeps half his property for his widow and the rest he bequeaths to his younger brother Dave. When Dave dies some years later, he keeps half his property for his widow and the remaining for his mother. The mother now has Rs 1,575,000.

74. What was the worth of the total property?
a. Rs. 30 lakh
b. Rs. 8 lakh
c. Rs. 18 lakh
d. Rs. 24 lakh
75. What was Carl's original share?
a. Rs. 4 lakh
b. Rs. 12 lakh

- c. Rs. 6 lakh
d. Rs. 5 lakh
76. What was the ratio of the property owned by the widows of the three sons, in the end?
a. 7 : 9 : 13
b. 8 : 10 : 15
c. 5 : 7 : 9
d. 9 : 12 : 13

Directions: Q. 77 to 80, choose the best alternative:

77. $\log_{216}\sqrt{6}$ to the base 6 is:
a. 3
b. $\frac{3}{2}$
c. $\frac{7}{2}$
d. None of these
78. There is leak in the bottom of a tank. This leak can empty a full tank in 8 hours. When the tank is full, a tap is opened into the tank which admits 6 litres per hour and the tank is now emptied in 12 hours. What is the capacity of the tank?
a. 28.8 litres
b. 36 litres
c. 144 litres
d. Cannot be determined
79. Which is the least number that must be subtracted from 1856, so that the remainder, when divided by 7, 12, and 16, will leave the same remainder 4.
a. 137
b. 1361
c. 140
d. 172
80. A dealer offers a cash discount of 20% and still makes a profit of 20%, when he further allows 16, articles to a dozen to a particularly sticky bargainer. How much percent above the cost price were his wares listed?
a. 100%
b. 80%
c. 75%
d. $66\frac{2}{3}\%$

Directions: Q 81 to 85, data is a provided followed by two statements - I and II - both resulting in a value, I and II.

Mark a if I > II

Mark b if I < II

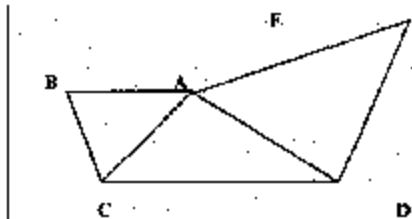
Mark c if I = II

Mark d if nothing can be said.

81. Nineteen years from now Jackson will be 3 times as old as Joseph is now. Johnson is three years younger than Jackson.
1. Johnson's age now.
2. Joseph's age now.

- Mark a if $I > II$
- Mark b if $I < II$
- Mark c if $I = II$
- Mark d if nothing can be said.

82. In $\triangle ACD$, $AD = AC$ and $\angle C = 2\angle E$. The distance between the parallel lines AB and CD is h . $\angle CAE = 150^\circ$ and $\angle DEA = 30^\circ$. Then:



- Area of parallelogram $ABCD$
- Area of $\triangle ADE$.

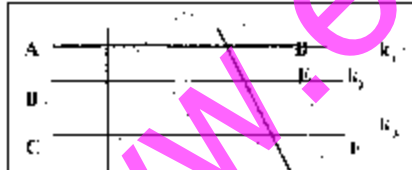
 - Mark a if $I > II$
 - Mark b if $I < II$
 - Mark c if $I = II$
 - Mark d if nothing can be said.

83. Last week Manoj received Rs 10 in commission for selling 100 copies of a magazine. Last week Manu sold 100 copies of this magazine. He received his salary of Rs 5 per week plus a commission of 2 paise for each of the first 25 copies sold, 3 paise for each of next 25 copies sold and 4 paise for each copy thereafter.

- Manoj's commission in the last week
- Manu's total income for last week.
- Area of $\triangle ADE$.

 - Mark a if $I > II$
 - Mark b if $I < II$
 - Mark c if $I = II$
 - Mark d if nothing can be said.

84. k_1, k_2, k_3 are parallel lines. $AD = 2$ cm, $BE = 8$ cm and $CF = 32$ cm.



- $(AB) \times (EF)$
- $(BC) \times (DE)$
- Area of $\triangle ADE$.

 - Mark a if $I > II$
 - Mark b if $I < II$
 - Mark c if $I = II$
 - Mark d if nothing can be said.

- 85.
- The probability of encountering 54 Sundays in a leap year.
 - The probability of encountering 53 Sundays in a non-leap year.
 - Mark a if $I > II$
 - Mark b if $I < II$
 - Mark c if $I = II$
 - Mark d if nothing can be said.

Directions: Choose the best option.

86. The winning relay team in a high school sports competition clocked 4-8 minutes for a distance of 13.2 km. Its runners A, B, C and D maintained speeds of 15 kmph, 16 kmph, 17 kmph and 18 kmph respectively. What is the ratio of the time taken by B to that taken by D?
- 5 : 16
 - 5 : 17
 - 9 : 8
 - 8 : 9

Directions: Q. 87 to 90: If $f(x) = 2x + 3$ and $g(x) = (x-3)/2$, then

87. Then $f \circ g(x) =$
- 1
 - $g(f(x))$
 - $(15x + 9)/(16x - 5)$
 - $1/x$
88. For what value of x , $f(x) = g(x-3)$
- 3
 - $1/4$
 - 4
 - None of these
89. What is value of $(f \circ g \circ g \circ f)(x) \circ f \circ g \circ f(x)$
- x
 - x^2
 - $(5x+3)/(4x-1)$
 - $[(x+3)(5x+3)]/[4x-5)(4x-1)]$
90. What is the value of $f \circ (f \circ g) \circ (g \circ f)(x)$
- x
 - x^2
 - $2x+3$
 - $(x+3)/(4x-5)$

Directions Q. 91 to 100: Each item has a question followed by two statements

Mark a, if the question can be answered with the help of I alone.

Mark b, if the question can be answered with the help of II alone.

Mark c, if the question can be answered only with the help of both I and II

Mark d, if the question cannot be answered even with the help of both statements.

91. Is the distance from the office to home less than the distance from the cinema hall to home?
- The time taken to travel from home to office is as much as the time taken from home to the cinema hall, both distances being covered without stopping.
 - The road from the cinema hall to home is bad and speed reduces, as compared to that on the road from home to the office.

