

CMAT 2018 Slot 1

Quant

1. How many iron balls, each of radius 1 cm, can be made from a sphere whose radius is 8 cm?

- A 64
- B 256
- C 512
- D 124

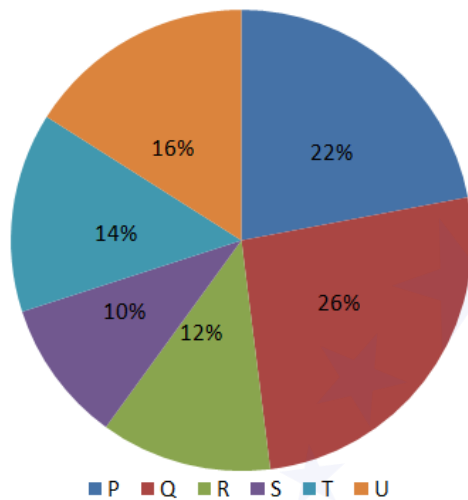
2. If a is between 0 and 1, which of the following statements is (are) true?

- (i) $a^2 - 1 > 0$
- (ii) $a^2 + 1 > 0$
- (iii) $a^2 - a > 0$

- A only (ii)
- B (i) & (ii)
- C (iii) only
- D All three

3. The following pie chart provides information about the revenue share of six companies P, Q, R, S, T, U as a percentage of the total car market (in Rs.) in the year 2010. These are the only six companies producing car in the market.

Revenue share



If the revenue share of company T increases by 20% in the year 2011, then find the percentage increase in the revenue share of these six companies in the year 2011 assuming that all the other companies except T generated the same revenue as they did in the year 2010.

- A 2.8%
 - B 3.2%
 - C 1.8%
 - D 2.6%
4. In how many years will Rs. 2 lakh double itself at 11.5% per annum simple interest?
- A Less than 8
 - B Between 8 and 9
 - C 9.3
 - D 10.5

5. If $AB + C = D$, find A and C given that when $B = 6$, $D = 30$ and when $B = 8$, $D = 36$.

- A $A = 2, C = 6$
- B $A = 3, C = 12$
- C $A = 6, C = 3$
- D $A = 4, C = 3$

6. If $y^2 + 3y - 18 \geq 0$, which of the following is true?

- A $y \leq 3$ or $y \geq 0$
- B $y > -6$ or $y < 3$
- C $-6 \leq y \leq 3$
- D $y \geq 3$ or $y \leq -6$

7. In how many different ways can 3 red balls, 2 blue balls and 4 yellow balls be arranged so that the balls of the same color come together?

- A 1742
- B 1732
- C 1728
- D 1750

8. The following table shows the courier charges (in Rs.) for sending 1 kg parcel from one city to another.

Cities	Ahmedabad	Mumbai	Kolkata	Bangalore	Jaipur
Ahmedabad		10	5	15	10
Mumbai	10		7	25	20
Kolkata	5	7		20	15
Bangalore	15	25	20		10
Jaipur	10	20	15	10	

Among the following, the charges will be the least for sending a parcel from:-

- A Ahmedabad to Jaipur
- B Mumbai to Bangalore
- C Jaipur to Bangalore
- D Kolkata to Mumbai

9. Three numbers X, Y and Z are in the ratio of 12: 15: 25. If the sum of twice of these numbers is 614, the ratio between the difference of Y and X and the difference of Z and Y is:-

- A 3:7
- B 5:1
- C 3:10
- D 10:3

10. Ankush and Babulal walk around circular track. They start at 9 a.m. from the same point in the opposite directions. Ankush and Babulal walk at a speed of 3 rounds per hour and 5 rounds per hour respectively. How many times shall they cross each other until 10.30 a.m.?

- A 9
- B 10
- C 12
- D 11

11. The monthly incomes of Amit and Bharat are in the ratio of 5:4, their monthly expenses are in the ratio of 19:21, and their monthly savings are in the ratio of 37:18. If the total annual savings of Amit and Bharat is Rs.1,32,000, Amit's monthly income is:-

- A Rs. 12,000
- B Rs. 15,000
- C Rs. 18,000
- D Rs. 16,000

12. In a circle of radius 6 cm, arc AB makes an angle of 114° with centre of the circle O. What is angle ABO?

- A 23°
- B 42°
- C 38°
- D 33°

13. In a survey conducted among 120 houses, it was found that 50 read Times of India, 60 read Indian Express and 48 read Hindustan Times; 20 read Times of India and Indian Express, 18 read Times of India and Hindustan Times and 24 read Indian Express and Hindustan Times. If 10 read all three, how many read only one newspaper?

- A 50
- B 32
- C 64
- D 84

14. The length of the minute of a watch is 42 mm. The area swept by it in 30 minutes (in mm^2) by taking π as 3.14 is:-

- A 2769.5
- B 44π
- C 728
- D 1040π

15. If $(x + 4)$ is a factor of $x^3 + 2x^2 + bx + 68$, what is the value of b ?

- A -9
- B 9
- C 8
- D -8

16. Rakesh covers 12 km at 6 km/hr, 36 km at 9 km/hr and then 32 km at 4 km/hr. Find the approximate average speed in covering the whole distance.

- A 4.2 km/hr

- B 5.52 km/hr
- C 5.71 km/hr
- D 5 km/hr

17. Two pipes A and B can fill a cistern in 120 minutes and 150 minutes respectively. There is also an outlet C. If all the three pipes are opened together, the cistern gets filled in 100 minutes. How much time will be taken by C to empty full tank?

- A 3 h 20 min
- B 2 h 40 min
- C 3 h
- D 3 h 40 min

18. Ramesh works A hours a day and rests B 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 adopts a new pattern which then continues for the next four weeks. When he works longer than he rests, his wage per hour is three times

CollegeDekho

what he earns per hour when he rests longer than he works. The following table shows his daily working hours for the week numbered 1 to 13.

	1st Week	5th Week	9th Week	13th Week
Rest	3	4	5	
Work	6	8	9	8

A week consists of six days and a month consists of four weeks. If Ramesh is paid Rs. 60 per working hour in the 1st week, what is his salary for the 1st month? (Assume that he is paid half his wages for his resting hours on duty)

- A Rs. 6840
- B Rs. 11400
- C Rs. 7240
- D None of these

19. In a box, there are eight yellow and four black balls. If three balls are drawn at random, what is the probability that two are yellow and one black?

- A 1/16
- B 28/55
- C 3/8
- D $\frac{8C2}{4C1}$

20. If $\tan A + \cot A = \sqrt{5}$, What is the value of $\tan^3 A + \cot^3 A$?

- A $\sqrt{5}$
- B 3

C $2\sqrt{5}$

D $\frac{2}{\sqrt{5}}$

21. Two balls were bought for Rs. 37.40 at a discount of 15%. What must be the marked price of each of the ball?

A Rs. 11

B Rs. 22

C Rs. 33

D Rs. 44

22. Find the value of a, if:

$$\text{Modulus}(2a-3)=3a+2$$

A $\frac{1}{5}$

B 0

C -5

D $-\frac{1}{5}$

23. From a jar of wine containing 32 litres, 4 litres is drawn out, and the jar is filled up with water. If the same proportion of wine is further drawn out two more times, what proportion of wine to water will be there in the resulting mixture?

- A 245:166
- B 343:169
- C 363:173
- D 323:189

24. The geometric mean proportion between $30 + \sqrt{200}$ and $54 - \sqrt{648}$ is:

- A $6\sqrt{2}$
- B $4\sqrt{5}$
- C $6\sqrt{35}$
- D $5\sqrt{6}$

25. Anil is twice as good a student as Bharat and is able to finish a work in 30 minutes less than Bharat's time. Find the time in which both of them can finish the same work together?

- A 45 min
- B 30 min
- C 25 min
- D 20 min

Reasoning

26. The river flows from west to east and on the way then turns left. After going some distance it encounters a hill. It goes around the hill counter-clockwise in a quarter circle, and then turns right. In which direction is the river finally following?

- A North
- B South

- C East
- D West

27. Based on the statement given below which of the following option is correct:-

Whenever Preeti's father is in town, she abstains from school and goes to her aunt's house.

- A a) If Preeti has not abstained from school or she has not gone to her aunt's house, it means that her father is not in town.
- B b) If Preeti has not abstained from school but her father is in town, then she will definitely go to her aunt's house.
- C c) If Preeti has abstained from school but she has not gone to her aunt's house, it means that her father is not in town.
- D d) Both (a) and (c)

28. Four friends, namely, Liyaqat, Lillian, Lima and Lalit are sitting on a horizontally placed wooden bench, all looking towards the same direction.

If:

There is at least one person sitting between Lillian and Lima;

Liyaqat is towards the right of Lima but not towards the right of Lalit;

Lalit is seated immediately next to Lillian; &

Lima is seated at one of the extreme corners of the bench.

