

Section I – Language Skills

For questions 1 to 4 refers to the passage below:

Idealism is the epistemological doctrine that nothing can be directly known outside of the minds of thinking beings. Or in an alternative stronger form, it is the metaphysical doctrine that nothing exists apart from minds and the "contents" of minds. In modern Western philosophy, the epistemological doctrine begins as a core tenet of Descartes—that what is in the mind is known more reliably than what is known through the senses.

Forms of idealism were prevalent in philosophy from the 18th century to the early 20th century. Transcendental Idealism, advocated by Immanuel Kant, is the view that there are limits on what can be understood, since there is much that cannot be brought under the conditions of objective judgment. Kant wrote his Critique of Pure Reason (1781–1787) in an attempt to reconcile the conflicting approaches of rationalism and empiricism, and to establish a new groundwork for studying metaphysics. Kant's intention with this work was to look at what we know and then consider what must be true about it, as a logical consequence of the way we know it. One major theme was that there are fundamental features of reality that escape our direct knowledge because of the natural limits of the human faculties. Although Kant held that objective knowledge of the world required the mind to impose a conceptual or categorical framework on the stream of pure sensory data—a framework including space and time themselves—he maintained that things-in-themselves existed independently of our perceptions and judgments; he was therefore not an idealist in any simple sense. Indeed, Kant's account of things-in-themselves is both controversial and highly complex. Continuing his work, Johann Gottlieb Fichte and Friedrich Schelling dispensed with belief in the independent existence of the world, and created a thoroughgoing idealist philosophy.

The most notable work of this German idealism was G. W. F. Hegel's Phenomenology of Spirit, of 1807. Hegel admitted his ideas were not new, but that all the previous philosophies had been incomplete. His goal was to correctly finish their job. Hegel asserts that the twin aims of philosophy are to account for the contradictions apparent in human experience and also simultaneously to resolve and preserve these contradictions by showing their compatibility at a higher level of examination. This program of acceptance and reconciliation of contradictions is known as the "Hegelian dialectic". Philosophers in the Hegelian tradition include Ludwig Andreas Feuerbach, who coined the term projection as pertaining to our inability to recognize anything in the external world without projecting qualities of ourselves upon those things; Karl Marx; Friedrich Engels; and the British idealists, notably T. H. Green, J. M. E. McTaggart and F. H. Bradley. Few 20th century philosophers have embraced idealism. However, quite a few have embraced Hegelian dialectic.

1. Idealism as a doctrine does NOT portray that,

- a) Nothing can be known at all outside the mind of thinking beings.
- b) Nothing exists beyond 'contents' of mind.
- c) It is only mind and 'contents' of mind that exists.
- d) The mind is more reliable than the senses.

2. What, as per Hegel was the aim of philosophy?

- a) To account for contradictions in our experiences
- b) To question the very foundation on which our daily lives and religious experiences are based
- c) To preserve the contradictions displayed in our experiences
- d) A & C

3. What is the main subject on which this passage is based?

- a) Social and civil movements
- b) Humanities and the art of making friends and enemies
- c) Critical theories and laws of nature
- d) Philosophical theories

4. What do you infer from the last paragraph of the passage?

- a) Hegel did not approve of all the previous philosophies and hence wished to re-do them completely.
- b) Hegel suggested that the old philosophies be completely disbanded as they were of no real consequence.
- c) Hegel spoke of his ideas as revolutionary and something that would take the world by storm.
- d) Hegel admitted his ideas as nothing new, and that he merely wished to complete the incomplete theories of other philosophers.

Direction for questions 5 to 7: Fill in the blank s with the most appropriate word

Since the Romans failed to subjugate the tribes in Northern Britain, they built a wall in a/an ____ (5) ____ attempt to ____ (6) ____ the natives. After all, what wall can ____ (7) ____ the determined?

- 5. a) overoptimistic b) thoroughgoing c) successful d) apparent
- 6. a) intimidate b) exclude c) barricade d) overcome
- 7. a) deter b) conquer c) circumscribe d) delineate

Direction for Questions 8 to 10:

To Simon, not usually so ____ (8) ____, their bantering talk seemed ____ (9) _____. Actually their exchanges masked underlying ____ (10) _____.

- 8. a) inscrutable b) unperceptive c) perspicacious d) enigmatic
- 9. a) vexing b) exasperating c) hostile d) amicable
- 10. a) conviviality b) assumptions c) geniality d) antagonism

Directions for Questions 11 to 14: In each question, there are four sentences. Arrange the four sentences in a logical order to form a coherent paragraph/passage. From the given options choose the most appropriate one.

11.

A. As compared to women, men have a different pattern of hair growth, fat distribution, and rate of sweat and sebum production.

B. Men also sweat more than women, and since their body hair is dense, the sweat takes longer to dry, increasing their chances of bacterial and fungal infections.

C. The male and female skin is by and large similar, save for subtle differences, which call for the variation in the skin care regimes.

D. Men secrete more sebum, which makes their skin more prone to acne due to the sensitivity of their skin.

a) DBAC

b) BDCA

c) ACDB

d) CADB

12.

A. If we fail to do this, pet keeping becomes a nuisance and hence, we must look after their comforts and make sure to protect them from their natural enemies.

B. We must teach them good manners, we must see that they are useful and friendly to us and cause no trouble to others.

C. It is good to keep pets, but when we keep them, we have to carry certain responsibilities like feeding them regularly and keeping them clean.

D. Thus, keeping pets involves a responsibility of its own and if we are prepared to carry it out, only then must we keep pets at home.

a) CBAD

b) DBAC

c) ADCB

d) BDAC

13.

