

MAT 2025 Memory Based Question Paper PDF

SECTION-A : English Language

DIRECTIONS (Qs. 1-5): Read the following passage carefully and answer the questions that follow.

Humans naturally seek order and structure in their lives. Abraham Maslow's hierarchy of needs theory aligns with this tendency by organizing human motivation into five progressive levels. First introduced in 1943, this theory proposes that people are driven by a series of needs that range from basic survival to personal growth.

The five levels, arranged from most to least fundamental, are: physiological needs (like food and shelter), safety and security, love and belonging, esteem, and self-actualization. These are grouped into three broader categories: basic needs (physiological and safety), psychological needs (love/belonging and esteem), and self-fulfilment needs (self-actualization).

Maslow distinguished between "deficiency needs," which arise from deprivation, and "growth needs," which emerge from the desire to achieve personal potential. While originally Maslow suggested people must meet lower-level needs before progressing upward, later updates acknowledged that needs can overlap and shift depending on circumstances. For instance, eating dinner with loved ones may satisfy both physiological and emotional needs.

Similarly, feeling respected (an esteem need) might occur even when basic needs like food or shelter are insecure. The top tier, self-actualization, refers to achieving one's full potential and living in alignment with core values. This need varies among individuals but generally involves personal growth and fulfilment. Critics have pointed out that Maslow's model isn't always linear—some people prioritize higher-tier needs even if their basic needs remain unmet. Maslow later accepted this flexibility. Despite criticisms, his hierarchy remains a foundational concept in motivation theory.

- According to Maslow, which of the following is a "growth need"?
(a) Shelter (b) Self-actualization
(c) Financial stability (d) Physical safety
- We can infer that someone struggling with job insecurity but actively writing a novel is likely:
(a) Ignoring Maslow's theory
(b) Confused about their motivation
(c) Misinterpreting esteem needs
(d) Fulfilling growth needs despite unmet deficiency needs
- Which of these best reflects the flexible nature of Maslow's theory as later interpreted?
(a) Love must follow esteem
(b) Basic needs are optional
(c) A person can seek esteem before satisfying safety needs
(d) Motivation doesn't depend on personal goals

- What does the family moving from a slum to a flat illustrate about Maslow's theory?
(a) One event may fulfil multiple needs
(b) Needs always follow a set order
(c) Safety is more important than food
(d) Growth needs are easily achieved
- What is the overall tone of the passage toward Maslow's theory?
(a) Sarcastic (b) Reverent
(c) Balanced and explanatory (d) Dismissive

DIRECTIONS (Qs. 6-10): Read the following passage carefully and answer the questions that follow.

The ability to delay gratification—the skill to resist immediate pleasure for a more valuable future reward—is considered a powerful trait for long-term success. It encourages self-discipline and helps individuals reflect on choices instead of reacting impulsively. Delayed gratification involves resisting short-term rewards in favour of long-term benefits. Research shows this ability plays a key role in success across careers, relationships, health, and financial management. Although some may find it difficult, impulse control is a learnable skill that can be strengthened over time.

In contrast, instant gratification involves choosing short-term comfort, often to avoid discomfort in the present. For instance, eating a second slice of pizza or skipping the last few minutes of a workout might feel rewarding immediately but doesn't help in the long run. In such moments, delaying gratification helps individuals choose what benefits them more over time. One notable study—the Marshmallow Test—highlighted this. Children were offered a choice between one treat immediately or two if they waited. Those who waited reportedly showed better outcomes later in life, such as improved academic scores and healthier habits. However, later studies suggest that socioeconomic background might also influence a child's ability to wait.

Everyday examples of delayed gratification include waiting to eat until dinner is ready, finishing studying before watching TV, or delaying a coffee treat until after accomplishing tasks. To develop this habit, people can set clear timeframes, reward themselves for small milestones, and build trust by keeping promises they make to themselves. Ultimately, delayed gratification may lack the instant thrill of quick rewards, but it contributes to emotional strength, discipline, and future well-being—foundations for a more fulfilled and balanced life.

- Which strategy is recommended to help develop delayed gratification?
(a) Avoid rewarding yourself for small efforts
(b) Rely on others for motivation
(c) Set specific time goals for rewards
(d) Only focus on long-term goals

7. A person skipping their evening Netflix binge until they complete a work report is most likely practicing:
 (a) Emotional repression (b) Delayed gratification
 (c) Social isolation (d) Avoidance behaviour
8. What can be inferred about instant gratification?
 (a) It leads to stronger willpower over time
 (b) It helps maintain discipline in the long run
 (c) It ensures better results in academics and health
 (d) It often brings temporary comfort but long-term drawbacks
9. Why might the Marshmallow Test results not be universally reliable?
 (a) Children were too young to make decisions
 (b) Testing time was too short
 (c) Cultural differences were not considered
 (d) Economic background could influence behaviour
10. Which of the following best describes the author's attitude toward delayed gratification?
 (a) Critical (b) Mocking
 (c) Supportive and practical (d) Sceptical but hopeful

DIRECTIONS (Qs. 11-13): Arrange these five sentences in proper order to form a meaningful paragraph/ sentence.