Which of the following is definitely true?

- A Lillian and Liyaqat are seated immediately next to one another.
- B Liyaqat is seated at one of the extreme corners of the bench.
- C There is at least one person seated between Lalit and Liyaqat.
- D There is at least one person seated between Lalit and Lima.

29. Ali, Benu, Cutty and Dolly play four different games among Basketball, Cricket, Kabaddi and Hockey. Ali does not play Basketball or Cricket. Benu does not play Kabaddi or Hockey. Cutty plays Hockey and Dolly plays either Basketball or Hockey. Who plays cricket?

- A Ali
- B Benu
- C Cutty
- D Dolly

- 30.** A National Highway road network has parallel and perpendicular roads running north south or east west only. Junctions/Intersections on this road network are marked as R1, R2, R3, R4... All roads are at exactly half a kilometer distance from each other. The following is known about junctions R1, R2, R3, R4, R8 and R24.
"R1' is east of 'R2' and west of 'R3'; 'R8' is southwest of 'R3' and southwest of R2. 'R2' is southeast of 'R24'. Which junctions are the farthest south and the farthest east?
- A** R1, R2
 - B** R8, R3
 - C** R3, R8
 - D** R2, R8
- 31.** 125 small but identical cubes have been put together to form a large cube. How many such small cubes will be required to cover this large cube completely?
- A** 208
 - B** 212
 - C** 254
 - D** 218
- 32.** Five boys Ganesh, Hitesh, Ishan, Jaikee and Kailash always compete with one another. Ishan gets more marks than Kailash and Jaikee gets less marks than Ganesh. Hitesh gets more marks than Jaikee and Kailash.
Whose marks among the following could be the lowest?
- A** Ganesh
 - B** Hitesh
 - C** Ishan
 - D** Jaikee
- 33.** Below given question has a main statement followed by four statements labeled A, B, C and D. Choose the ordered pair of statements, where the first statement implies the second and the two statements is logically consistent with the main statement.
All cubes are round in shape.
(A) Figure A is not round in shape.
(B) Figure A is a cube.
(C) Figure A is not a cube.
(D) Figure A is round in shape.
- A** CA
 - B** DB

C AC

D AB

34. If $a + b$ means a is sister of b,
 $a - b$ means a is brother of b,
 $a \times b$ means a is daughter of b,
 $a \div b$ means a is mother of b,
Which of the following relationship shows that p and r are wife and husband?

A $p \div q \times r$

B $p - q \times r$

C $p + q \times r$

D $p + q - r$

35. In a code language FRIGHTENS is written as 106; SIMILARLY is written as 118; How would DEMONITISATION be written in the same language?

A 159

B 169

C 167

D 166

36. Four packets P, Q, R and S, three wallets A, B and C are kept on a table one after the other in a row from left to right. Wallet C has as many items to its left as to its right. No packet is at any extreme end of the row. Packet P is kept to the immediate left of packet R. Packet P is to the immediate right of wallet A. What is kept third from left end of the row on the table?

A C

B S

C R

D A

37. A green grocer sells five types of fruits- Apple, Black berry, Banana, Cherry and Peach. Black berry is more fresh and heavier than Peach. Apple is heavier than Banana and more fresh than Cherry. Cherry is heavier than Black berry, but less fresh than Peach. Banana is heavier than Black berry, but less fresh than it. Which of the following is the lightest of all the fruits?

A Peach

B Black berry

C Apple

D Banana

38. 2 3 7 4 3 2 1 5 7 3 2 7 1 0 9 8 7 5 4 7 2 3

Find the number of 7 in the given series that are followed by an even number but are not preceded by a prime number?

A 1

B 2

C 3

D 4

39. Each of the three kids gets at least one color box out of 6 color boxes, at least one tiffin box out of 6 tiffin box and at least one chocolate box out of 6 chocolate boxes so that the total number of the items that each of them gets is the same. No one gets the same number of tiffin boxes, color boxes and chocolate boxes. Then which of the following can be TRUE?

A Each Kid gets 2 tiffin boxes, 2 color boxes and 2 chocolate boxes.

B Each Kid gets 2 tiffin boxes and 2 color boxes.

C Each Kid gets 1 color box, 2 chocolate boxes and 3 tiffin boxes.

D The number of tiffin boxes, color boxes and chocolate boxes that each Kid gets is 1, 2 and 3 not necessarily in that order.

40. A, B, C, D, E, F and G are seven members in a family, out of which there are three females and four males. There are two architects, two travel agents, one teacher, one engineer and one doctor. No lady is either a teacher or an engineer. C is a travel agent and is married to A, who is a teacher. F, the engineer, is married to D, who is neither a travel agent nor a doctor. No two ladies have the same profession. B is the sister of G who is an architect. What is E's profession?

A Architect

B Travel agent

C Engineer

D Doctor

41. There are six members - Pills, Qills, Rills, Sills, Tills and Uills in a family. There are two married couples. Qills is Bengali and is the father of Tills. Uills is the grandfather of Rills. Uills is from Tamil Naidu. Sills is the grandmother of Tills and Sills is from Punjab. There is one Bengali, one Tamilian, one Punjabi, one Telegu and two Haryanvis in the family. The Telegu person is a female and married. Nobody who is a grandchild is married.

Which of the following two are married couples?

A Pills Qills, Uills Sills

- B Pills Sills, Qills Uills
- C Pills Rills, Qills Sills
- D Pills Uills, Qills Rills

42. Complete the below given series:-

0, 6, 6, 20, 20, ____.

- A 42
- B 40
- C 26
- D 32

43. Looking at Samir, Rahul said, "Your only brother is the father of my daughter's father". How is Samir related to Rahul?

- A Father
- B Grandfather
- C Brother-in-laws
- D Uncle

44. Kapila, Meenal, Rishi, Pradeep and Lalita have five flats in different buildings of five different colours- Blue, White, Red, Orange and Green. The Green building is the shortest of all the buildings and Pradeep's flat is in it. The building in which Lalita's flat is located, is neither Blue nor White in colour and is taller than the building in which Meenal's and Rishi's flats are located. One person's name starts with the same letter as the first letter of the building's colour in which he resides and it is the second tallest of all. Which of the following can be TRUE about the resident of the building, its colour and its height?

- A Lalita - Blue - Shortest
- B Meenal - Red - Tallest
- C Lalita - Orange - Tallest
- D Pradeep - Green - Tallest

45. Five theatres PVR, DT, Chanakya, Regal and Maratha Mandir screen two out of ten films based on Romance, Thriller, Horror, Adventure, Children, Drama, Documentary, History, Religion and Cartoon. Each theatre exhibits only two films and allots two different slots for them, wherein slot I is before slot II. Chanakya screens a Horror film in the first slot, while Maratha Mandir exhibits a Historical film in the second slot. DT exhibits a thriller film in the second slot and Regal exhibits a documentary film. Drama must be exhibited only in the second slot. The children's film and the Cartoon film are exhibited in

the same theatre while the religious film is not in the first slot. If Chanakya screens a Religious film in its second slot, then which of the films can be screened by theatre Regal?

- A Cartoon and History
- B Documentary and Drama
- C Documentary and History
- D Horror and Documentary

46. Three girls K, L, M and three boys N, Z and P are sitting around a table facing inwards playing cards. K and L do not sit next to each other. Z and P are opposite each other. M is sitting to the immediate right of P. If K is not between Z and M, then N is not next to P. Which of the following is not an arrangement (in clockwise direction) satisfying the conditions given above?

- A NK Z LMP
- B PKN Z LM
- C LN Z KMP
- D KMPLN Z

47. Ten candidates appear for an interview and six of them are selected. There are two M.Techs, two MBAs, two MBBS and four LLB among the candidates. At least one MBA candidate is selected, of the six selected candidates, exactly one must be an M.Tech candidate. If two MBBS candidates are selected, then which of the following statements can be TRUE?

- A One MBA and one LLB candidate are selected.
- B Three LLB candidate are selected.
- C Only one MBA and two LLB candidates are selected.
- D One M.Tech and three LLB Candidates are selected.

48. All students are young; some young are short; all short are stout; most stout are clever; all clever are courageous, then which of the following is most definitely false?

- A Some students are stout
- B Some young are courageous
- C Most stout are courageous
- D All stout are courageous

49. Arvind, Saurabh, Romy and Denu, have different qualifications. Their qualifications are MBA, B.Tech, M.Tech and LLB - not necessarily in that order. Arvind and Romy are not MBAs, whereas Saurabh and Romy are not LLB; Romy and Denu are not B.Tech, whereas Denu and Arvind are not M.Tech. If Saurabh is a B.Tech then which of the following should be an MBA?