A. In 13th century Europe, the idea of applying gold leaf and gems to religious art arose, and the wider idea of collage began to spread among artists.

B. Mosaic, a practice which involves fitting together many small pieces of tile to form a pattern, is also a form of collage, and it has been widely practiced in the Middle East and Mediterranean for centuries.

C. Collage, from the French word coller, to stick, is a visual art which is accomplished by gluing objects to a central backing.

D. The roots of collage can be found as far back as the 10th century, when calligraphers in Japan starting gluing pieces of paper to their works.

a) DCBA

b) ACBA

c) CDAB

d) BADC

14.

A. In the process, air bubbles are forced out of the clay, ensuring that these bubbles will not heat and cause the clay to explode in the kiln.

B. Properly wedged clay is very smooth, with an even texture which is easy and pleasant to work with.

C. In the wedging process, clay is repeatedly kneaded on a porous surface to draw some of the water out while distributing the moisture evenly, eliminating hard spots in the clay.

D. People can also set clay up for specific tasks while they wedge, as for instance in the case of a conical wedge of clay which is ideally suited to working on the wheel.

a) DBCA

b) CABD

c) ACBD

d) BACD

For questions 15 to 18 refer to the passage below:

An unidentified flying object (UFO) is an object which is observed in the sky, but cannot be identified. While people have been spotting mysterious objects in the sky for centuries, claims of UFO sightings exploded in the wake of the Second World War. Attitudes about UFOs vary widely, with some people believing that such objects have a perfectly logical scientific explanation, while others have suggested that the origin of UFOs is paranormal in nature. People who support a paranormal explanation for UFOs are sometimes referred to as “believers,” referencing the idea that they believe in paranormal phenomena. It may come as a surprise to learn that the vast number of UFO sightings reported each year are later downgraded to “IFOs,” or identified flying objects. Claims of genuine UFOs are rare, and hard to confirm, usually due to lack of photographic evidence or reliable witnesses. Some believers accuse skeptics of suppressing evidence which would support a more paranormal explanation for UFOs, arguing that there is a conspiracy to hide the truth. The UFO craze really started in 1947, when a pilot named Kenneth Arnold reported seeing a flying object which he likened to a saucer, coining the term “flying saucer” along the way. Arnold was viewed as a reasonably credible witness, and his sketches of the mysterious object got a lot of press, undoubtedly inflaming the collective imagination. Today, UFO believers can share information about sightings, along with conspiracy theories, on numerous websites and forums.

When examining the history of the UFO, it is interesting to note that sightings greatly increased after the close of World War Two, when numerous nations started experimenting with cutting-edge aircraft. Experimental aircraft associated with the military obviously have to be tested at some point, and such aircraft often look extremely strange. Due to security reasons, sightings of experimental aircraft cannot be confirmed or explained, so it is possible that the UFOs which believers think are whizzing across the sky at all hours are actually just extremely sophisticated planes. It should also be noted that UFO sightings have historically been very high in the Southwest, a region which has been used as a military proving ground for a very long time. Other UFO sightings around the world often happen to occur near military bases and research facilities, further supporting the idea that these unidentified objects remain obscure for security reasons, rather than mysterious ones.

Some UFOs do indeed look like aircrafts of some form, leading people to suggest that they are examples of alien technology, despite lack of confirmation. Others take the form of moving lights and random floating shapes. In most cases, mundane explanations like the weather can be used to dismiss UFO claims, but believers still retain their hope that “the truth is out there,” as they say in the X-Files series. UFO hotspots are specific locations where numerous UFO sightings have taken place. People who would like an opportunity to see UFOs can visit a UFO hotspot for the best chance of success.

15. Which of the following can be inferred from this passage about UFO's?

- a) UFO believers nowadays share information, views, photographs and discussions on several online forums.
- b) There are theories that state that UFOs could be sophisticated and never-seen-before military aircrafts.
- c) UFOs have typically been sighted more around areas that have military bases close by.
- d) All of the above

16. What are UFO hotspots?

- a) A location where 'believers' can connect directly with UFOs via a satellite system.
- b) A location where numerous UFO sightings have been seen.
- c) A location where there is a clear landing strip welcome UFOs to land.
- d) A location where, in case of a UFO invasion, all earthlings should gather.

17. What is the tone of the passage?

- a) Derogatory
- b) Balanced
- c) Analytical
- d) Passionate

18. According to the passage, what is the "believer's" argument against those who do not believe in UFOs?

- a) They argue that most of them have seen UFOs and hence know, for a fact, that they exist.
- b) They believe in the X file series and base their argument on it.
- c) They believe that the evidences are being suppressed to hide the truth.
- d) They know that the UFOs are just sophisticated flying planes in the sky.

Direction for the Questions 19 to 20: Choose the option closest in meaning to the word given.

19. Sleep is a heightened anabolic state, accentuating the growth and rejuvenation of the immune, nervous, skeletal and muscular systems.

- a) enhancing
- b) adulating
- c) decimating
- d) ameliorating

20. Using colours appropriately in living spaces can influence your temperament and mood, and therefore impact your life in a positive way.

- a) acquiescence
- b) tenacity
- c) disposition
- d) pittance

Direction for the Questions 21 and 22: Choose the option which is the antonym of the word underlined.

21. People incessantly complain about traffic jams and the delayed transport schedules during the monsoons.

- a) ambiguously b) munificently c) sporadically d) consistently

22. Having a good game plan will only ameliorate one's discomfort.

- a) exacerbate b) castigate c) decimate d) depreciate

Directions for Questions 23 to 24: In each of the following sentences, five options are given. You are required to identify the best way of writing the sentence in the context of the correct usage of standard written English. While doing so, you have to ensure that the message being conveyed remains the same in all the cases.