- a. Mark a, if the question can be answered with the help of I alone.
 b. Mark b, if the question can be answered with the help of II alone.
 c. Mark c, if the question can be answered only with the help of both I and II
 d. Mark d, if the question cannot be answered even with the help of both statements.
92. A and B work at digging a ditch alternately for a day each. If A can dig a ditch in 'a' days and B can dig it in 'b' days, will work get done faster if A begins the work?
 1. n is a positive integer such that $n(1/a + 1/b) = 1$
 2. $b > a$
 a. Mark a, if the question can be answered with the help of I alone.
 b. Mark b, if the question can be answered with the help of II alone.
 c. Mark c, if the question can be answered only with the help of both I and II
 d. Mark d, if the question cannot be answered even with the help of both statements.
93. If twenty sweets are distributed among some boys and girls such that each girl gets two sweets and each boys gets three sweets, what is the number of boys and girls?
 1. The number of girls is not more than five.
 2. If each girl gets 3 sweets and each boy gets 2 sweets, the number of sweets required for the children will still be the same.
 a. Mark a, if the question can be answered with the help of I alone.
 b. Mark b, if the question can be answered with the help of II alone.
 c. Mark c, if the question can be answered only with the help of both I and II
 d. Mark d, if the question cannot be answered even with the help of both statements.
94. If the selling price were to be increased by 10%, the sales would reduce by 10%. In what ratio would profits change?
 1. The cost price remains constant.
 2. The cost price increased by 10%.
 a. Mark a, if the question can be answered with the help of I alone.
 b. Mark b, if the question can be answered with the help of II alone.
 c. Mark c, if the question can be answered only with the help of both I and II
 d. Mark d, if the question cannot be answered even with the help of both statements.
95. What is the average weight of the 3 new team members who are recently included into the team?
 1. The average weight of the team increases by 20 kg.
 2. The 3 new men substitute 3 earlier members whose weighs are 64 kg, 75 kg, and 66 kg.
 a. Mark a, if the question can be answered with the help of I alone.
 b. Mark b, if the question can be answered with the help of II alone.
 c. Mark c, if the question can be answered only with the help of both I and II
 d. Mark d, if the question cannot be answered even with the help of both statements.
96. Is segment PQ greater than segment RS?
 1. $PB > RE, BQ = ES$
 2. B is a point on PQ, E is a point on RS.
 a. Mark a, if the question can be answered with the help of I alone.
 b. Mark b, if the question can be answered with the help of II alone.
 c. Mark c, if the question can be answered only with the help of both I and II
 d. Mark d, if the question cannot be answered even with the help of both statements.
97. Three boys had a few Coffee Bite toffees with them. The number of toffees with the second were four more than those with the first and the number of toffees with the third were four more than those with the second. How many toffees were there in all?
 1. The number of toffees with each of them is a multiple of 2.
 2. The first boy ate up four toffees from what he had and the second boy ate up six toffees from what had and the third boy gave them two toffees each from what he had, and the number of toffees remaining with each of them formed a geometric progression.
 a. Mark a, if the question can be answered with the help of I alone.
 b. Mark b, if the question can be answered with the help of II alone.
 c. Mark c, if the question can be answered only with the help of both I and II
 d. Mark d, if the question cannot be answered even with the help of both statements.
98. Little Beau Peep she lost her sheep, she couldn't remember how many were there. She knew she would have 400 more next year, than the number of sheep she had last year. How many sheep were there?

1. The number of sheep last year was 20% more than the year before that and this simple rate of increase continues to be the same for the next 10 years.
2. The increase is compounded annually.
- a. Mark a, if the question can be answered with the help of I alone.
- b. Mark b, if the question can be answered with the help of II alone.
- c. Mark c, if the question can be answered only with the help of both I and II
- d. Mark d, if the question cannot be answered even with the help of both statements.

99. What will be the total cost of creating a 1-foot border of tiles along the inside edges of a room?

1. The room is 48 feet in length and 50 feet in breadth.
2. Every tile costs Rs. 10.
- a. Mark a, if the question can be answered with the help of I alone.
- b. Mark b, if the question can be answered with the help of II alone.
- c. Mark c, if the question can be answered only with the help of both I and II
- d. Mark d, if the question cannot be answered even with the help of both statements.

100. Ten boys to a neighbouring orchard. Each boy steals a few mangoes. What is the total number of mangoes they steal?

1. The first boy steals 4 mangoes, the fourth boy steals 16 mangoes, the eight boy 32 mangoes and the tenth boy steals 40 mangoes.
2. The first boy stole the minimum number of mangoes and the tenth boy stole the maximum number of mangoes.
- a. Mark a, if the question can be answered with the help of I alone.
- b. Mark b, if the question can be answered with the help of II alone.
- c. Mark c, if the question can be answered only with the help of both I and II
- d. Mark d, if the question cannot be answered even with the help of both statements.

PASSAGE 1

The translation in 1947 of Jean-Paul Sartre's lecture, "Existentialism is a Humanism" (1945), ensured that the term existentialism would enter into the vocabulary of American thought and culture. Existentialism is notoriously difficult to define, especially since it claims a varied philosophical background, drawing from Rene Descartes, Soren Aabye Kierkegaard, Friedrich Wilhelm Nietzsche, and Martin Heidegger. Moreover, as Gabriel Marcel and others announced, an existentialist could believe in God as mightily as a Sartre embraced atheism. Sartre's existentialism, in its boldest outlines, came to rest on the assertion that man is free, and that in having the freedom to choose, man encounters anxiety and despair. While existentialism in Sartre's hands often dwelled on the absurd and problematic nature of human existence, the essential conclusion that the existential perspective drew was that our existence is of our own making; we are responsible for our fates. This "dreadful freedom" was at once exhilarating and frightening.

In his introduction to Sartre's lecture on existentialism, translator Bernard Frechtman remarked that the American vogue for Sartre's "philosophy, which had begun in 1945 was ... one of those curious phenomena which might, if properly examined, illuminate some peculiarities of culture in America." Alas, Frechtman failed to develop this insight, although he did suggest that the popular press in America had focused too much on Sartre's personality and too little on his ideas. Examination of the initial dissemination of French existentialism in American popular culture reveals a number of intertwined themes. First, much of the American fascination with French existentialism was rooted in what French sociologist Pierre Bourdieu calls "cultural capital," the power of certain cultural representations to command prestige and respect. Thus, from the start, fashion and idea coexisted to define the dissemination of French existentialism in America. Second, American coverage of French existentialists such as Sartre, Simone de Beauvoir, and Albert Camus exemplified what historian Daniel Boorstin calls the predominance of the celebrity in modern American culture. The popular reception of existentialism in America was as much about the image of the intellectual as the content of existentialist ideas. Third, Sartre and other existentialists were portrayed in American popular culture as exemplary of "an erratic left-bank bohemianism," an image that fit poorly with post-war celebrations of the American intellectual as a sober minded, optimistic, and respectable citizen. By popularising French existentialists as celebrities and associating their pessimistic philosophy with the trauma France had experienced in World War II, the popular press undermined their reception by the American intellectual community. Many considered existentialism a passing vogue, not centrally applicable to the life of the mind in America. Thus, the cultural

SECTION-3

Directions Q. 101 to 150: Read all passages carefully and choose your answer from the four alternatives provided.