- A Romy
- B Arvind
- C Denu
- D Either Romy or Denu

50. Five delegates P, Q, R, S and T are forwarding their files to one another. P sends his file to Q, S and T, T sends his files to R while P and R exchange their files with each other. Q sends his file to S who sends his files to T. If P has to forward his files to R, then in how many ways P can forward files to R?

- A Two
- B Three
- C Four
- D One

Verbal

Instructions [51 - 53]

Read the passage carefully and answer the question that follows.

Passage I

I once made a statement in a room full of college students that the most important thing a young person could acquire in college might be a sense of her own limitations. I realised when I said it that it was not a very fashionable thing to say. Popular books on how to therapy, stress the glorious potential of every human being and urge us to accept ourselves, finally, as being only a little lower than the angels. I heartily approve of any celebration of human potential, but I believe that we must acknowledge our potential for limitless evil as well. We must understand what we can do in the way of evil before we can even pretend to be good. This is the beginning of morality, the psychological or spiritual or, in a religious tradition, the mythical basis that makes morality possible. One of the most moral book of the past century is Joseph Conrad's Heart of Darkness, because Conrad faces the problem of evil in people. He tells us that we must recognize in ourselves the ability to put the head of our enemy on stick and dance around a fire with it, and only when we recognize that can we even begin to deal with any moral question at all. Students who have been nourished on pop psychology and told "I'm O.K." have some trouble dealing with Conrad, and some of them regard him as perverse.

I am amazed at the number of educated people who believe that we are somehow better, more moral, than our ancestors were. I have seen otherwise intelligent people grow red in the face at the suggestion that human beings are not better now - less cruel, more considerate, less animalistic, more humane- than they were when Nero ruled Rome or when the Pharaohs ruled Egypt or, when the Druids at Stonehenge readied their sacrifices. In one way we are more likely to have become dull to our potential for evil (and so discover it suddenly and with disastrous consequences) today than we were a few centuries ago. This is because we actively suppress the kind of self-knowledge that makes intelligent moral decisions possible. Sin and guilt are such old-fashioned terms that most of us are embarrassed by the very words.

51. The beginning of morality is based on:-

- A A strong religious and ethical sense.
- B A knowledge of the possibilities of evil as well as good.

- C A profound sense of tradition.
- D An innate sense of good and evil.

52. One would assume from this passage that the author probably taught:-

- A Music
- B Popular culture
- C French
- D Philosophy

53. The author's attitude towards popular how to books could be described as:-

- A Critical
- B Approving
- C Apathetic
- D Sympathetic

Instructions [54 - 56]

Read the passage carefully and answer the question that follows.

Passage II

Science made some progress in the middle Ages but the spirit of modern science was born with the Renaissance. Science in the middle ages struggled against restrictions and there were many fetters to be destroyed before it could continue unhampered. Superstitions were common and to the masses were much more acceptable than were scientific explanations. The Renaissance brought about an interest in all things pertaining to men and the thirst for new achievements led to a critical observation of natural phenomena. The spirit of learning was manifested in science. Scientists of the 16th century made the first effective protest against the medieval scientific method of accepting theories before investigation had verified them. Francis Bacon pointed out that classical scientific conclusions did not represent mature knowledge and implored men to explore the realms of nature. Descartes brought out the necessity of questioning everything. He was the forerunner of science.

54. Outlook towards science in the middle ages can be best describe as:-

- A It was in the pre-Renaissance period that the spirit of learning was manifested in science.
- B Spirit of modern science was born in the middle ages.
- C Superstitions were common than scientific explanations.
- D Science in the middle ages blossomed unrestricted and without hindrances.

55. Another word for FETTERS is:-

- A Manacle
- B Hoop
- C Ornament
- D None of these

56. How were the scientists of the 16th century different from those of the medieval times?

- A They accepted scientific theories only after investigation had verified them.
- B They struggled against restrictions protested.
- C They overlooked natural phenomena and accepted hearsay.
- D Insufficient information.

Instructions [57 - 62]

Read the passage carefully and answer the question that follows.

Passage III

How can an organization's sales operations be improved? One of the keys to becoming more effective is to first determine the type of "selling process" which needs to be used. In other words, the role the salesperson must play has to be identified. There are three different processes sales staff can adopt: narrative, suggestive and consultative. The narrative approach depends on the salesperson moving quickly into a standardized presentation. Every buyer receives the same presentation. Emphasis is on highlighting benefits and how the product or service can help the buyer. This is an effective approach if the buying motive for all customers is the same. This process is well suited where there are a great number of prospectuses to be called on.

The suggestive approach depends on the seller being in a position to offer alternative recommendations. This is quite different from the narrative approach as the presentation is tailored to the individual customer. Here, the salesperson must initiate some discussion in order to get the buyer in a positive frame of mind.

An example of this process would be a restaurant wine steward who has checked with the waiter what food the customer has ordered and then opens by saying that either "this or that" particular wine would go best with the food ordered. This is an excellent approach where one doesn't have much time with the customer but is able to acquire some basic information and then offer a particular recommendation. This process is well suited for products and services. However, it does require the salesperson to acquire basic information from the customer before moving on to the presentation. The consultative approach requires the salesperson to have a thorough understanding of the customer and what the customer is trying to achieve. The role of the salesperson is to become an adviser or consultant and she must acquire a great deal of information from the customer. With this information, the salesperson can plan what to offer the customer. In this case, the salesperson must tailor the presentation to highlight how the salesperson's product or service can be of help. This approach will usually require a number of sales calls as the buying process may be complex. The consultative approach requires a wide variety of skills, including probing, listening, analysis, creativity and persuasiveness. The other two approaches typically require fewer skills. Hiring, training, motivating and rewarding sales people needs to be linked to the type of sales process being used and this is where the problem starts. Many organizations, which should be using a consultative approach, use a narrative approach. They use standardized methods and do not tailor presentations to individual customers. You see this in many industries. When this is the case, price becomes a key criterion for the customer. A key issue in developing a professional sales organization is first establishing the sales process. When that decision has been made, all other sales decision, including hiring, training and rewards can be linked to it.

57. How would you describe the writer's style?

- A Persuasive

- B Critical
- C Personal
- D Argumentative

58. In paragraph 3, 'In order to' is used:-

- A To describe an effect
- B To describe a cause
- C To describe a purpose
- D To describe an effort

59. In paragraph 8, 'key criterion' is closest in meaning to:-

- A Confusion
- B A contrary analysis
- C An important point
- D A minor issue

60. According to the passage which of the approaches is the most complicated.

- A The narrative approach
- B The consultative approach
- C The suggestive approach
- D No significant difference

61. The writer is probably:-

- A An academic
- B A journalist
- C A businessman
- D A sales professional

62. Which of the following selling approach may work best for a new technological product that is first of its kind?

- A The narrative approach

- B The consultative approach
- C The suggestive approach
- D Depends on the product

Instructions [63 - 65]

Read the passage carefully and answer the question that follows.

Passage IV

Excerpt from Delhi Daily

'Delhi Belly' restaurant provides a dining experience like no other! A rustic atmosphere, along with delicious food, it provides an opportunity to soak up the local flavor. Recently relocated to the old market area, Delhi Belly is especially popular for lunch. At the counter, you can place your order for one of Delhi Belly's three daily lunch specials or one of several Delhi snacks, all at reasonable prices. Once you get your food, choose a seat at one of the four charming communal tables. By the time you are ready to carry your leaf plate to the trash bin, you have experienced some of the best food and one of the most charming companies our city has to offer.

Restaurant review

Yesterday, I was exposed to what has been called "a dining experience like no other." At lunchtime, Delhi Belly is so crowded; I wondered when the authorities had last visited the establishment. The line snaked out of the door to the corner, and by the time I reached the counter, I was freezing. I decided on the 'Delhi Belly lunch special'. It turned out to be the blandest food I have ever eaten. At Delhi Belly, you sit at one of four long tables. The couple sitting across from me was having an argument. The truck driver next to me told me more than I wanted to know about highway taxes. After I had tasted all of the food on my plate, I rose to leave, whereupon one of the people working behind the counter yelled at me to clean up after myself. Throwing away that plate of food was the most enjoyable part of dining at Delhi Belly.

63. If you go to lunch at Delhi Belly, you could expect to see:-

- A a long line of customers
- B the authorities
- C the restaurant critic from the newspaper
- D well cooked snacks

64. Which of the following illustrates the restaurant critic's opinion of the food at Delhi Belly?

- A "At Delhi Belly's, you sit at one of four long tables."
- B "At lunchtime, Delhi Belly is so crowded, I wondered when the authorities had last visited the establishment."
- C "After I had tasted all of the food on my plate, I rose to leave, whereupon one of the people working behind the counter yelled at me to clean up after myself."
- D "Throwing away that plate of food was the most enjoyable part of dining at Delhi Belly."