23.

a) Unrequited love is a term that is used when one person have strong feelings towards another that are not reciprocated.

b) Unrequited love is a term that is used when one person has strong feelings towards another that are not reciprocated.

c) Unrequited love is a term that is used when one person has strong feelings towards another and is not reciprocated.

d) Love that is unrequited is a term that is used when one person has strong feelings towards another that are not reciprocated.

24.

a) Tinted glass is also used in commercial buildings to keep the inside cooler, and has the added benefit of giving the outside of a building a more uniform, aesthetically pleasing appearance.

b) Tinted glass is also used in commercial buildings to keep the inside cooler, and have the added benefit of giving the outside of a building a more uniform, aesthetically pleasing appearance.

c) Tinted glass are also used in commercial buildings to make the inside cooler, and has the added benefit of giving the outside of a building a more uniform, aesthetically pleasing appearance.

d) Tinted glasses is also used in commercial buildings to keep the inside cooler, and has the added benefit of giving the outside of a building a more uniform, aesthetically pleasing appearance.



Direction for the Questions 25 to 28: Answer questions 25 to 28 based on the brief statements or passages.

25. The stock market has the potential to multiply money two fold to tenfold. Clearly, everyone must invest all their surplus savings in the stock market.

Which of the following, if true, would most weaken the argument above?

- a) Only those people who are aware of the functioning of stock market should invest their funds and savings
- b) A fall in the stock prices can also lead to drastic effects on some investors and can even cause bankruptcy.
- c) Only those with a huge surplus can make investments in the stock market.
- d) The investors in the stock market are trained to get proper investments without much risk.

26. Green tea has many advantages; it helps prevent diseases like multiple Sclerosis, cancer, Alzheimer's and Parkinson's. It is clear that all patients suffering from any of the above-mentioned diseases must consume green tea daily.

Which of the following, if true, identifies the greatest flaw in the reasoning shown?

- a) Green tea seems to have an effect in preventing the mentioned diseases, not in curing them.
- b) Proper medication should be considered for curing or stabilizing such diseases and not herbal medications.
- c) Not every patient suffering from such diseases would prefer or desire to have herbal green tea.
- d) Patients must consider such techniques only along with regular medication prescribed by the doctors.

27. Researchers have found that regular exercise is likely to reduce depression and anxiety and help one better manage stress. Evidently, everyone must exercise regularly and for prolonged periods of time in order to keep their stress levels low and in check.

Which of the following, if true, would pose the most serious doubt on the conclusion drawn above?

- a) A correct & prescribed training must be taken for a proper exercise routine otherwise it could harm an individual's body.
- b) It is also observed that high levels of physical activity can tire the body and mind and can trigger higher levels of stress.
- c) Not everyone can exercise regularly, specially people with heart ailments.
- d) Exercising for a prolonged period is not possible for all due to tight work schedules.

28. Juvenile delinquency is rampant in our society. It is clear that children and adolescents commit crimes because of poverty and lack of the basic resources and necessities.

Which of the following, if true, would most weaken the argument above?

- a) Television has given the youth of today a lot of exposure which encourage them to take such steps.
- b) If the punishable system of the society is made stronger and stern, then the level of crime can definitely drop.
- c) 60% of the youth groups are forced into such action due to peer pressure.
- d) Children are nowadays enamored by the choices available to the richer classes, and hence their desire to use and access luxury items, pushes them towards crime.

Directions for Questions 29 to 32: Read each sentence to find out whether there is any grammatical error in it. The error, if any, will be in one part of the sentence. The letter of that part is the answer.

29.

- a) Water has a heat capacity which
- b) enables the oceans to absorb and store
- c) vast quantities of heat,
- d) Thereby seldom preventing climatic extremes.

30.

- a) When sediments harden into sedimentary rocks,
- b) the names applied to them
- c) changes to indicate the
- d) change in the physical state.

31.

- a) The significant difference between fairy tales and dreams:
- b) in dreams most often than not
- c) the wish fulfillment is disguised, while
- d) in fairy tales much of it is openly expressed.

32.

- a) Sedimentary rocks are composed largely of
- b) minute fragments of the
- c) disintegration of existing rocks and
- d) in some instances from the remains of animals.

Section II – Quantitative Skills

Directions for questions 33 to 37: Answer the following questions independently

33. If $132A1B0$ is divisible by 11 and A is a square of B , what is the value of B ?

- a) 9 b) 8 c) 4 d) 3

34. Evaluate the following: 39% of 750 + 65% of 850

- a) 840 b) 848 c) 852 d) 845

35. In Hotel Taj, the average daily income from all the rooms is Rs.2500. If the average charge of an AC room is 3000 and charge per non AC room is Rs.2000, find the total number of rooms in the hotel when there are 120 AC rooms.

- a) 200 b) 220 c) 240 d) 320

36. Konark Express has to reach Goa in 24 hrs. Due to bad weather the train covers $\frac{1}{4}$ th of the distance in 8 hours. If the speed of the train is 84 km/hr, by how much should the speed be increased, so that the train reaches on time?

- a) 44 km/hr b) 126 km/hr c) 84 km/hr d) 42 km/hr

37. A committee of 5 people has to be formed from a group of 10 people. The group contains 8 women and 2 men. The committee should contain at least 3 women in it. In how many ways can the committee be formed?

- a) 252 b) 242 c) 253 d) 262

Directions for questions 43 and 44: Each question below is followed by two statements A and B. You are to determine whether the data given in the statement is sufficient for answering the question. You should use the data and your knowledge of Mathematics to choose between the possible answers.