Directions: Read the passages carefully and mark the best choice as the answer.

politics for the dissemination of existentialism in America became complex, marked by tensions in control of the cultural capital associated with French culture and the image of the intellectual. It was nearly 20 years before existentialism was accepted as a viable philosophy relevant to the modern American intellectual community.

Americans in the 1940s highly valued French ideas, art, and fashion, less for any essential quality than for the prestige that came with their French label. These perceptions were satirised in two cartoons that ran in the late 1940s in the *New Yorker*, which apotheosised a certain popular, middlebrow style in America. In one cartoon, a rather dishevelled street vendor selling ties at 25 cents each looks askance at his well-dressed competitor who is able to sell the same items, elegantly called cravats, at one dollar apiece. Another cartoon shows a doughty group of women, one of whom exclaims: "I know what! Let's play Old-Fashioned before we start talking French". The allure of France, of things French in American culture, must not be underestimated as a continuing theme in accounts of the popularity of existentialism and of existential thinkers, and existential thinkers consciously played on this fascination.

Before the Second World War in Europe had ended, before the atomic bomb had forever scarred the physical and mental landscape of modern men and women, the existential figure and ideas of Jean-Paul Sartre had alighted on American shores. Sartre was determined to become an influential figure in both Europe and the United States. In "Paris Alive," translated by Lincoln Kirstein, Sartre introduced himself to Americans. In a note to the essay, the editors of the magazine characterised Sartre, incorrectly, as "one of the military leaders" of the French resistance during the war. Although Sartre did not refer to himself as a leader, he universalised his discussion of the psychological impact of German occupation upon the French by pronouncing: "Never were we freer than under the German occupation." With this strange, apparently contradictory observation about the nature of freedom, Sartre began to communicate existentialist ideas—without naming them formally—to his American audience. In the essay, Sartre also touched upon themes that would later become associated with the essentials of an existentialist perspective: authenticity, choice, the presence of death, loneliness, responsibility, and the notion that "in his freedom in choosing himself, he [man] chose the freedom of all."

Major introductions to existentialism appeared in American magazines between 1945 and 1948. The dissemination of existentialist ideas and personalities in the popular press was more than a story being narrated upon the inert intellectual bodies of Sartre, Beauvoir, Camus, and existentialism. As Anna Boschetti has noted, Sartre and his followers had carefully orchestrated their reception in order to

capture the French intellectual field, thus assuring, albeit briefly, that existentialism would dominate. Sartre and Beauvoir attempted to influence the reception of their philosophical perspective on the American intellectual field as well.

101. Why does the author say that the term "Existentialism" is notoriously difficult to define?
 1. it has a varied background
 2. an existentialist believes in God
 3. it draws from many thinkers
 - a. 1 and 2
 - b. 1 and 3
 - c. 1, 2 and 3
 - d. Only 2
102. Which of the following statement is true?
 - a. An existentialist believes in God
 - b. Existentialism originated in France
 - c. Existentialists were against freedom as they thought it was 'dreadful'
 - d. Existentialism was not accepted by the Americans
103. The main point that the author makes in the third paragraph is that:
 - a. France was the cultural capital of the world
 - b. the existentialists were considered as "erratic, left- bank bohemians".
 - c. the portrayal in the media of existentialism created misunderstandings about intellectuals
 - d. Existentialism was not accepted as a philosophy for 20 years
104. What word would best replace the word "apotheosise" as used in the passage?
 - a. hypothesised
 - b. created
 - c. encouraged
 - d. glorify
105. It can be concluded from the passage that:
 - a. the philosophers held the American press in disdain
 - b. the philosophers did not bother about what was written about them in the press
 - c. the philosophers were satirised in cartoons
 - d. the philosophers used the press to promote them selves
106. What would be the best meaning of the line, "Never were we freer than under the German occupation."
 - a. the French were free during the German occupation
 - b. the French were not free during the German occupation
 - c. the French were responsible for their own fates
 - d. difficult to say

107. What is the best definition of existentialism, that can be inferred from the passage?
- man is what he makes himself and is also responsible for what he makes of himself
 - to exist is to be
 - man is free but the freedom to choose causes him anxiety
 - difficult to say
108. Which of the following is not mentioned in the passage?
- Albert Camus
 - Wilhelm Nietzsche
 - Bernard Frechtman
 - Rene Cassin
109. What would be the best title for the passage?
- Existentialism
 - The Impact of Existentialism on American Culture
 - The French existentialist philosophers
 - How the Press Created Existentialism

PASSAGE 2

"Man errs, till he has ceased to strive." So sighs the figure of God in the prologue to Goethe's great poetical drama, "Faust". Driven by his boundless desire for knowledge, the play's erring hero strives mightily throughout to discover "what holds the world together in its innermost self." Generations of directors and theatregoers have asked themselves much the same question when struggling to comprehend this theatrical Everest.

For Peter Stein, one of Germany's most celebrated directors, staging all 12,111 lines of the "world poem" Goethe spent nearly 60 years writing has been his life-long dream. Its reputation for being un-performable began with the writer himself. Goethe described "Faust" to his friend and fellow dramatist Friedrich Schiller as a "poetic monstrosity". Largely because of its unique, uncategorisable second part, no modern director has ever staged it at one go and in its entirety. But though he had to wait until his 60s, Mr. Stein never abandoned his goal. His production at once became the talk of Germany.

"Any fool can stage part one of 'Faust', said Mr Stein modestly. And while even he would agree that not every fool can stage part one well, its themes and stories are familiar enough. Conceived in the '1770s, when Goethe was in the flush of Sturm and Drang romanticism, part one bursts with ideas and with youthful exuberance. It is also dramatically original and psychologically brilliant.

Mephistopheles appears to a disillusioned Faust and offers to be his servant, revealing to him all "earthly" knowledge. The catch is that, in the next world, they will switch roles. Faust takes the offer. Yet he is hungry also for power and pleasure. "Two souls do dwell, alas, within my breast!", he says. He errs badly, and philosophical drama becomes human tragedy. Faust seduces Gretchen, an innocent girl, who is

executed for killing their illegitimate child. Faust also causes the death of her mother and brother.

Yet the cause of all this suffering himself survives for part two—Goethe needed no lesson from Hollywood—and it is here that the difficulties begin. Most directors, simply give up before the challenge of the second part, and it is not hard to see why. Its range of subject matter, its mixture of genres and its varieties of tone make it a challenge to read, let alone to pull together into a coherent piece of theatre. It took Mr Stein decades to understand, though now, he says, he reads it "like a newspaper".

Maybe so, but Bild Zeitung it is not. There is virtually no storyline, no unity of time or place and no limit to the spiritual and intellectual conundrums with which Goethe's luxuriant imagination confronts his wandering heir. The poet here sums up his personal religion, depicting a complex, imperfect deity that is humorous, cynical and kind. At the same time, part two is worldly and comic, bringing in Goethe's learned scientific interests as well as his wide-ranging historical and economic opinions. Topics include paper currency, artificial life, Norse and classical myth as well as the restless quest for technical progress.