65. The main purpose of the restaurant review is to:-

- A tell people they probably don't want to eat at Delhi Belly.

- B make fun of couples who argue in public.
- C recommend the lunch special.
- D warn people that Delhi Belly tends to be crowded.

66. Choose the word or the phrase that has most nearly the same meaning for the word given below.

PERFIDY

- A Thrift
- B Loyalty
- C Sincerity
- D Betrayal

67. Choose the word or the phrase that has most nearly the same meaning for the word given below.

SABOTAGE

- A Destructive action
- B Resistance
- C Deliberate subversion
- D Vandalism

68. Choose the word or the phrase that has most nearly the opposite meaning for the word given below.

BASHFUL

- A Bawling
- B Arrogant
- C Impetuous
- D Kindly

69. Complete the analogy.

POSTURE : BEARING::_____

- A Regimentation: uniformity
- B Deportment: behavior
- C Anarchy: street brawls
- D Melodrama : exaggeration

70. From the options given below, find the closest substitute for the underlined expression.

He secured a job in the films because he was good at producing voice sounds.

- A Mono acting
- B Mimicry
- C Ventriloquism
- D Caricature

71. A word and its definition is given followed by four sentences. Choose the option that best fits with the definition.

Maneuvering:

- A A family is making plans for the daughter's wedding.
- B A manager making his way to the top.
- C A captain giving order to his soldiers.
- D A child planning to stay away from school.

72. The following question has a set of three statements. Each statement can be classified as one of the following:-

- (i) Facts, which deal with pieces of information that one has heard, seen or read, and which are open to discovery or verification (the answer option indicates such a statement with an 'F').
- (ii) Inferences, which are conclusions drawn about the unknown, on the basis of the known (the answer option indicates such a statement with an 'I').
- (iii) Judgements, which are opinions that imply approval or disapproval of persons, objects, situations and occurrences in the past, the present or the future (the answer option indicates such a statement with a 'J').

Identify the Fact(F), Judgement(J) and Inference(I) from the given sentences.

1. God created the earth
2. God exists
3. Wine tastes better than beer

- A 1F,2J,3J
- B 1J,2J,3J
- C 1I,2F,3J
- D 1J,2J,3I

73. The following question has a set of three statements. Each statement can be classified as one of the following:

- (i) Facts, which deal with pieces of information that one has heard, seen or read, and which are open to discovery or verification (the answer option indicates such a statement with an 'F').
- (ii) Inferences, which are conclusions drawn about the unknown, on the basis of the known (the answer option indicates such a statement with an 'I').

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(iii) Judgements, which are opinions that imply approval or disapproval of persons, objects, situations and occurrences in the past, the present or the future (the answer option indicates such a statement with a 'J').

Identify the Fact(F), Judgement(J) and Inference(I) from the given sentences.

1. Weather forecast says 80% chance of thunderstorms, It's a good idea to bring an umbrella.
2. My throat is sore and my nose is running, I have probably caught a cold.
3. There are over 40 million volumes in the university library, they probably have a copy of the famous book 'Savitri'.

- A 1,2,3J
- B 1,2,3I
- C 1F,2F,3J
- D 1J,2J,3F

74. Which of the given figure of speech has been employed in the formation of the following sentence?
"I am so tired that I can sleep for a year."

- A Hyperbole
- B Pun
- C Oxymoron
- D Understatement

75. Fill in the blank using appropriate prepositions.
"A plane flies _____ the clouds."

- A in
- B above
- C along
- D with

General Awareness

76. _____ varies directly with vibrating body's amplitude.

- A Loudness of sound
- B Modulation of sound
- C Quality of sound
- D Tone of the sound

77. Which of the following is true?

- A Saltwater freezes at the same temperature as fresh water
- B Saltwater freezes at a slightly higher temperature than fresh water
- C Saltwater freezes at a slightly lower temperature than fresh water
- D Seawater does not freeze

78. Human eye is most sensitive to which color in the day light?

- A Yellow
- B Green
- C Yellowish Green
- D Red

79. What is the Data Capacity of a standard size CD ROM?

- A 650 - 700 MB
- B 185 - 210 MB
- C 550 - 600 MB
- D 500 - 650 MB

80. Indian Railways generates highest revenue from which of the following?

- A Passenger fare
- B Freight fare
- C Parcel
- D Sundry earnings

81. A hash function guarantees integrity of a message. It guarantees that message has not been:-

- A Exchanged
- B Over view
- C Changed
- D Violated

82. Sections 299 to 377 of Indian Penal Code are:-

- A Of Offences Against Property
- B Of Offences affecting the Human Body
- C Of Offences Relating to Marriage
- D Of Defamation

83. Which of the following is true about Stand Up India Loan Scheme?

- A To facilitate bank loans between 10 lakh and 1 Crore to at least one Scheduled Caste (SC) or Scheduled Tribe (ST) borrower per bank branch for setting up a greenfield enterprise
- B To facilitate bank loans between 10 lakh and 1 Crore to at least one woman borrower per bank branch for setting up a greenfield enterprise
- C This enterprise may be in manufacturing, services or the trading sector
- D All of these

84. Google has introduced a unique feature that guides users through 'shortcuts' that are more easily accessible by:-

- A Heavy vehicles
- B Two wheelers
- C Cars
- D Taxies

85. Who of the following has launched an e-commerce startup for farm equipment rental?

- A Mahindra and Mahindra
- B Escorts Agri Machinery
- C Standard Tractors
- D John Deere

86. India has met goal of elimination of which of the following disease (as specified by World Health Organization (WHO) under its GET2020)?

- A Trachoma
- B Tuberculosis
- C Ebola

D Keratoconus

87. The three languages included in the Eighth Schedule of the Constitution by the 71st amendment are:-

- A Konkani, English, Manipuri
- B Konkani, Nepali, Dogri
- C Konkani, Nepali, Maithili
- D Konkani, Manipuri, Nepali

88. Which of the following gas/es is/are used to disinfect water in sewage treatment facilities?

- A Ozone
- B Chlorine
- C Nitrogen
- D Ozone and chlorine

89. Which of the following is an election that is called earlier than expected?

- A Snap election
- B By-election
- C General election
- D Recall election

90. After discovery of which of the following methods the date of the Harappan Civilization (2300-1750 BC) has been fixed?

- A Dendrochronology
- B Stratification
- C Carbon isotopes
- D Radio carbon dating

91. Which of the following about plants is correct?

- A Respiration and photosynthesis proceed at the same rate
- B Photosynthesis proceeds at a much faster rate than respiration
- C Photosynthesis proceeds at a much slower rate than respiration
- D There is no connection between the respiration and photosynthesis

92. With reference to BrahMos, which of the following statements is/are correct?

1. It is a ramjet supersonic cruise missile being developed by BrahMos Aerospace, a joint venture between ISRO of India and NPO Mashinostroyeniya (NPOM) of Russia.
 2. It can be launched from submarines, ships, aircraft or land against ships and land-based targets.
 3. India and Russia have agreed to double the range of the BrahMos supersonic cruise missile following India's entry into the Missile Technology Control Regime (MTCR).
- Select the correct answer using the code given below.

- A 1 only
- B 2 and 3 only
- C 1 and 3 only
- D 1, 2 and 3

93. With reference to 'HIV and AIDS (Prevention and Control) Bill, 2017', consider which of the following statements is/are true?

1. It seeks to prevent and control the spread of HIV and AIDS, prohibits discrimination against persons with HIV and AIDS.
2. It makes anti-retroviral therapy a legal right of HIV/AIDS patient.
3. It has provisions to safeguard the property rights of HIV positive people.
4. Every HIV infected person below the age of 18 years has the right to reside in a shared household and enjoy the facilities of the household.

- A 1 and 2 only
- B 3 only
- C 2 and 3 only
- D 1, 2, 3 and 4

94. How many angular bleed lines are present on the new Indian rupee 2000 bank note?

- A 7
- B 4
- C 6
- D 5

95. Which of the following banned the 'manjha' used for flying kites?

- A Supreme Court of India
- B National Green Tribunal

- C Health Ministry
- D Environment Ministry

96. Who said, 'The greater number of fortresses you hold the weaker will be your power. Let all our forces will be on the sea, because if we should not be powerful at the sea, everything at once be against us.....Let it be known for certain that as long as you may be powerful at the sea?'

- A Da Almeida
- B John Cabot
- C Christopher Columbus
- D Amerigo Vespucci

97. 'Vote on account' is dealt in which of the following articles of the Indian Constitution?

- A 121
- B 116
- C 171
- D 131

98. The Taj Mahal is threatened due to:-

- A Carbon dioxide
- B Carbon mono oxide
- C Sulphur dioxide
- D Calcium oxide

99. The below given painting 'The Persistence of Memory' is one of the most recognizable pieces in art history. Who was the painter?