Give answer:

- a) if the statement A alone is sufficient to answer the question, but the statement B alone is not sufficient.
- b) if the statement B alone is sufficient to answer the question, but the statement A alone is not sufficient
- c) if both statements A and B together are needed to answer the question.
- d) if you cannot get the answer from the statement A and B together, but need even more data.

43. What is the rate per cent per annum on an amount of Rs 15,000 deposited in a Bank?

- A. The simple interest for two years is Rs 3,600.
- B. The difference between the simple interest and compound interest for two years is Rs.216.

44. What is the value of the two digit number?

- A. The product of the digits is 28.
- B. The digit at the unit place is smaller than the other one.

Directions for questions 45 to 50: Answer the questions independently.

45. A number 16XY is divisible by 4 and leaves a remainder 10 when divided by 11. Which of these cannot be an X or Y?

- a) 0
- b) 1
- c) 6
- d) 7

46. There are three washing machines that beep after every 12 mins, 30 mins and 40 mins respectively. All the machines beep together at sharp 15 hours. Find the interval after it will beep again.

- a) 14502 mins
- b) 1452 mins
- c) 14520 mins
- d) 120 mins

47 In company, production of product X varies directly as the cube root of product Y and inversely as the square of product Z. If no of products X = 4 when Y = 8 and Z = 3, Find no. of X product when Y = 512 and Z = 6

- a) 4
- b) 2
- c) 6
- d) 8

48. If the radius of a circle is increased by 6%, then the area is increased by

- a) 6%
- b) 12%
- c) 12.36%
- d) 16.64%

49. If two dice are flipped, find the probability that the sum of the numbers on the two faces is an even number.

- a) 0.6 b) 0.7 c) 0.2 d) 0.5

50. The ratio of the area of a square inscribed in a semi-circle to that of the area of a square inscribed in the circle of the same radius is

- a) 2 : 1 b) 2 : 3 c) 2 : 5 d) None of these

Directions for Questions 51 and 52: Refer to the data below and answer the questions that follow.

In a factory, a sum of Rs. 6,000 is allotted per day to the production department for manufacturing widgets. 8 man hours and 12 machine hours are required to manufacture 1 widget. 1 man hour costs Rs. 20, and 1 machine hour costs Rs. 15.

51. What is the maximum number of widgets that the factory can manufacture per day?

- a) 20 b) 15 c) 12 d) 17

52. How many rupees will remain unused per day with the maximum possible production?

- a) 200 b) 220 c) 240 d) None of these

Directions for Questions 53 to 55: Answer the questions independently.

53. P and Q are 120 km apart. A starts from P towards Q at 6 a.m. B starts from Q towards P at 11 a.m. A is 50% faster than B. They cross each other at 8 p.m. A's speed (in km/hr) is _____.

- a) 6 b) 5 c) 4 d) 4.5

54. There are 6 bags containing 2, 3, 4, 5, 11 and 17 balls respectively. If all the balls in a bag are of the same colour and in all, there are red, blue and green balls in the ratio 1 : 2 : 3 respectively, then the number of blue balls is _____.

- a) 7 b) 14 c) 21 d) 6

55. Two men are walking towards each other along a railway track. They each start at opposite ends of the railway track. One man is walking faster than the other. They pass each other 720 yards from the nearest of the two ends.

When each man reaches the other end of the track, he stops for a cigarette. Both men take exactly the same amount of time to smoke a cigarette. Then they turn around and head back to their original starting positions. This time they meet 400 yards from the other end of the track.

What is the length of the track?

- a) 1760 yards b) 2000 yards c) 2160 yards d) 1540 yards

Direction for question 56: Each question below is followed by two statements A and B. You are to determine whether the data given in the statement is sufficient for answering the question. You should use the data and your knowledge of Mathematics to choose between the possible answers.

Give answer:

- a) if the statement A alone is sufficient to answer the question, but the statement B alone is not sufficient.
- b) if the statement B alone is sufficient to answer the question, but the statement A alone is not sufficient
- c) if both statements A and B together are needed to answer the question.
- d) if either the statement A alone or statement B alone is sufficient to answer the question.

56. What is the profit earned per chair by selling a chair for Rs 250?

- A. A cost price of 10 such chairs is equal to selling price of 8 such chairs.
- B. 25% profit is earned by selling 4 such chairs.

Directions for questions 57 to 63: Answer the questions independently

57. If 7 men do 7% of a work in a week, how many men will be required to do 28% of the same work in February 2011?

- a) 30 men
- b) 20 men
- c) 10 men
- d) 7men

58. Bacteria reproduce in such a manner that every hour their number doubles. In a controlled experiment that started with one bacterium in a jar at 2 pm on Saturday, the jar was found to be completely full at 12 noon on Wednesday. Had there been 64 bacteria initially, when would the jar be completely full?

- a) Midnight, Tuesday
- b) 6 a.m., Wednesday
- c) 10 a.m., Wednesday
- d) 11 a.m., Wednesday

59. In what ratio should one mix a solution where the ratio of milk to water is 5 : 4 and another where this ratio of water to milk is 7 : 3 to get a solution that is one part milk and two parts water?

- a) 3 : 20
- b) 35 : 3
- c) 36 : 23
- d) 21 : 32

60. Three faces of an unbiased dice are black, two faces are green and one face is orange. The dice is rolled three times. The probability that the colours black, green and orange appear in the first, second and third tosses respectively is _____.

- a) $\frac{5}{36}$
- b) $\frac{1}{36}$
- c) $\frac{1}{9}$
- d) $\frac{1}{18}$

61. If a and b are two numbers such that $a + b = 18$, $|a - b|$ is 24. Then a and b are the roots of the quadratic equation _____.