Quite apart from what it all means, there are several practical facts that until now have killed any attempt at professional staging. The full play lasts 21 hours, including breaks. Counting stage time alone, it runs for 15 hours. (A comparable tour-de-force is Richard Wagner's four-opera "Ring" cycle, which runs from 14 to 17 hours). At Hanover, audiences have a choice of a two-day "Faust" marathon at weekends or six sessions on consecutive nights. The play also needs a huge performance space and a committed group of actors. Mr Stein's 35 actors have signed on to his "Faust" project for the duration.

As guide ropes in scaling this peak, Mr Stein chose to stick to the text and to follow Goethe's own stage directions. This refusal to impose an interpretation of his own provoked the critics, but made theatrical sense. When Mephistopheles first appears to Faust, he is disguised as a black poodle, and a real black dog trots on stage, wagging his tail in a deceptively undevilish way. In part two, as Faust speaks the lines, "I watch a mirror here of man's whole story", Goethe called for a rainbow, and Mr Stein's designer artfully obliges.

The production is a feast for the eye, even if Ferdinand Wogerbauer's part one set, as some have complained, is too safely conventional. The book-lined study at the beginning in which Faust glumly ponders his life is lit by a single gothic window. When Faust and Mephistopheles enter the witch's kitchen, she is a truly ugly Halloween witch. Stefan Mayers design for the second part is, suitably enough, more abstract and does not follow to the last detail Goethe's instructions for leafy groves and rocky caverns.

For theatregoers, it is all an exhilarating experience and not as wearing as it sounds. Mr Stein has used two

stages in a large hall in Hanover's Expo zoo compound. The audience moves from stage to stage after each interval. A nice air of theatrical communism prevails. In the masked carnival and in the imperial banquet scenes, the audience becomes part of the play. After watching it over two days, this reviewer at least felt as if the actors had become old friends.

Most of them performed at a high level throughout, an astonishing display of expressive talent and stamina. Mr Stein split the roles of Faust and Mephistopheles in two, Bruno Ganz and Christian Nickel were to share playing Faust. But Mr Ganz, one of the finest German-speaking actors, hurt himself in rehearsal. For now, the relatively unknown Mr Nickel must handle the entire role. Given that he is on stage for six of the play's 15 hours, he can perhaps be forgiven for a somewhat uneven performance. The two actors playing Mephistopheles have a different problem. One is brilliant, funny and cynical the other is graver and more earnest. Dorothee Hartinger as Gretchen is a little too sparkly and charming for the plain girl she is supposed to play.

110. Which of the following statements is not true?
- Goethe spent almost 60 years in writing "Faust"
 - Faust agrees to trade souls with Mephistopheles in the next birth
 - Faust is an epic poem
 - Faust is a true story of a German doctor
111. What would be the best meaning for the line, 'Two souls do dwell, alas, within my breast'?
- Faust had two souls
 - Faust was confused and thus erred badly
 - Faust was caught up between two conflicting desires
 - Every man has two natures, one for earthly knowledge and the other for power and pleasure
112. Why is it considered difficult to stage the second part of Faust?
- it has a wide range of subject matter
 - it is a mixture of genres -
 - it is difficult to read and understand
- Only I and II
 - Only II and III
 - Only I and III
 - I, II and III
113. What would be the best meaning of 'four de force' mentioned in the passage?
- a long tour lasting 14-17 hours
 - a forceful display of ideas
 - a feat of strength or skill
 - a play having a forceful impact
114. Which of the following statements are true?
- Mephistopheles is a black poodle in the play

- Mr Stein did not follow the instructions of Goethe
 - The sets for the two parts are designed by different designers
 - none of the above
115. Why did it make theatrical sense to follow Goethe's original stage dissections?
- it would keep the play authentic
 - it would help in keeping with what Goethe originally meant
 - it would not have provoked the critics
 - it was what Mr Stein wanted to do
116. Which of the following are NOT defects of the play, as mentioned in the passage?
- Gretchen is too sparkly and charming
 - the audience becomes part of the play
 - the role of Mephistopheles has been split in two.
- Only I
 - Only II
 - I & III
 - I, II and III
117. What does the author want to emphasise when he says that an air of "theatrical communism" prevails?
- the audience and the actors become as one
 - there is much confusion in the play
 - the workers and the viewers are treated as one
 - there is no difference among the actors and the audience
118. The passage could best be described as:
- An excerpt from a literary magazine
 - A review of Faust
 - An attempt to explain Faust
 - Praise the director who has attempted the impossible

PASSAGE-3

The world renowned management guru and the originator of the concept of core competence, C.K. Prahalad, explains that the concept was born when the management world was flooded with improvement ideas arising from the TQM genre and Reengineering. What Prahalad and Gary Hamel argue is that while these measures may lead to better or improved management, the quest for competitiveness has to primarily come from different strategies to be pursued. They call this the strategic intent. How are these strategies to be formed?

A distinction has to be drawn between products and competencies. While a product is the resultant of various inputs that are organised in an efficient manner, competencies are grown from within. They cannot be just organised but will have to be built over a period of time. While products primarily require facilities, competencies are a combination of people with the requisite know-how acquisition. Thus, competitiveness born out of product superiority can

easily be eroded when competitors improve their products. On the other hand, competitiveness born out of ingrained competencies can stay longer.

The picture before and after the Second World War is proof of the above concept. Even though the physical facilities were all devastated, because of basic competencies, the people of Germany and Japan could rebuild the economy in no time. The wheel has come a full circle by the end of the century when they are on the top again! During the 80s, Canon and Honda grew enormously compared to Xerox and Chrysler. Through the adoption of the improvement method competitors quickly reach comparable standards. What then can still provide the competitive edge? This is where the advantage is to be generated through management's ability to consolidate technologies and production skills into competencies that enable individual businesses to seize quickly the changing opportunities. Core competencies, according to Prahalad, are the collective learning in the organisation, especially how to co-ordinate diverse production skills and integrate multiple streams of technologies.

Often, there is difficulty in identifying what is a company's core competence. Of course, what it is not can perhaps be more easily perceived. It is not merely vertically integrating the business, thereby making everything under one roof. It is not merely using common plant or services facility or sales force.

Hamel and Prahalad suggest 3 tests. (1) Core competence provides potential access to a wide variety of markets; (2) it should make a significant contribution to the perceived customer benefits of the end product and (3) it should be difficult for competitors to imitate. It has been estimated that few companies can build world leadership in more than 5 or 6 fundamental competencies. In the Indian scene, it is easy to see that companies like Sundarani Fasteners, Reliance and Bajaj Auto which have figured in the Asia's top 20 companies list have indeed built their fortunes based on their core competencies. But the picture is not all that clear with regard to others.