- A Leonardo da Vinci

- B Vincent van Gogh
- C Edvard Munch
- D Salvador Dali

100. Who is the famous sports personality in the image below?



- A Syed Abdul Rahim
- B Farokh Engineer
- C Ashok Mankad
- D Dhyanchand



Answers

Quant

1.C	2.A	3.A	4.B	5.B	6.D	7.C	8.D
9.C	10.C	11.B	12.D	13.C	14.A	15.B	16.C
17.A	18.A	19.B	20.C	21.B	22.A	23.B	24.C
25.D							

Reasoning

26.C	27.D	28.D	29.B	30.B	31.D	32.D	33.C
34.A	35.C	36.C	37.A	38.A	39.D	40.B	41.A
42.A	43.D	44.C	45.B	46.A	47.C	48.D	49.C
50.C							

Verbal

51.B	52.D	53.A	54.C	55.A	56.A	57.A	58.C
59.C	60.B	61.D	62.A	63.A	64.D	65.A	66.D
67.C	68.B	69.B	70.C	71.B	72.B	73.B	74.A
75.B							

General Awareness

76.A	77.C	78.C	79.A	80.B	81.C	82.B	83.D
84.B	85.A	86.A	87.D	88.D	89.A	90.D	91.B
92.B	93.D	94.A	95.B	96.A	97.B	98.C	99.D
100.D							

Explanations

Quant

1. C

Volume(V) of the sphere with radius R=8 cm is given by $V = \frac{4}{3}\pi R^3$.

$$= \frac{4}{3}\pi(8^3) = \frac{4}{3}\pi(512)cm^3.$$

and Volume (v) of each iron ball with radius r= 1cm is given by $v = \frac{4}{3}\pi r^3$.

$$= \frac{4}{3}\pi(1^3) = \frac{4}{3}\pi cm^3.$$

Let say 'n' iron balls each of volume 'v' are required to form a sphere of volume 'V'.

=> Total volume of 'n' iron balls = Volume of the sphere

$$\Rightarrow n \times v = V$$

$$\Rightarrow n = V \div v = \frac{4}{3}\pi(512) \div \frac{4}{3}\pi = 512.$$

Hence 512 iron balls are required in total to form the sphere.

2. A

Given $0 < a < 1$(1)

Let us go with the verification of options

Option (i):

squaring on both sides of (1), we get

$$0 < a^2 < 1$$

Subtracting '1' in the above equation, we get

$$-1 < a^2 - 1 < 0.....(2)$$

$\Rightarrow a^2 - 1 < 0$, Hence option (i) is false.

Option (ii):

Squaring on both sides of (1), we get

$$0 < a^2 < 1$$

Adding '1' on both sides of above equation, we get

$$1 < a^2 + 1 < 2.....(3)$$

$\Rightarrow a^2 + 1 > 0$, Hence Option (ii) is true.

Option (iii):

As $0 < a < 1$, $a^2 < a$(4)

Subtracting 'a' on both sides of (4), we get

$$a^2 - a < 0$$
, Hence Option (iii) is also false.

3. A

Let, us assume the total revenue for 2010 as 100.

Since, all the companies except T have generated the same revenue in 2011, the percentage increase in revenue for all companies will be only due to the increase in revenue of T.

$$\text{Increase in revenue of T(2011)} = 20\% \times 14 = 2.8$$

$$\text{Total revenue(2011)} = 102.8$$

$$\therefore \% \text{ increase in revenue} = \frac{102.8-100}{100} \times 100\% = 2.8 \%$$

Hence, option A.

4. B

Let say after a Time period (T) 'x' years the amount Rs. 2 lakh gets doubled at a rate of interest (R) = 11.5% per annum

Initial principle amount (P) = 2,00,000 Rs.

$$\text{Simple Interest (I) for 'x' years is given by } I = \frac{PTR}{100} = 200000 \times x \times 11.5 \div 100$$

$$\Rightarrow I = 23000 \times x.$$

Final Principle amount (P') = P + I = 2 × P (as given)

$$\Rightarrow I = 2 \times P - P = P$$

$$\Rightarrow 23000 \times x = 200000$$

$$\Rightarrow x = 200000 \div 23000$$

$$\Rightarrow x = 8.695 = \text{between 8 and 9.}$$

5. B

Given $AB + C = D$(1)

If B = 6 and D = 30, then from (1),

$$6A + C = 30$$
.....(2)

and If B = 8 and D = 36,

$$8A + C = 36$$
.....(3)

$$(3)-(2) \Rightarrow 2A = 6$$

$$\Rightarrow A = 3$$

Substituting the value of A in equation (2) we get,

$$18 + C = 30$$

$$\Rightarrow C = 12.$$

6. D

$$y^2 + 3y - 18 \geq 0$$

$$\Rightarrow y^2 + 6y - 3y - 18 \geq 0$$

$$\Rightarrow y(y + 6) - 3(y + 6) \geq 0$$

$$\Rightarrow (y - 3)(y + 6) \geq 0$$

$$\Rightarrow y \geq 3 \text{ and } y \leq -6$$

7. C

Since balls of same color should come together, let us consider 3 red balls as one unit and 2 blue balls as one unit and 4 yellow balls as another unit.

So, we have a total of 3 different units which can be arranged in '3!' ways.

these 3 red balls can internally be arranged in '3!' ways.

Similarly the blue balls and yellow balls can be arranged internally in '2!' and '4!' ways respectively.

So, total number ways = $3! \times 3! \times 2! \times 4! = 6 \times 6 \times 2 \times 24 = 1728$ ways

8. D

By carefully observing the given data and by observing the given options,

The charges will be least for the parcel from Kolkata to Mumbai which is Rs. 7,

Hence option (D) is the answer.

9. C

Given X, Y and Z are in the ratio 12: 15: 25

Let say X = 12k, Y = 15k and Z = 25k, where k is any constant.

Difference between Y and X = $15k - 12k = 3k$(1)

and Difference between Z and Y = $25k - 15k = 10k$(2)

Ratio of (1) and (2) = $3k \div 10k = 3 : 10$.

10. C

Given speed of Ankush = 3 rounds per hour = 1 round per 20 min

Whereas speed of Babulal = 5 rounds per hour = 1 round per 12 min.

Let us consider Ankush as stationery at the starting point.

The relative speed of Babulal with respect to Ankush = 3 rounds per hour + 5 rounds per hour = 8 rounds per hour

This implies, In one hour Babulal crosses Ankush 8 times.

So, starting from 9.00 am to 10.30 am i.e., 1.5 hours or 90 min, Babulal crosses Ankush 12 times.

11. B

Given monthly savings of Amit and Bharat are in the ration 37:18. Let the savings of Amit and Bharat be 37k and 18k, where 'k' is a constant.

⇒ Total monthly savings of Amit and Bharat = 55k.

Given Total annual savings of Amit and Bharat = 1,32,000.

⇒ Total monthly savings = 11,000.

⇒ 55k = 11000

⇒ k = 200.

Hence monthly savings of Amit and Bharat are 7400 and 3600 respectively.

From the given data,

Let the monthly incomes of Amit and Bharat be 5x and 4x respectively, where 'x' is a constant.

Similarly, let the monthly expenditures of Amit and Bharat be 19y and 21y respectively, where 'y' is a constant.

Savings = Income - Expenditure

⇒ $5x - 19y = 7400$(1)

and $4x - 21y = 3600$(2)

Solving both the equations we get x = 3000 and y = 400.

Therefore, the monthly income of Amit is 5x i.e., 15000.

12. D

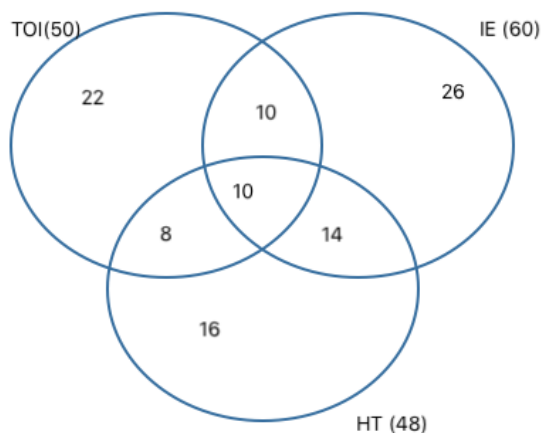
In $\triangle AOB$, AO = OB (Equal radii)

∴ $\triangle AOB$ is isosceles.

∴ $\angle ABO = \angle BAO = (180^\circ - 114^\circ) / 2 = 33^\circ$

Hence, option D.

13. C



As can be seen from the above venn diagram distribution

Number of households reading only one newspaper = $22 + 26 + 16 = 64$.

Hence, option C.

14. **A**

60 minutes = 360 degrees or 2π radians.