- a) $x^2 + 18x + 63 = 0$ b) $x^2 - 18x - 63 = 0$ c) $x^2 + 18x - 72 = 0$ d) $x^2 - 18x + 71 = 0$

62. If $S = 3 + 5 + 9 + 17 + 33 + \dots$ the value of the 10th term of the series is _____.

- a) 1024 b) 1025 c) 1023 d) 1020

63. Find the number of divisors of 420.

- a) 16 b) 12 c) 24 d) 48

Directions for questions 64 to 68: Answer the questions based on the information given below.

Study the following table for the number of pass and fail students in various classes and schools and answer the Qs 86 to 90.

Class	VI	VII	VIII	IX	X
School	Pass, Fail	Pass, Fail	Pass, Fail	Pass, Fail	Pass, Fail
A	20, 4	30, 3	36, 6	70, 5	80, 4
B	25, 5	20, 4	40, 5	60, 5	100, 1
C	30, 3	25, 5	46, 4	50, 6	120, 2
D	15, 1	25, 2	48, 5	40, 4	150, 3
E	60, 2	30, 1	50, 0	80, 10	100, 0

64. What is the overall fail percentage (approximately)?

- a) 10 b) 8 c) 6 d) 5

65. What is the respective ratio of the total number of Pass Students of Class VI to that of Class VIII from all the Schools together?

- a) 9 : 11 b) 181 : 221 c) 81 : 123 d) None of these



66. Which Class has maximum number of Pass Students from all the Schools together?

- a) VIII b) VII c) IX d) X

67. What is the average number of Pass students of all the classes together of School E?

- a) 80 b) 74 c) 71 d) 64

68. What is the respective ratio of the total number of Fail students of Class IX to the total number of Fail students of Class X from all the Schools together?

- a) 2 : 1 b) 3 : 4 c) 4 : 5 d) 6 : 7

Directions for questions 69 to 73: Answer the questions independently

69. Find the HCF and LCM of 1.23, 1.35 and 2.1.

- a) 0.03, 774.9 b) 0.3, 7749 c) 0.003, 77.49 d) 774.9, 0.03

70. A grain trader, who is dishonest in his ways, often uses lesser weights while weighing, and sells the grains at full price. If he sells one kilogram of a specific grain at a price of Rs. 278, while passing on only 786 grams to the purchaser, what is the trader's approximate gain percentage?

- a) 26% b) 27% c) 25% d) 21%

71. Rs. 144 is the difference between simple interest on a certain principal at 5% for 8 years and at 4% for 6 years. Find the principal amount.

- a) Rs. 750 b) Rs. 1150 c) Rs. 1600 d) Rs. 900

72. Ashok and Mohan can do a piece of work in 12 days. Mohan and Vinod can together do it in 15 days. If Ashok is twice as good a workman as Vinod, in how much time will Mohan alone can do the work?

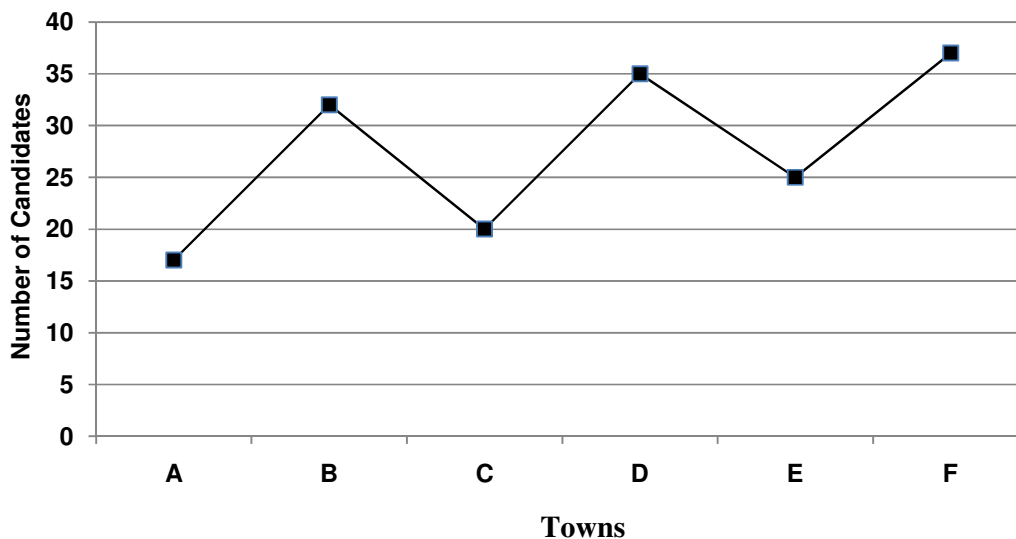
- a) 15 days b) 20 days c) 25 days d) 35 days

73. A circular swimming pool is surrounded by a concrete wall 4 ft. wide. If the area of the concrete wall surrounding the pool is $\frac{11}{25}$ that of the pool, then the radius of the pool is

- a) 8 ft. b) 16 ft. c) 20 ft. d) 30 ft.

Direction for Questions 74 to 78: Study the following graph carefully to answer the questions:

**Number of Candidates Appearing for Management Aptitude Test (MAT) from Various Towns
(Number in thousands)**



74. What is the respective ratio of the number of candidates appearing for the MAT from Town B to Town E?

- a) 11 : 8 b) 13 : 10 c) 6 : 5 d) None of these

75. What is the **approximate** average number of candidates appearing for MAT from all the Towns together?

- a) 29950 b) 28900 c) 27920 d) 26940

76. The number of candidates appearing for MAT from Town A is **approximately** what per cent of the number of candidates appearing for MAT from Town F?