Is it the reason why they are not competitive globally? The answer is not all that easy. A criticism that is levelled is that the Indian business houses are far too diversified and not focused. The counter-point to the Prahaladian doctrine has come from Prof. Palepu of the Harvard Business School who says that diversification is not strategically incorrect in this era of core competence. He argues that core competence is a Western concept and that Asia's large business groups can nurture non-conventional competencies. He says that diversification in a group can be combined with focus in a company. His main contention is that any organisation is a function of the markets around it. Since markets always don't work in developing economies like in the Western world, institutional mechanisms do not exist on their own and this is precisely provided by large, diversified business groups. The five institutional elements identified are

(1) the market in which a company sells its goods and services to its consumers; (2) the market in which it gets talent into its companies; (3) the market where it raises its financial resources; (4) the market for contracts or the legal system which binds contracts or the legal system which binds contracts and (5) the degree of government intervention. According to Palepu, the big business groups actually create these institutions as their core competencies.

More often these are intangible and are expensive to build and can only be attempted by large business houses. However, he also mentions that this institution building will take at least 2 or 3 decades after which the core competency concept may become more applicable.

When we consider the above concept, it fits in very well with the present day need of the tremendous infrastructure problems which the government by itself is just unable to cope with. The idea of large business houses entering into this infrastructure area is considered to be a necessary one, though it may run completely contrary to the idea of core competencies.

It would appear that it is not all that easy for Indian companies to merely follow the concept of core competence. A new formula has to be hammered into shape as to what core competencies to identify and develop and what institutional mechanisms are to be evolved. This will indeed be the turning point. Some examples do exist in this context from the Asian Tigers, who have not been studied in as great a depth as Western corporations. We are indeed at cross roads and the turning may well be a truly Indian solution to myriad Indian problems.

119. What is strategic intent, according to the passage?
 - a. TQM genre was responsible for the birth of the concept of core competence
 - b. The measures may lead to better or improved management
 - c. Different strategies have to be followed to reach the quest for competitiveness
 - d. Re-engineering is also the reason for the concept of core competence
120. What, according to the passage, is the difference between product and competencies?
 - a. products are technological but competencies depends on people
 - b. competencies have to be shaped and developed but products have to be made
 - c. products are efficient use of resources, but competencies are human resources and knowhow
 - d. products and competencies are the same, only the approach is different
121. What is the central idea of the passage?
 - a. An explanation of core competence

- b. Coping with complex managerial challenges
 - c. How to apply core competence to Indian industry
 - d. Trends in modern management thought
122. The proof of core competence after the Second World War is that
- a. the Germans and the Japanese rebuilt their economy though the physical facilities were all destroyed and they are on the top again
 - b. Canon and Honda grew enormously compared to Xerox and Chrysler
 - c. many Japanese companies became world leaders
 - d. technologies were consolidated into competencies to take advantage of changing opportunities
123. Which of the following are the evaluation tests for core competence?
- I. opening up of access to a wide variety of markets
 - II. significant contribution to customer benefits of the end product
 - III. difficulty in being imitated
 - IV. that no company is able to build global leadership in more than 5 or 6 fundamental competencies
- a. I, II and III
 - b. II and III
 - c. II and IV
 - d. I, II and III
124. What is the title for the passage?
- a. Prahalad and Gary Hamel's New Creed
 - b. Identifying and developing core competencies
 - c. Infrastructure Development and Core Competence
 - d. The Prahaladian doctrine
125. Palepu of Harvard Business School:
- a. agrees with the concept of core competence
 - b. does not agree with the concept of core competence
 - c. is indifferent to the concept of core competence
 - d. difficult to say
126. The institutional elements according to Prof. Palepu are
- I. selling and service market
 - II. market for spotting talent for their companies
 - III. financial resource market
 - IV. market for contracts and legal system and the degree of government intervention
- a. I and II
 - b. II and III
 - c. II and IV
 - d. I, II and III

PASSAGE 4

While several discoveries in science ever since people started engaging in organised research activity have led to a better life for the average human being, it cannot be gainsaid that some have been used to cause untold misery to vast sections. The developments in science and technology have proved to be a mixed blessing-marvellous medical discoveries like penicillin and antibiotics have cured diseases whereas the fabrication of the atom bomb has resulted in wiping out entire towns and populations. It all goes to show that science is a double-edged weapon because it can be used both for good and evil purposes. Herein comes the crucial question of ethics. Is it not possible for a scientist to say "no" when asked to taken up research that may one day lead to destruction? This poser has been troubling the participants in research activity for decades. Noelle tenoir, who has served as a chairperson on the International Bioethics Committee of UNESCO and is now heading the European Commission's Group of Advisers on the Ethical Implication so Biotechnology, has done well to highlight several related issues in the World Science Report.

While bitter disputes followed the dropping of the atom bombs over the two Japanese cities of Hiroshima and Nagasaki in 1945, there was no organised reaction as such. But the developments in biology like genetic engineering, which is nothing but a process of modifying living organisms, led to an ethics movement even three decades ago. Significantly enough, a conference of geneticists meeting at Azilomar in the U.S. declared a moratorium on research for one year, providing a pause for understanding the possible risks to human health and the environment as a result of using genetically-modified organisms. During the 1960s, ethics panels were setup in several countries but France was the first country to establish a national consultative committee for ethics in the life and health sciences. A survey made three years ago by the UNESCO Bioethics Unit pointed to the functioning of more than 200 national ethics committees all over the world. It is interesting to learn that there is now a discernible movement from ethics to law with the aim of protecting human rights faced with the challenge of science and technology. Again, it is worth noting that the U.S. parliament placed the issue of the links between bioethics and human rights on its agenda. Essentially, the objective of these efforts is to affirm that the human being is not a mere object for science.