\Rightarrow 1 minute = 60 degrees.

\Rightarrow 30 minutes = 180 degrees or π radians.

Therefore area (A) swept by minute hand of length 42 mm in 30 minutes = area of semi-circle of radius ($r = 42$ mm).

$$\Rightarrow A = \pi r^2 \div 2 = 3.14 \times 42^2 \div 2 = 2769.5 \text{ mm}^2.$$

15. **B**

Let say $f(x) = x^3 + 2x^2 + bx + 68$ and given $(x+4)$ is a factor of $f(x)$.

$$\Rightarrow f(x) = (x + 4) \times k \dots \dots \dots (1)$$

where 'k' is the quotient when $f(x)$ is divided by $(x+4)$.

Substituting 'x = -4' in the equation (1), we get

$$f(-4) = 0$$

$$\Rightarrow -4^3 + 2(-4)^2 + b(-4) + 68 = 0$$

$$\Rightarrow -64 + 32 - 4b + 68 = 0$$

$$\Rightarrow 4b = 36$$

$$\Rightarrow b = 9.$$

16. **C**

Average speed = Total distance covered \div Total time taken.

Total distance covered = $12 + 36 + 32 = 80$ km.

Total time taken = $12 \div 6 + 36 \div 9 + 32 \div 4 = 2 + 4 + 8 = 14$ hrs.

$$\Rightarrow \text{Average speed} = 80 \div 14 = 5.71 \text{ km/hr.}$$

17. **A**

Let the capacity of the cistern be 600 units.

From the given data, the efficiencies of pipes A and B are 5 units/ min and 4 units/min respectively.

Let the efficiency of outlet pipe C be 'k' units/min.

Given the time taken to fill the cistern when all the three pipes are open = 100 minutes

$$\Rightarrow \text{Efficiency of pipes} \times \text{time taken} = \text{Capacity of cistern.}$$

$$\Rightarrow (5 + 4 - k) \times 100 = 600$$

$$\Rightarrow 9 - k = 6$$

$$\Rightarrow k = 3$$

Therefore the time taken(t) by pipe C to empty the cistern = $\text{Capacity of the cistern} \div \text{efficiency of pipe C}$

$$\Rightarrow t = 600 \div 3 = 200 \text{ minutes} = 3 \text{ hrs } 20 \text{ min.}$$

18. A

As per the given conditions, weeks 1 and 3 will have similar pay structure and weeks 2 and 4 will have similar pay structure.

For weeks 1 and 3

wage/hr for working = 60

wage/hr during rest = 30

Total payment per day = $(60 \times 6) + (30 \times 3) = 450$

Total payment for weeks 1 and 3 = $450 \times 12 = 5400$

For weeks 2 and 4

wage/hr for working = 20

wage/hr during rest = 10

Total payment per day = $(20 \times 3) + (10 \times 6) = 120$

Total payment for weeks 2 and 4 = $120 \times 12 = 1440$

\therefore Total monthly salary = $5400 + 1440 = 6840$

Hence, option A.

19. B

Probability = $\text{Expected number of outcomes} \div \text{Total number of outcomes.}$

Total number of outcomes = Total number of ways to draw randomly 3 balls out of 12 balls = ${}^{12}C_3$ ways.

Expected number of outcomes = Number of ways to draw 2 yellow balls out of 8 and 1 black ball out of 4 = ${}^8C_2 \times {}^4C_1$

$$\text{Hence Probability} = {}^8C_2 \times {}^4C_1 \div {}^{12}C_3 = 28 \times 4 \div 220 = \frac{28}{55}$$

20. C

$$\cot A = \frac{1}{\tan A}$$

let $\tan A = x$, then $\cot A = \frac{1}{x}$

$$\text{Given, } x + \frac{1}{x} = \sqrt{5} \dots \dots \dots (1)$$

Cubing on both sides, we get

$$\left(x + \frac{1}{x}\right)^3 = \sqrt{5}^3$$

$$\Rightarrow x^3 + \frac{1}{x}^3 + 3 \times x \times \frac{1}{x} \times (x + \frac{1}{x}) = 5\sqrt{5}$$

$$\Rightarrow x^3 + \frac{1}{x}^3 + 3 \times \sqrt{5} = 5\sqrt{5}$$

$$\Rightarrow x^3 + \frac{1}{x}^3 = 2\sqrt{5}.$$

$$\Rightarrow \tan A^3 + \cot A^3 = 2\sqrt{5}.$$

21. B

Let the marked price of two balls be X

Given that they were bought at 37.40 rupees at 15% discount.

$$\Rightarrow X \times \frac{85}{100} = 37.40$$

$$X = 44$$

we have considered that the marked price of two balls is X i.e: 44 rupees.

The question is asking to find marked price of each ball

so, answer is 22 rupees

option B

22. A

Modulus(2a-3) = 3a+2, which can also be written as |2a-3| = 3a+2.

Modulus function f(x) = |x| is defined as

$$|x| = x, \text{ for } x > 0,$$

$$|x| = -x, \text{ for } x < 0$$

So, we get two cases here,

Case (1):

$$2a-3 > 0$$

$$\Rightarrow a > \frac{3}{2} \dots \dots \dots (1)$$

$$|2a-3| = 2a-3 = 3a+2$$

$$\Rightarrow a = -5$$

But from equation (1), The above value of a = -5 is not a possible case.

Case (2):

$$2a-3 < 0$$

$$\Rightarrow a < \frac{3}{2} \dots \dots \dots (2)$$

$$|2a-3| = -(2a-3) = 3a+2$$

$$\Rightarrow a = \frac{1}{5}$$

This is a possible case, hence the value of a = $\frac{1}{5}$

23. B

From 32 litres, 4 litres is drawn out and is replaced with water.

Proportion of wine drawn = $4/32 = 1/8$ th of the total volume of the wine in the mixture.

When wine is drawn out for the second time, $(1/8) \times (28) = 3.5$ litres of wine will be drawn out.

Wine remaining in the jar = $28 - 3.5 = 24.5$ litres

When wine is drawn out for the third time, $(1/8) \times (24.5) = 3.0625$ litres of wine will be drawn out.

Wine remaining in the jar = $24.5 - 3.0625 = 21.4375$ litres

Water in the jar = 10.5625 litres

Ratio of wine remaining in the jar to water remaining in the jar = 343:169

24. C

The geometric mean proportion between two numbers 'a' and 'b' is given by $\sqrt{a \times b}$

The given two numbers are $30 + \sqrt{200}$ and $54 - \sqrt{648}$

which are also equal to $10(3 + \sqrt{2})$ and $18(3 - \sqrt{2})$.

Hence the geometric mean proportion = $\sqrt{10(3 + \sqrt{2}) \times 18(3 - \sqrt{2})} = \sqrt{180 \times (3^2 - (\sqrt{2})^2)} = \sqrt{1260}$
 $= 6 \times \sqrt{35}$.

25. D

Given Anil is twice as good a student as Bharat

\Rightarrow Efficiency of Anil : Efficiency of Bharat = 2:1

and also, Efficiency is inversely proportional to Time taken,

\Rightarrow Time taken by Anil : Time taken by Bharat = 1:2.....(1)

Given that Time taken by Anil is 30 min less than Bharat's time.

Let say, Time taken by Bharat be 't' minutes.

Then the time taken by Anil = t-30 minutes

Substituting these in equation (1), we get

$$\frac{t-30}{t} = \frac{1}{2}$$

$\Rightarrow t = 60$ minutes.

Therefore the time taken by Anil and Bharat are 30 minutes and 60 minutes respectively.

Let Efficiency of Bharat be 'x', then Efficiency of Anil will be '2x'

\Rightarrow Total Work = Efficiency \times Time taken = $(2x) \times 30$ (or) $(x) \times 60 = 60x$ units.

Efficiency when Anil and Bharat are working together = $x + 2x = 3x$

Total Work = 60x units

Time taken(T) by Anil and Bharat together to complete the work = Total work/ Efficiency when Anil and Bharat work together

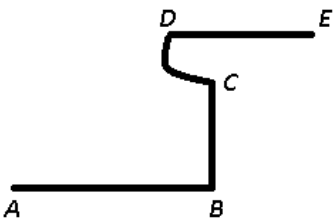
$$\Rightarrow T = \frac{60x}{3x}$$

⇒ T = 20 minutes.

Reasoning

26. **C**

Let the river start from point A and flows towards B, then turns left and reach at hill C. It goes around the hill counter-clockwise in a quarter circle to reach D, and then turns right finally to reach E.



Thus, river is flowing in **east** direction.

⇒ Ans - (C)

27. **D**

We are given that :Whenever Preeti's father is in town, she abstains from school and goes to her aunt's house. Now option A says If Preeti has not abstained from school or she has not gone to her aunt's house, it means that her father is not in town.