- a) 53 b) 67 c) 39 d) 47

77. What is the respective ratio of the number of students appearing for the MAT from Town A, B and C together to the number of students appearing for the MAT from Town D, E and F together?

- a) 28 : 39 b) 3 : 2 c) 9 : 10 d) 14 : 13

78. The number of candidates appearing for MAT from Town C is approximately what per cent of the total number of candidates appearing for MAT from all the Towns together?

- a) 13 b) 17 c) 21 d) 12

Direction for Questions 79 and 80: Each question below is followed by two statements A and B. You are to determine whether the data given in the statement is sufficient for answering the question. You should use the data and your knowledge of Mathematics to choose between the possible answers.

Give answer:

- a) if the statement A alone is sufficient to answer the question, but the statement B alone is not sufficient.
- b) if the statement B alone is sufficient to answer the question, but the statement A alone is not sufficient
- c) if both statements A and B together are needed to answer the question.
- d) if you cannot get the answer from the statement A and B together, but need even more data.

79. The ages of Neera and Shalu are in the ratio of 2 : 1. What is the age of Shalu?

- A. The ages of Shalu and Sugandha are in the ratio of 2 : 1.
- B. After 4 years the ratio of Neera's and Shalu's ages will be 3 : 2.

80. What is the salary of A, in a group of A, C, E, G, H and J, whose average salary is Rs 25,000?

- A. Total of the salary of C and E is Rs 54,000.
- B. Total of the salary of G and H is Rs 58,000.

Section III – Logical Reasoning

Direction for Question 81: In the following question you are given four statements followed by three conclusions numbered I, II and III. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements.

81.

Statements:

Some shoes are socks.
All socks are towels.
All towels are bed sheets.
No bed sheet is blanket.

Conclusions:

I. No towel is blanket.
II. Some shoes are towels.
III. Some shoes are bed sheets.

a) Only I and II follow b) Only II and III follow c) Only I and III follow d) All follow

Direction for Question 82: In the question below a statement is given followed by two courses of action numbered I and II. On the basis of the information given in the statement, decide which of the suggested courses of action logically follow(s). Give answer:

a) if only I follows.
b) if only II follows.
c) if both I and II follow.
d) if either I or II follows.

82. Cases of road accidents are increasing constantly, particularly in the urban areas.

Courses of action:

I. Transport Authorities in the urban areas should impose stringent norms for maintenance of vehicles.
II. Traffic police should severely punish those found to be violating traffic rules.
Statement:

Direction for questions 83 to 87: Answer the questions based on information given below.

Seven friends, A, B, C, D, E, F and G like different colors among green, white, yellow, pink, blue, purple and red and different fruits among apple, litchi, orange, banana, guava, peach and pineapple (not necessarily in that order).

A likes green color and apple. The one who likes yellow also likes litchi. E likes guava and G likes pink. The one who likes white does not like banana but the one who likes red, likes banana. C likes white and the one who likes guava likes blue. The one who likes pink likes pineapple. B does not like peach. D does not like white but D likes banana. F does not like orange while C does not like Peach.

83. Which of the following is/are true?

a) D likes red b) G likes orange c) C likes litchi d) D likes guava

84. Who among the following like guava?

- a) F b) D c) E d) B

85. Who among the following like purple?

- a) A b) F c) E d) D

86. Which of the following is/are true?

- a) F likes peach b) D likes guava c) B likes orange d) G likes orange

87. Which of the following is/are true?

- a) E likes red and D likes banana b) B likes yellow and D likes guava
c) A likes green and G likes blue d) C likes orange and G likes pineapple

Direction for questions 88 to 90: Given an input line the machine arranges the words and numbers step by step in a systematic manner as illustrated below:

Input: subsidy 76 48 follow 35 next 63 must
Step I: 35 subsidy 76 48 follow next 63 must
Step II: 35 subsidy 48 76 follow next 63 must
Step III: 35 subsidy 48 next 76 follow 63 must
Step IV: 35 subsidy 48 next 63 76 follow must
Step V: 35 subsidy 48 next 63 must 76 follow

Output in Step V is the final. As per the rules followed in the above steps, find out in each of the following questions the appropriate step for the given input.

88. If the second step of an input is “21 white direct 72status front 37 69”, how many more steps are required to complete the arrangement?

- a) Three b) Four c) Five d) Six

89. What will be the third step for the input “17 85pearls garland 67 93 restriction judgments”?

- a) 17 restriction 67 pearls garland 85 93 judgments
b) 17 restriction 67 pearls 93 garland 85 judgments
c) 17 restriction 85 pearls 67 garland 93 judgments
d) 17 restriction 67 pearls 85 garland 93 judgments

90. If the second step of an input is “26 shop finance 48game music 63 37”; what will be the fifth step?

- a) 26 shop 37 music 48 finance game 63
- b) 26 shop 37 music finance 48 game 63
- c) 26 shop 37 music 48 game finance 63
- d) There is no fifth step

Directions for questions 91 and 92: Choose the conclusion that can be derived from the given passage.

91. Typically the entrepreneur is seen as an individual who owns and operates a small business, but, simply to own and operate a small business or even a big business does not make one an entrepreneur. If this person is a true entrepreneur then new products are being created, new ways of providing services are being implemented.

- a) Entrepreneurs are inventors
- b) Someone who develops an enterprise may be considered an entrepreneur
- c) Entrepreneurs do not own and operate small business
- d) Entrepreneurs are the main actors in economic growth

92. In a world of many trading countries, the trade between two countries need not be balanced, for the trade of each to be in global balance. Differing demands and productive capabilities among countries will cause a specific country to have trade deficits with some countries and surpluses with others.