127. Why are developments in science a double-edged weapon?
- a. they have resulted in both harmless and harmful things
 - b. they have been beneficial and destructive
 - c. they have developed without ethics
 - d. none of the above

128. Why did the scientists declare a moratorium on research for one year?
- to study the risks to human health
 - to study the risks to environment
 - to debate about ethical issues
- I and II
 - I and III
 - II and III
 - I, II and III
129. Based on the above passage, we can say that the author feels that:
- scientists should refuse to do research on destructive things
 - ethics committees should be established
 - human beings are not objects for science
 - None of the above.
130. The article is most probably written by a:
- scientist
 - social activist
 - newspaper reporter
 - cannot say
131. The tone of the article is:
- analytical
 - critical
 - descriptive
 - judgmental
132. Why was there no organised reaction to the nuclear bombs dropped on Hiroshima, according to the writer?
- people did not feel strongly against them
 - there were no ethics committees established at that time
 - the world was too shocked to respond
 - none of the above
133. Which of the following statements is not true?
- there are more than 200 national ethics committees all over the world
 - scientists have declared a declared a moratorium on research for one year
 - bitter disputes followed the dropping of the atom bombs
 - there is a movement for protecting human rights
134. What is the best title of the passage?
- Ethics and scientific research
 - Human beings and scientific research
 - Science is a double-edged weapon
 - Protection of human rights

PASSAGE 5

On a personal level, winning doesn't mean the other guy has to lose. As former P&G brand manager Bruce Miller put in, "It's not a zero-sum game. It's more like golf than tennis, you are playing against yourself and the course, not the guy across the net or in the next office. Play your best game and, if it's good enough, you'll be a winner. You might not achieve the specific goal you have set, but the company is big enough and

flexible enough to move you up and onward in a way that suits your talents. That's winning."

Miller remembers the story of an assistant brand manager who, by his own account, was achieving great things and looked as if he had the world by the tail, "At about the time his "class" was ready to go out on sales training, he had a closed-door meeting with his boss. His peers assumed he was the first to get the nod. It turned out his performance had all along been more flash than substance, and the meeting with his boss was to discuss other career alternatives inside or outside the company. Miller is convinced that the moral of the story is that winning is all about your own performance and not about keeping up with what the other guy seems to be doing.

Former CEO ED Artzt equates winning with professionalism: It's mastery of the fundamentals. And that's what you must do to win in management. You must master the fundamentals of the business you're in, the functions you perform, and the process of managing people. If you don't do that, you'll eventually become a journey man or journey woman, and the brilliance you once had will surely tarnish.

Mastering the fundamentals of any profession, be it in the arts, sports, or business, requires great sacrifice, endless repetition, and a constant search for the best way to do things. A professional in search of mastery brings an attitude to his or her work that no sacrifice is too great and no experience or grunt work is too menial if it helps achieve mastery of the fundamentals. It all begins with attitude, striving to attain professionalism and embracing winning as a way of life. if you want to become a winning manager, I urge you to embrace that attitude with all your might.

135. What does Miller mean when he says that winning is not a zero sum game?
- it does not mean that the other guy has to lose
 - you are playing against yourself
 - it's more like golf than tennis
 - the company is big enough to move you up
136. By "more flash than substance," the author means:
- the achievement was temporary, not lasting
 - the achievement was more a matter of chance
 - the manager was fooling himself
 - none of the above
137. A journeyman or journey woman:
- is not a master of fundamentals
 - is just passing time
 - is not brilliant
- I and II
 - I, II and III
 - I and III

- d. II and III
138. The author feels that:
- mastering fundamentals is essential to win
 - mastering fundamentals requires great sacrifice
 - winning is not a zero sum game
 - none of the above
139. The best title for the passage could be:
- Winning
 - Winning and Professionalism
 - Getting a Winner's Attitude
 - Mastering Fundamentals is Important
140. The author is most likely to be a:
- management consultant
 - newspaper reporter
 - writer of self help books
 - career counsellor

PASSAGE 6

Hunger is about people. It is also about oppression and inequalities. Hunger is about corrupt politicians and corrupt bureaucracy; it is also about power and powerlessness. Hunger is about borrowed ideas of science and technology and development which have not worked in local realities; it is also about the disintegration of local communities; about loss of values, traditions, culture and spirituality. Ending hunger is the important unfinished agenda of this century and of independent India.

The world as a whole has achieved dramatic increase in food production, enough to cover the minimum needs of the global population. Yet hunger and malnutrition persist in alarming measure in India and other third World countries. The World Bank's estimates are that over a billion people in the world have problems of food security. The Food and Agricultural Organisation (FAO) estimates point out that 64 developing countries out of 117 will be unable to feed their population adequately and that 38 out of these developing countries will be able to feed less than half of their populations adequately.

India believes that its problems of hunger and food security are almost over because of the significant increase in productivity achieved through the use of new technologies of the Green Revolution. Foodgrains per capital increased from 395 grains in 1951 to 466 grams in 1993. There are reports about surplus stocks used for exports; also reports about surplus stocks rotting because there are not enough storing facilities. And yet in such a situation, we have millions who go hungry and who die a silent death of starvation and malnutrition. In 1974 the FAO organised the first World Food Conference, where its members took a pledge to end hunger by 1984. Henry Kissinger, then US Secretary of State vowed at the meeting that "within a decade, no man, woman or child will go to bed hungry." A quarter of a century later more people are dying of hunger.

FAO organised its second World Food security Conference in 1985 which reaffirmed its moral commitment "to achieve the objective of ensuring that all people at all times are in a position to produce the basic food they need." In 1996, yet again, FAO organised its third global conference on food security with much fanfare. The result of this third summit meeting was another declaration, called the Rome Declaration, affirming once again the right of everyone to be free of hunger. The summit also offered an action plan to reduce the numbers of hungry people by half within two decades — a more modest commitment than made by Kissinger a quarter of a century ago.

In spite of the three global conferences, the future of food security looks as bleak as ever. Fidel Castro, who was also attending the third FAO summit meeting, pointed out "Hunger is the off-spring of injustice, and the unequal distribution of the wealth of his world. Social and economic surplus have actually marginalised the poor and deprived them of the means to eat".

The NGOs and people's representatives who had also gathered for this summit meeting said in their final declaration, "Ensuring food security demands an approach to agriculture policy that is in almost every respect the reverse of that adopted by the Summit's delegates." They suggested that instead of pursuing policies that encourage corporate agriculture, there should be policies in laboured organic production, reducing or eliminating the use of pesticides and other agro-chemicals.

And instead of hooking farmers' into a global economy over which they have no control, they suggested that resources be shifted in favour of local farming and regional food producers and food systems.

141. According to the World Bank, how many people face problems of food scarcity?
- 2 million
 - 100 million
 - 500 million
 - 1000 million
142. What had led India to believe that it does not face any food crisis?
- The presence of surplus stocks of exports
 - Report about surplus stocks rotting
 - The apparent success of the Green Revolution
 - Both (a) and (c)
143. Why did the third FAO summit moderate the pledge made by Kissinger in the first summit?
- Because Kissinger's promise was too ambitious.
 - Because in reality, it is never possible eliminate hunger and poverty from the world.