Now this can be inferred

Option B says If Preeti has not abstained from school but her father is in town, then she will definitely go to her aunt's house. This cannot be inferred as we cannot say she will surely go to her aunt's house

option C says If Preeti has abstained from school but she has not gone to her aunt's house, it means that her father is not in town. this can also be inferred as she has not gone to her aunt's house

So A and C both can be inferred

28. **D**

Lima is seated at one of the extreme corners of the bench. Liyaqat is towards the right of Lima

⇒ Lima is at left end of row.

There is at least one person sitting between Lillian and Lima, ⇒ Now there are two cases, when there is 1 person between them and when there are 2.

Liyaqat is towards the right of Lima but not towards the right of Lalit.

Case I :

Lima	Liyaqat	Lalit	Lillian
------	---------	-------	---------

Case II :

Lima	Liyaqat	Lillian	Lalit
------	---------	---------	-------

Thus, only statement which is definitely true is that there is at least one person between Lalit and Lima.

⇒ Ans - (D)

29. **B**

It is given that **Cutty plays Hockey**.

Dolly plays either Basketball or Hockey, ⇒ **Dolly plays Basketball**.

Ali does not play Basketball or Cricket, ⇒ **Ali plays Kabaddi**.

Thus, only one left now is **Benu plays Cricket**.

=> Ans - (B)

30. **B**

On reading the Roads can be placed as :

R24					
	R2		R1		R3
R8					

We can say R8 R3 are the farthest south and farthest east .

31. **D**

125 small cubes have been together, so we have a 5x5x5 cube.

So,if we want to cover it completely we've need to cover all the sides of it completely, we will just put same cubes over the one of the sides of it and then from both the sides we've to spread it just by one row and so it will cover it properly, and do it for all the other sides.

So, now we will have a 7x7x7 cube.

Thus, number of cubes required to cover it = $(7 \times 7 \times 7) - (5 \times 5 \times 5) = 218$

=> Ans - (D)

In short, to cover it completely, cubes required = $(n + 2)^3 - (n)^3$

and to make it hollow, cubes removed = $(n)^3 - (n - 2)^3$

32. **D**

Hitesh gets more marks than Jaiknee and Kailash, : $H > J, K$

Ishan gets more marks than Kailash and Jaiknee gets less marks than Ganesh, : $I > K$ and $G > J$

From above statements, we can conclude that one of either **Jaiknee** or Kailash could be the lowest.

=> Ans - (D)

33. **C**

Given, All cubes are round in shape

From the above statement, it can be inferred that

If a figure is round implies it may or may not be cube because there will be other figures which are round.

If the figure is not cube implies it may or may not be round.

If the figure is not round in shape implies it should not be cube.

If the figure is cube implies it should be round.

Hence, AC and BD will be logically consistent statements with the main statement.

34. **A**

Let us verify the options.

Option (A):

$p \div q$, means p is mother of q.

$q \times r$, means q is daughter of r.

The above two statements together tells us that, p is the wife of r. Hence wife and husband relationship exists between p and r.

Therefore option (A) is the answer.

Option (B):

$p - q$, means p is the brother of q .

$q \times r$, means q is daughter of r .

The above two statements together doesn't tell us that p and r are related as wife and husband.

Hence, Option (B) is not the answer.

Option (C):

$p + q$, means p is the sister of q .

$q \times r$, means q is daughter of r .

The above two statements together doesn't tell us that p and r are related as wife and husband.

Hence, Option (C) is not the answer.

Option (D):

$p + q$, means p is the sister of q .

$q - r$, means q is the brother of r .

The above two statements together doesn't tell us that p and r are related as wife and husband.

Hence, Option (D) is not the answer

35. **C**

If we add the numbers denoted by each alphabet, when we number them as $A=1, B=2, C=3, \dots, Z=26$

FRIGHTENS : $6 + 18 + 9 + 7 + 8 + 20 + 5 + 14 + 19 = 106$

SIMILARLY : $19 + 9 + 13 + 9 + 12 + 1 + 18 + 12 + 25 = 118$

DEMONITISATION : $4 + 5 + 13 + 15 + 14 + 9 + 20 + 9 + 19 + 1 + 20 + 9 + 15 + 14 = 167$

=> Ans - (C)

36. **C**

Wallet C has as many items to its left as to its right, => Wallet C is in middle.

No packet is at any extreme end of the row, => A and B are at ends.

Packet P is to the immediate right of wallet A, => A is at extreme left end.

A	P		C			
<u>Wlt</u>	Pkt	Pkt	<u>wlt</u>	Pkt	Pkt	<u>Wlt</u>

Packet P is kept to the immediate left of packet R.

Thus, B is at extreme right end.

A	P	R	C	Q/S	S/Q	B
<u>Wlt</u>	Pkt	Pkt	<u>wlt</u>	Pkt	Pkt	<u>Wlt</u>

∴ **Packet R** is third from left end.

=> Ans - (C)

37. **A**

CollegeDekho

We need to find the lightest fruit, so we will take the weight scale only.

Cherry is heavier than Black berry and Black berry is heavier than Peach, : $C > BB > P$

Apple is heavier than Banana, : $A > B$

Banana is heavier than Black berry, : $B > BB$

Combining above statements, we get : $A > B > BB > P$ and $C > P$

Thus, we can conclude that **Peach** is the lightest.

=> Ans - (A)

38. **A**

Number of 7 in the given series that are followed by an even number but are not preceded by a prime number

= (not a prime number) (7) (even number)

2 3 7 4 3 2 1 5 7 3 2 7 1 0 9 8 7 5 **4 7 2 3**

Thus, there is only one such 7.

=> Ans - (A)

39. **D**

Each of the three kids gets at least one color box out of 6 color boxes, at least one tiffin box out of 6 tiffin boxes and at least one chocolate box out of 6 chocolate boxes so that the total number of the items that each of them gets is the same. No one gets the same number of tiffin boxes, color boxes and chocolate boxes.

It is given that the total number of the items that each of them gets is the same.

Total number of items = $6+6+6=18$

So each one will get $18/3=6$ items.

If no one gets the same number of tiffin boxes, color boxes and chocolate boxes

Then the number of items with each must be 1,2,3.

tiffin boxes color boxes chocolate boxes.

1	2	3
2	3	1
3	1	2

Only option D is correct.

40. **B**

No lady is either a teacher or an engineer. No two ladies have the same profession.

=> The three females will be doctor, architect and travel agent each.

C is a travel agent and is married to A, who is a teacher, => A is male and C is female.

F, the engineer, is married to D, => F is male (because no females are engineer) and thus D is female.

D is neither a travel agent nor a doctor, => D is architect.

B is the sister of G who is an architect, => B the last remaining female is doctor, and thus G and E are the remaining males.

m	A	Teacher
f	B	Doctor
f	C	Travel Agent
f	D	Architect
m	E	Travel Agent
m	F	Engineer
m	G	Architect

Thus, E is a **travel agent**.

=> Ans - (B)

41. **A**

Qills is Bengali and is the father of Tills. Sills is the grandmother of Tills and Sills is from Punjab

=> Sills is mother of Qills.

Uills is the grandfather of Rills., => Uills is husband of Sills.

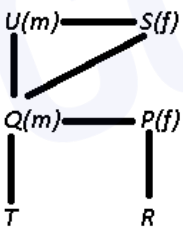
Also, Rills and Tills are grandchildren and siblings.

The Telegu person is a female and married, => Pills is wife of Qills.

The remaining two Rills and Uills are Haryanvis.

f	P	Telugu
m	Q	Bengali
m/f	R	<u>Haryanvi</u>
f	S	Punjabi
m/f	T	<u>Tamilian</u>
m	U	<u>Haryanvi</u>

The married couples are :



=> Ans - (A)

42. **A**

$$0 = 1^2 - 1$$

$$6 = 2^2 + 2$$

$$6 = 3^2 - 3$$

$$20 = 4^2 + 4$$

$$20 = 5^2 - 5$$

$$42 = 6^2 + 6$$

Option A is correct.

43. **D**

Father of Rahul's daughter's father = Rahuls' father

Now, Samir's only brother = Rahul's father

=> Samir is Rahul's uncle.

=> Ans - (D)

44. **C**

The Green building is the shortest of all the buildings and Pradeep's flat is in it (5-shortest and 1-tallest)

One person's name starts with the same letter as the first letter of the building's colour in which he resides and it is the second tallest of all.

=> There is only one such combination, **Rishi** and **Red**.

Height	Person	Colour
	<u>Kapila</u>	
	<u>Meenal</u>	
2	<u>Rishi</u>	Red
5	<u>Pradeep</u>	Green
	<u>Lalita</u>	

The building in which Lalita's flat is located, is neither Blue nor White in colour, => Lalita's flat is Orange.