- a) A country's global trade balance is determined by relative demand and productive capabilities.
- b) A country's trade will always be in balance, even though it runs a deficit with a single country.
- c) A country's trade deficits and surpluses with other countries always balance out.
- d) A country's global trade balance is a sign of strength or weakness.

Direction for questions 93 to 97: Answer the questions independently.

93. Four of the following five are alike in a certain way and so form a group. Which is the one that **does not** belong to the group

- a) Tin
- b) Gold
- c) Brass
- d) Copper

94. In a certain code LOAD is written as 3#%5 and VIDE is written as @\$56. How is DOVE written in that code?

- a) 5@#6
- b) 5#56
- c) 5\$@6
- d) 5#@6

95. Find the code for the given word from the table given below.

STRAIN

	1	2	3	4	5
1	Y	R	D	M	X
2	I	F	W	S	P
3	S	U	B	L	H
4	F	K	T	M	I
5	A	N	W	R	D

	5	6	7	8	9
5	A	C	J	T	N
6	O	R	V	V	G
7	E	Z	J	K	A
8	Z	N	S	X	L
9	I	H	G	Q	T

- a) 87 43 66 44 95 52 b) 24 99 12 79 45 59 c) 87 58 54 51 21 69 d) 31 43 12 55 76 86

96. How many such pairs of letters are there in the word DONATIVE; each of which have as many letters between them in the word, as they have in English alphabet?

- a) None b) One c) Two d) More than three

97. If it is possible to make only one meaningful word from the first, the third, the fourth, the seventh and the eighth letters of the word DIAMETERICAL, second letter of that word is your answer. If more than one such word can be formed, your answer is P and if no such word can be formed your answer is N.?

- a) R b) M c) P d) N

Directions for question 98: Below in the question are given two statements (A) and (B). One of these statements may be the effect of the other statement. Read both the statements and decide which of the following answer choice correctly depicts the relationship between these two statements.

Mark answer:

- A. if statement (A) is the cause and statement (B) is its effect.
 B. if statement (B) is the cause and statement (A) is its effect.
 C. if both the statements (A) and (B) are effects of independent causes.
 D. if both the statements (A) and (B) are effects of some common cause.

98.

- a) Parents in the locality decided to stop sending their children to school by private vehicles.
 b) A major accident of a private van carrying school children resulted in the death of a few and injuries to many children.

Directions for question 99: In the following, a statement is followed by two arguments, I and II. Decide which of the arguments is strong and which is weak.

Mark the answers as:

- A. If only argument I is strong.
- B. If only argument II is strong.
- C. If both I and II are strong.
- D. If neither I nor II is strong.

99. Should school education be made free in India?

- a) Yes, this is the only way to develop literacy.
- b) No, it would add to the already heavy burden on the exchequer.

Direction for Question 100: In the question you are given four statements followed by three conclusions numbered I, II and III. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements.

100.

Statements:

Some fruits are flowers.
Some flowers are buds.
No bud is leaf.
All leaves are plants.

Conclusions:

- I. No plant is bud.
- II. Some plants are flowers.
- III. Some buds are fruits.

- a) None follows
- b) Only I follows
- c) Only II and III follow
- d) Only III follows

Direction for Questions 101 to 105: Refer the information given below and answer the questions that follow:

There was a 5 days (Monday-Friday) seminar in a college which focused on upcoming technologies in market. The speaker had divided his seminar into 5 chapters (1-5) not necessarily in the same order. On each day he delivered the lecture on one chapter. The notes which he prepared for each chapter were of 20 pages, 30 pages, 50 pages, 40 pages and 60 pages and the time consumed by him to explain each chapter was 1 hour, 2 hours, 3 hours, 4 hours and 2.5 hours not necessarily in the same order. The following information was given about the order of teaching:

- i) Except for the chapters taught on Monday and Friday, the chapters required time according to their number of pages. (i.e. as the number of pages increased, the time required to teach them also increased)
- ii) Chapter 3 was taught on Monday and it took 1 hour to teach it.
- iii) The chapter taught on Tuesday had more number of pages than chapter taught on Monday. Chapter 2 was of 30 pages and the chapter taught on Friday was of 40 pages.
- iv) Chapter 4 took maximum time for teaching and on Tuesday, the chapter which required 2.5 hours was not taught on Tuesday.
- v) Chapters taught on Wednesday and Thursday required more time than that on any other day.

101. Which chapter was taught on Tuesday?

- a) 1 b) 2 c) 4 d) 5

102. The chapter taught on Friday was of how many pages?

- a) 20 b) 30 c) 40 d) 50

103. The chapter which required 2.5 hours for teaching was taught on which day?

- a) Tuesday b) Friday c) Either a) or b) d) None of these

104. Which chapter was taught on Wednesday?

- a) 4 b) 1 c) 5 d) can't say

105. If we were told that chapter 5 was taught 3rd in the order of teaching in the week then which chapter was taught on Friday?

- a) 2 b) 3 c) 4 d) 1

106. Determine the correctness or otherwise of the following Assertion [A] and the Reason [R] and choose answer:

- a) If both [A] and [R] are true and [R] is the correct reason for [A]
- b) If both [A] and [R] are true but [R] is not the correct reason for [A]
- c) If both [A] and [R] are false
- d) If [A] is true but [R] is false

Assertion [A]: With the growth momentum already under pressure, an increase in policy rates will further hurt the economy's future prospects.

Reason[R]: Disappointed over the Reserve Bank of India's decision to hike policy rates for the 11th time in 15 months, India Inc warned that the move might pull down economic growth below eight per cent.