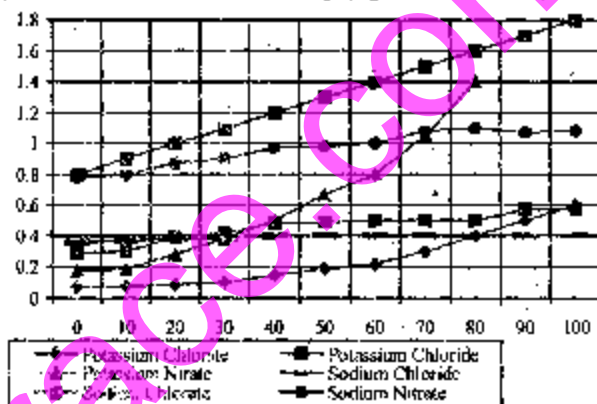
- c. Because Kissinger's promise had started to look unattainable as more and more people were dying out of hunger.
d. Because FAO's resources to eliminate poverty were limited.
144. What is the major point in the NGO's stand after the third FAO summit?
a. The agriculture policy adopted by the Summit's delegate will never lead to food security.
b. Farmers should be provided security first to achieve food security for the world.
c. Local farming should be encouraged more.
d. Change pattern of agriculture from corporate agriculture to policies that favour the farmer.
145. All the following are instances of commercial agriculture EXCEPT
a. usage of pesticides
b. usage of agrochemicals
c. inorganic production
d. regional food producers and food systems
146. What is the basic paradox of India's food system?
a. That in spite of being a Third World country, it has enough food surplus
b. That in spite of food surplus, several people die annually
c. That in spite of large-scale food production, the farmers are all poor
d. Both 2 and 3
147. What, according to the author, is the basic cause of hunger?
a. faulty agricultural policy
b. lack of purchasing power
c. faulty governmental policies
d. inequality and powerlessness
148. The author says all the following EXCEPT
a. Per capita availability of food grains has decreased from 1951 to 1993 in India.
b. FAO's promises in its summits have mostly gone unfulfilled.
c. Fidel Castro is a communist leader.
d. Hunger and malnutrition constitute a serious impending crisis to the world.
149. The author definitely says which of the following in the context of the passage?
a. Hunger is caused, at least in part, due to implementation of borrowed scientific ideas.
b. Several Third World countries are in the process of eliminating hunger.
c. Green Revolution was based on borrowed technology.
d. As of now, there seems to be a new direction to acquire food security.
150. How does the author corroborate the third sentence of the passage?

- a. By pointing to inadequacies of the policies of the government.
b. By pointing to the failed promises of FAO.
c. By pointing to the words of Fidel Castro.
d. By pointing to the resolution adopted by the NGOs.

SECTION-4

Directions: Q. 151 to 155 are based on the graph given below:

Solubility - Temperature relationships for various salts.
(The Y-axis denotes Solubility (kg/litres of water))



151. Which of the following salts has greatest solubility?
a. Potassium Chlorate at 80°C.
b. Potassium Chloride at 35°C.
c. Potassium Nitrate at 39°C.
d. Sodium Chloride at 85°C.
152. Approximately, how many kg of Potassium Nitrate can be dissolved in 10 litres of water at 30°C?
a. 0.04
b. 0.4
c. 4
d. 0.35
153. By what % is the solubility of Potassium Chlorate in water increased as the water is heated from 30°C to 80°C?
a. 100
b. 200
c. 250
d. 270
154. If 1 mole of Potassium Chloride weighs 0.7456 kg, approximately, how many moles of Potassium Chloride can be dissolved in 100 litres of water at 36°C?
a. 700
b. 650
c. 480
d. 540
155. Which of the salts has greatest change in solubility in kg/litre of water between 15°C and 25°C?

- Potassium Chlorate
- Potassium Nitrate
- Sodium Chlorate
- Sodium Nitrate

Directions for questions 156 to 159: Study the information below and answer questions based on it.

A leading socialite decided to organise a dinner and invited a few of her friends. Only the host and the hostess were sitting at the opposite ends of a rectangular table, with three persons along each side. The pre-requisite for the seating arrangement was that each person must be seated such that atleast on one side it has a person of the opposite sex. Maqbool is opposite Shobha, who is not the hostess. Ratan has a woman on his right and is sitting opposite a woman. Monisha is sitting to the hostess's right, next to Dhirubhai. One person is seated between Madhuri and Urmila, who is not the hostess. The men were Maqbool, Ratan, Dhirubhai and Jackie, while the women were Madhuri, Urmila, Shobha and Monisha.

- The eighth person present, Jackie, must be:
 - the host
 - seated to Shobha's right
 - seated opposite Urmila
 - I only
 - III only
 - I and II only
 - II and III only
- Which of the following persons is definitely not seated next to a person of the same sex?
 - Maqbool
 - Madhuri
 - Jackie
 - Shobha
- If Ratan would have exchanged seats with a person four places to his left, which of the following would have been true after the exchange?
 - No one was seated between two persons of the opposite sex (e.g. no man was seated between two women)
 - One side of the table consisted entirely of persons of the same sex
 - Either the host or the hostess changed seats.
 - I only
 - II only
 - I and II only
 - II and III only
- If each person is placed directly opposite his or her spouse, which of the following pairs must be married?
 - Ratan and Monisha
 - Madhuri and Dhirubhai
 - Urmila and Jackie
 - Ratan and Madhuri

Directions: Q. 160 to 163 are based on the following table and information given below:

- In 1984-85 value of exports of manufactured articles exceeds the value of exports of raw materials by 100%.
- In 1985-86 the ratio of % of exports of raw material to that of exports of manufactured articles is 3 : 4.
- Exports of food in 1985-86 exceeds the 1984-85 figure by Rs. 1006 crore.

Percentage of total value of exports in India

Item	1984-85	1985-86
Food		23%
Manufactured Articles		
Raw Material		
Total value of Export (in crore) of Rs.	22400	25800

- In 1984-85, what percentage of total values of exports accounts for items related to food?
 - 23%
 - 29.2%
 - 32%
 - 22%
- During 1984-85, how much more raw material than food was exported?
 - Rs 2580 crore
 - Rs 906 crore
 - Rs 1986 crore
 - Rs 1852 crore
- Value of exports of raw material during 84-85 was how much percent less than that for 85-86?
 - 39
 - 42.5
 - 7
 - 31.6
- The change in value of exports of manufactured articles from 1984-85 to 1985-86 is:
 - 296 crore
 - 629 crore
 - 2064 crore
 - 1792 crore

Directions for questions 164 to 166: Study the information below and answer questions based on it.