Also, Lalita's building is taller than Rishi's building, => Its the tallest.

Height	Person	Colour
	<u>Kapila</u>	
	<u>Meenal</u>	
2	<u>Rishi</u>	Red
5	<u>Pradeep</u>	Green
1	<u>Lalita</u>	Orange

Thus, only true combination is : **Lalita-Orange-Tallest**.

=> Ans - (C)

45. **B**

Chanakya screens a Horror film in the first slot, while Maratha Mandir exhibits a Historical film in the second slot. DT exhibits a thriller film in the second slot and Regal exhibits a documentary film.

Theatre	Slot I	Slot II
PVR		
DT		Thriller
Chanakya	Horror	
Regal		
Maratha Mandir		Historical

(Documentary)

(Drama)

The children's film and the Cartoon film are exhibited in the same theatre, => Only theatre with two slots left is PVR.

Theatre	Slot I	Slot II
PVR	Children/ Cartoon	Cartoon/ Children
DT		Thriller
Chanakya	Horror	
Regal		
Maratha Mandir		Historical

(Documentary)

(Drama)

Religious film is not in the first slot, => Religious and Drama are in second slot, and thus Documentary is played in Regal in first slot.

Theatre	Slot I	Slot II
PVR	Children/ Cartoon	Cartoon/ Children
DT		Thriller
Chanakya	Horror	Religious/ Drama
Regal	Documentary	Drama/ Religious
Maratha Mandir		Historical

∴ If Chanakya screens a Religious film in its second slot, then **Documentary and Drama** films can be screened by theatre Regal.

=> Ans - (B)

46. **A**

The last condition i.e If K is not between Z and M, then N is not next to P which is not satisfied in option A.

In Option A, N is next to P since it is a circular arrangement.

Hence, the correct answer is Option A

47. **C**

Course	M. techs	<u>MBA</u> s	MBBS	LLB
Total (10)	2	2	2	4
Selected (6)	1		2	

3 candidates are already selected and now at least one MBA candidate is selected.

Case I : 1 MBA and 2 LLB candidates are selected.

Case II : 2 MBA and 1 LLB candidates are selected.

Case III : 1 each of M.tech, MBA and LLB candidate is selected.

Thus, case I matches the third option.

=> Ans - (C)

48. **D**

CollegeDekho

We have most stout are clever and all clever are courageous , however statement D says All stout are courageous which is definitely false as there will be stouts which will neither be clever and or be courageous so D is definitely false

49. C

Data arranged as per the statements

	MBA	B.Tech	M.Tech	LLB
Arvind	X		X	
Saurabh				X
Romy	X	X		X
Denu		X	X	

Now if Saurabh is a B.Tech, then **Denu** should be an MBA.

=> Ans - (C)

50. C

From the given data, we can compile the following table

Receiver \ Sender	P	Q	R	S	T
P		✓	✓	✓	✓
Q				✓	
R	✓				
S					✓
T			✓		

This table represents that Sender P will send files to Q R S and T
The various ways of transferring files from to PR is

- 1)PR
- 2)PQSTR
- 3)PSTR
- 4)PTR

Hence 4 ways..

Verbal

51. B

The author mentions, "but I believe that we must acknowledge our potential for limitless evil as well. We must understand what we can do in the way of evil before we can even pretend to be good."

From this, the author conveys that the sense of morality must begin by understanding our possibilities of evil as well as good.

Hence, option B is the answer.

52. D

Throughout the passage, the author talks about the concept of morality. They mention the capacity of humans to be good as well as evil.

From this, we can infer that the author probably taught Philosophy.

Hence, the answer is option D.

53. **A**

The author mentions, "Popular books on how to therapy, stress the glorious potential of every human being and urge us to accept ourselves, finally, as being only a little lower than the angels."

"Students who have been nourished on pop psychology and told "I'm O.K." have some trouble dealing with Conrad, and some of them regard him as perverse."

From the above-mentioned statements of the author, we can infer that he/she is critical of the popular how to books.

Hence, the answer is option A.

54. **C**

"Science in the middle ages struggled against restrictions and there were many fetters to be destroyed before it could continue unhampered. Superstitions were common and to the masses were much more acceptable than were scientific explanations."

Hence, the answer is option C.

55. **A**

A fetter is a chain used to restrict movement.

Among the options, "manacle" is the only one synonymous with "fetters".

Hence, the answer is option A.

56. **A**

"Scientists of the 16th century made the first effective protest against the medieval scientific method of accepting theories before investigation had verified them."

Hence, the answer is option A.

57. **A**

The author mentions different sales techniques and explains the situations where each of those techniques will be the most effective.

He is not being critical of any of the techniques, nor is he making an argument for any of them. The author is also not sharing any personal experience. He is trying to persuade people to use the sales techniques that are suitable for their purpose.

Hence, the answer is option A.

58. **C**

"the salesperson must initiate some discussion in order to get the buyer in a positive frame of mind."

Here the author is mentioning the purpose of the salesperson in initiating the discussion. Hence, the answer is option C.

59. **C**

"When this is the case, price becomes a key criterion for the customer."

The phrase "key criterion" means "an important point of consideration". Hence, the answer is option C.

60. **B**

While talking about the consultative approach, the author states, "The consultative approach requires the salesperson to have a thorough understanding of the customer and what the customer is trying to achieve. This approach will usually require a number of sales calls as the buying process may be complex."

Hence, the answer is option B.

61. **D**

The author mentions the sales techniques and different situations where each method should be used. He also discusses how a newly formed company should approach its sales operations. Thus, the author knows a great deal about the field.

Hence, among the options, D is the most suitable answer.

62. **A**

Since the company is new and is working on a technology that is first of its kind, every potential customer will look at the product with the same mindset. The company's emphasis should thus be on highlighting the benefits of the technology to the customers. Hence, the narrative approach will be the most effective for this situation.

The answer is option A.

63. **A**

In the second part of the paragraph, the reviewer says, *"At lunchtime, Delhi Belly is so crowded; I wondered when the authorities had last visited the establishment. The line snaked out of the door to the corner,"*

From this, we can infer that we can expect a long line of customers if we go to Delhi Belly for lunch.

Hence, the answer is option A.

64. **D**

Options A, B and C do not talk about the food served at Delhi Belly, but rather about the general atmosphere at the place at lunchtime.

In option D, the critic says that throwing away the plate was the most enjoyable part since he did not like the food.

Hence, the answer is option D.

65. **A**

Throughout the review, the reviewer complains about the crowd, the taste of the food, customers and employees working at Delhi Belly by mentioning his experience while having lunch there.

Through this, they are trying to convey that Delhi Belly is not that great a place to eat. Hence, option A is the most suitable answer.

66. **D**

Perfidy is the state of being faithless and untrustworthy. Betrayal has similar meaning to perfidy.

Answer is option D.

67. **C**

sabotage - deliberate destruction or damage

Answer is option C.

68. **B**

bashful - shy, reserved

Among the given options, arrogant is most nearly opposite of bashful.

Answer is option B.

69. **B**

Posture and bearing are synonyms to each other.

In the given options, deportment and behaviour are synonyms to each other.

Answer is option B.

70. **C**

Ventriloquism is the production of voice in such a way that sound seems to come from other source(puppet).

Option C is most appropriate word for the given context.

Answer is option C.

71. **B**

maneuvering is the action of clever planning or moving skilfully.

Answer is option B.

72. **B**

All three statements are judgements, as they are personal opinions and not facts or conclusions based on some data.

Statement 1: Whether God created the Earth or not is not a fact as it cannot be verified. It is also not an inference as it is not based on some given data. It is an opinion and hence can be classified as a judgement.

Statement 2: This again is not a verifiable fact or an inference. It is an opinion which may vary from person to person and thus, classified as judgement.

Statement 3: This statement is clearly a personal opinion as the relative tastes of things are very subjective and depend on the person. Hence, this sentence is also classified as a judgement.

Hence, the answer is option B.

73. **B**

All three sentences are inferences as they draw conclusions based on available information.

Statement 1: It is given that the weather forecast has given an 80% chance of thunderstorms. Based on this information, it is concluded to be a good idea to carry an umbrella.

Statement 2: The throat of the person is sore and their nose is running. Based on these symptoms, they are inferring that they might have a cold.

Statement 3: It is known that there are over 40million volumes in the university library. Based on this it is inferred that the library may also have a copy of the book "Savitri".

Hence, the answer is option B.

74. **A**

"I am so tired that I can sleep for a year."

In the given sentence, the speaker is exaggerating their tiredness by saying that they can "sleep for a year".

Out of the given options, "hyperbole" means "to exaggerate".

Hence, the answer is option A.

75. **B**

We know that a plane flies at a higher altitude than clouds. Thus, out of the given options, "above" is the most appropriate choice.

Hence, the answer is option B.