107. Facts are those statements which deal with pieces of information that one has heard, seen or read, and which are open to discovery or verification.

Which of the following sentences can be labelled Facts?

- A. The unflagging enthusiasm of low-cost airlines abroad to extract the most from their customers never ceases to amaze.
- B. Last year, an airline interiors firm unveiled a seat that was more akin to saddles so that passengers would be in a semi-standing position, allowing for more of them to be packed into the limited space of an aircraft.
- C. Fortunately, this descent into cowboy class from the already-cramped cattle class has not yet been implemented by any airline
- D. It is not surprising then that the same airline has proposed to dispense with two out of its three on-board lavatories to accommodate six more seats, after its proposal to charge for using the bathrooms caused an outcry.

- a) A only
- b) B only
- c) A and C
- d) B and D

Directions for question 108: Below in the question are given two statements (A) and (B). One of these statements may be the effect of the other statement. Read both the statements and decide which of the following answer choice correctly depicts the relationship between these two statements.

Mark answer:

- A. if statement (A) is the cause and statement (B) is its effect.
- B. if statement (B) is the cause and statement (A) is its effect.
- C. if both the statements (A) and (B) are effects of independent causes.
- D. if both the statements (A) and (B) are effects of some common cause.

108.

- a) The city observed lowest temperature of the last decade accompanied by heavy fog during the week.
- b) Most of the flights from the city were indefinitely delayed causing panic among the passengers.

Direction for Question 109: In the question below is given a statement followed by two courses of action numbered I and II. On the basis of the information given in the statement, decide which of the suggested courses of action logically follow(s). Give answer:

- a) if only I follows.
- b) if only II follows.
- c) if both I and II follow.
- d) if either I or II follows.

109. Despite good economic progress of the country, a significant number of undernourished children have been observed in the rural parts of the country.

Courses of action:

- I. Government should increase Wealth Tax/ Income Tax and use that money for upliftment of the deprived class.
- II. Government should introduce schemes like free meals in primary schools and make primary education compulsory.

Direction for question 110: A statement is followed by two arguments, I and II. Decide which of the arguments is strong and which is weak.

Mark the answers as:

- A. If only argument I is strong.
- B. If only argument II is strong.
- C. If both I and II are strong.
- D. If neither I nor II is strong.

110. Should we scrap the public distribution system in India?

- a) Yes, protectionism is over. People must get their bread on their own.
- b) No, the poor do not get any benefit because of corruption.

Directions for questions 111 to 117: Answer the questions independently.

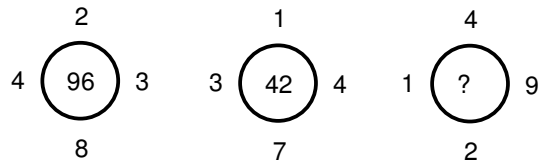
111. AE : DB in the same way as JQ : ?

- a) MN
- b) RK
- c) PI
- d) MR

112. If NMAT = 480, SNAP = 500, then CET = ?

- a) 230
- b) 250
- c) 280
- d) 310

113. Study the numbers and find the number that will replace?



- a) 72 b) 61 c) 83 d) 36

114. If by arranging the letters of the word, ISNNTALETEB, the name of a game is formed, what are the first and last letters of the word(s) so formed?

- a) T, I b) T, A c) T, S d) N, T

115. Find the wrong term in the series.

5, 10, 11, 18, 23, 22, 46, 24, 95, 25

- a) 11 b) 22 c) 95 d) 46

116. Alpesh was counting down from 32. Chirag was counting upwards the numbers starting from 1 and he was calling out only the odd numbers. What common number will they call out at the same time if they were calling out at the same speed?

- a) 19 b) 21
c) 22 d) They will not call out the same number.

117. Find the code for the given word from the table given below.

REPLY

	1	2	3	4	5
1	L	F	O	J	E
2	U	R	C	K	I
3	H	A	M	B	L
4	P	J	W	S	T
5	Y	C	E	Z	F

	5	6	7	8	9
5	P	I	B	R	T
6	G	E	X	V	Y
7	N	D	Q	L	Z
8	G	R	V	I	D
9	Y	H	O	K	P

- a) 86 66 41 78 51 b) 22 53 55 35 24 c) 22 15 99 97 69 d) 58 66 34 11 95

Directions for Questions 118 to 120: Read the information carefully and answer the questions that follow.

In a B-school entrance coaching institute, five out of eight faculty members – P, Q, R, S, T, U, V and W – are to be scheduled for classes on each day of the week including Sunday. On any day, except on the first day of the month, exactly three faculty members out of those who were scheduled on the previous day must be scheduled. The scheduling pattern must also satisfy the following conditions:

- (i) If Q is scheduled on a day, then V cannot be scheduled on that day.
- (ii) If T is to be scheduled on a day, then U must be one of the professors to be scheduled after T on that day.
- (iii) If R is to be scheduled on a day, then V must be one of the faculty members to be scheduled after R on that day.
- (iv) One of the 2 faculty members P or W is to be scheduled for the last class on any day.

118. Which of the following could be the group of faculties to be scheduled on the first day of a month?

- a) V, T, R, U, P b) T, P, R, V, W c) W, T, P, U, S d) U, W, R, V, P

119. Which of the following is true of the valid sequence any day's of scheduling of faculties?

- a) Q cannot be scheduled for the third class.
- b) U cannot be scheduled for the third class.
- c) T cannot be scheduled for the third class.
- d) R cannot be scheduled for the third class .

120. If R is scheduled at the third place in a sequence, which of the following faculties cannot be the second one in that sequence?

- a) W b) U c) P d) T