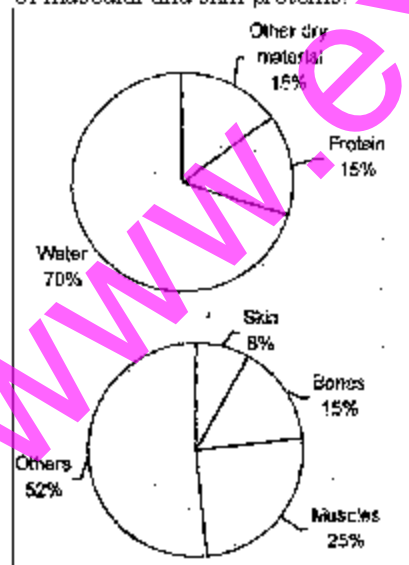
Five of India's leading models are posing for a photograph promoting "World peace and understanding". But then, Rakesh Shreshtha, the photographer, is having a tough time getting them to stand in a straight line, because Aishwarya refuses to stand next to Sushnilta because Sushmita had said something about her in a leading gossip magazine. Rachel and Anu want to stand together because they are "such good friends, you know." Manpreet, on the other hand, cannot get along well with Rachel, because

there is some talk about Rachel scheming to get a contract already awarded to Manpreet. Anu believes her friendly astrologer who has asked her to stand at the extreme right for all group photographs. Finally, Rakesh managed to pacify the girls and got a beautiful picture of five beautiful girls smiling beautifully in a beautiful straight line, promoting world peace.

164. If Aishwarya is standing to the extreme left, which girl is in the middle?
 a. Manpreet
 b. Sushmita
 c. Rachel
 d. Cannot say
165. If Aishwarya stands to the extreme left, which is the girl who stands second from left?
 a. Cannot say
 b. Sushmita
 c. Rachel
 d. Manpreet
166. If Anu's astrologer tells her to stand second from left and Aishwarya decides to stand second from right, then who is the girl standing on the extreme right?
 a. Rachel
 b. Sushmita
 c. Manpreet
 d. Cannot say

Directions: For questions 167 to 170 refer to the pie-chart given below:

167. What fraction of Ghoshbabu's weight consists of muscular and skin proteins?



- a. $\frac{1}{13}$
 b. $\frac{1}{30}$
 c. $\frac{1}{20}$
 d. Cannot be determined
168. Ratio of distribution of protein in muscle to the distribution of protein in skin is:
 a. 3:1

- b. 3:10
 c. 1:3
 d. $3\frac{1}{2}:1$

169. What percent of Ghoshbabu's body weight is made up of skin?
 a. 0.15
 b. 10
 c. 12
 d. Cannot be determined
170. In terms of total body weight, the portion of material other than water and protein is closest to:
 a. $\frac{3}{20}$
 b. $\frac{1}{15}$
 c. $\frac{85}{100}$
 d. $\frac{1}{20}$

Directions for questions 171 to 174: Study the information below and answer the questions based on it.

A, B, C, D, E, F and G are brothers. Two brothers had an argument and A said to B: "You are as old as C was when I was twice as old as D, and will be as old as E was when he was as old as C is now". B said to A "You may be older than F but G is as old as I was when you were as old as G is, and D will be as old as F was when F will be as old as G is".

171. Who is the eldest brother?
 a. A
 b. E
 c. C
 d. Cannot be determined
172. Who is the youngest brother?
 a. B
 b. D
 c. F
 d. Cannot be determined
173. Which two are probably twins?
 a. D and G
 b. E and C
 c. A and B
 d. Cannot be determined
174. Which of the following is false?
 a. G has 4 older brothers.
 b. A is older than G but younger than E.
 c. B has three older brothers.
 d. there is a pair of twins among the brothers.

Directions: Q. 175 to 178 are based on the following information:

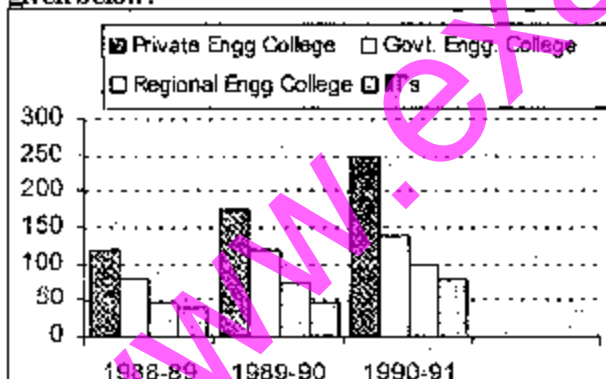
The following table gives the sales details for text books and reference books at Primary /Secondary/ Higher Secondary/Graduate Levels.

Year	Primary	Secondary	Higher Secondary	Graduate Level
1975	42137	8820	65303	25343

1976	53568	10285	71602	27930
1977	58770	16437	73667	28687
1978	56872	15475	71668	30057
1979	66213	17500	78697	33682
1980	68718	20177	82175	36697

175. What is the growth rate of sales of books at primary school level from 1975 to 1980?
- 29%
 - 51%
 - 63%
 - 163%
176. Which of the categories shows the lowest growth rate from 1975 to 1980?
- Primary
 - Secondary
 - Higher secondary
 - Graduate Level
177. Which category had the highest growth rate in the period?
- Primary
 - Secondary
 - Higher Secondary
 - Graduate Level
178. Which of the categories had either a consistent growth or a consistent decline in the period shown?
- Primary
 - Secondary
 - Higher Secondary
 - Graduate Level

Directions Q. 179 to 182 are based on the graph given below:



Number of Engineering Students (in hundreds) at institutions of different kinds

179. What was the total number of engineering students in 1989-90?
- 28500
 - 4400
 - 4200
 - 42000
180. The growth rate in students of Govt. Engineering colleges compared to that of Private Engineering colleges between 1988-89 and 1989-90 is:

- More
- Less
- Almost equal
- $\frac{3}{2}$

181. The total number of Engineering students in 1991-92, assuming a 10% reduction in the number over the previous year, is:
- 5700
 - 57000
 - 44800
 - None of these
182. In 1990-91, what percent of Engineering students were studying at IITs?
- 16
 - 15
 - 14
 - 12

Directions: Q. 183 to 185: are based on the table and information given below.

Bankatlal works x hours a day and rests y hours a day. This pattern continues for 1 week, with an exactly opposite pattern next week, and so on for four weeks. Every fifth week he has a different pattern. When he works longer than he rests, his wage per hour is twice of what he earns per hour when he rests longer than he works.

The following are his daily working hours for the weeks numbered 1 to 13:

	1 st week	5 th week	9 th week	13 th week
Rest	2	3	4	-
Work	5	7	6	8

A week consists of six days and a month consists of 4 weeks.

183. If Bankatlal is paid Rs 20 per working hour in the first week, what is his salary for the first month?
- 1440
 - 2040
 - 1320
 - 1680
184. Bankatlal's average monthly salary at the end of the first four months will be:
- 1760
 - 2040
 - 1830
 - 1680
185. The new manager Kushaldas stipulated that Rs. 5 be deducted for every hour of rest and Rs. 25 be paid per hour starting the week, then what will be the change in Bankatlal's salary for the 3rd month? (Hourly deductions and salaries are constant for all weeks starting 9th week).
- 540
 - 480
 - 240
 - 0