11. L. This viewpoint also rejects the notion that the future already exists in the same way as the past and present.
 M. Presentism, a philosophical theory, posits that only present events are real.
 N. Critics argue that this stance is at odds with modern physics, especially relativity, which treats time as a dimension.
 O. Despite such criticism, presentism remains intuitively appealing to many who experience time as flowing.
 P. It contrasts with eternalism, which holds that past, present, and future events are equally real.
 (a) MLPNO (b) MLPON
 (c) MOLNP (d) MPLNO
12. L. Such language, rather than fostering action, often serves to obscure responsibility.
 M. Bureaucratic institutions tend to use passive constructions that detach the agent from the act.
 N. For instance, instead of saying "We denied the request," the phrase becomes "The request was denied."
 O. This kind of linguistic distancing creates a sense of neutrality and inevitability.
 P. Scholars of language and power argue that these structures can be used to avoid accountability.
 (a) PMNOL (b) MNOLP
 (c) MNPOL (d) NMLOP
13. L. Governments argue that mass data collection enhances national security by identifying potential threats.
 M. However, civil liberties advocates warn that such surveillance undermines democratic freedoms.
 N. With the rise of digital communication, surveillance technologies have become more sophisticated and widespread.
 O. These critics emphasize the need for transparency and legal safeguards to prevent misuse.

- P. The debate continues over how to balance public safety with individual privacy rights.
 (a) NLMOP (b) LMONP
 (c) MLNOP (d) NMOLP

DIRECTIONS (Qs. 14-16): In each of the following sentence, there are two blank spaces. Below the sentences, there are five options with a pair of words each. Fill up the sentences with the pair of words that make the sentence grammatically and contextually correct.

14. Sarcasm is a form of _____ behaviour that allows someone to deliver an insult _____, often under the mask of humour.
 (a) humorous, openly
 (b) aggressive, directly
 (c) passive-aggressive, indirectly
 (d) polite, rudely
15. Backhanded compliments are often more _____ than sarcasm, because the person being insulted may not even _____ it at the time.
 (a) blunt, acknowledge (b) subtle, recognize
 (c) sarcastic, repeat (d) rude, forget
16. Thin-skinned individuals often fall prey to self-doubt, as they tend to _____ critical feedback and _____ perceived failures long after the event has passed.
 (a) deflect, commemorate (b) dismiss, overcome
 (c) project, analyze (d) ruminate, internalize

DIRECTIONS (Qs. 17-18): In the following questions, a sentence/ part of the sentence is underlined. Below are given alternatives which may improve the underlined part. Choose the correct alternative.

17. Sometimes it's harder to stop than to go on. But everything must come to an end eventually.
 (a) Ceasing momentum can often be more demanding than sustaining it
 (b) It's usually simpler to quit than to continue
 (c) Putting an end to effort is always a breeze
 (d) One always finds it impossible to discontinue work
18. It is essential that you blame nobody but yourself for the situation you have found yourself in.
 (a) shift perspective to consider others' roles
 (b) view the issue from a detached angle
 (c) accept full ownership of your current position
 (d) divert accountability to external pressures

DIRECTIONS (Qs. 19-20): In each of the questions, four alternatives are given for the Idiom/Phrase. Choose the alternative which best expresses the meaning of the Idiom/ Phrase.

19. Go down in history
 (a) To write scientific history books
 (b) To travel through time
 (c) To be remembered for something significant
 (d) To abandon historical research
20. Off the cuff
 (a) With careful preparation
 (b) With formality and precision
 (c) In an angry and emotional tone
 (d) Without prior thought or planning

DIRECTIONS (Qs. 21-22): In the questions given below, out of the four alternatives, choose the one which is opposite in meaning to the given word.

21. Polarized
 (a) Unified (b) Fragmented
 (c) Segregated (d) Extremist
22. Amplified
 (a) Extended (b) Magnified
 (c) Reduced (d) Heightened

DIRECTIONS (Qs. 23-24): In the question given below, out of the alternatives, choose the one which is similar in meaning to the given word.

23. Seizure
 (a) Donation (b) Relinquishment
 (c) Confiscation (d) Liberation
24. Helmsman
 (a) Engineer (b) Navigator
 (c) Fisherman (d) Mechanic

DIRECTIONS (Qs. 25-27): Choose an option which can be substituted for a given phrase out of the given options.

25. Government by the wealthy
 (a) Plutocracy (b) Aristocracy
 (c) Oligarchy (d) Autocracy
26. A state of being pleasantly lost in one's thoughts
 (a) Ennui (b) Malaise
 (c) Reverie (d) Stupor
27. A person who believes that all values are baseless and rejects all religious and moral principles
 (a) Agnostic (b) Existentialist
 (c) Sceptic (d) Nihilist

DIRECTIONS (Qs. 28-30): Each of the paragraphs given below has a sentence missing which is indicated by a blank. From the options given below, choose the sentence that seems the most logically appropriate to complete the paragraph.

28. In *Meditations*, Marcus Aurelius writes:
 If you seek tranquility, do less. Most of what we say and do is not essential. If you can eliminate it, you'll have more time, and more tranquility. Ask yourself at every moment, "Is this necessary?" This is a good question to ask ourselves at every moment, especially when we're being pulled this way and that, and struggling from overwhelm in our work and daily life.
 When we ask ourselves "Is this necessary?" we'll invariably find ourselves answering that it is not, or at least, that it doesn't have to happen now, or it can be batched to take place at another time, or it can be delegated to someone else. _____.
- (a) The key is to slow down long enough to hear the answer, and then act on it with conviction.
 (b) This is why time-blocking methods have become so popular in productivity systems today.
 (c) However, we often ignore this instinct and continue to overcommit out of habit or guilt.
 (d) It's tempting to believe that doing more equates to progress, but history suggests otherwise.

29. We often regret decisions made hastily—those taken without enough reflection. Such rash choices frequently stem from stress or emotional upheaval, but they can occur at any time. Learning to avoid them is crucial _____.
 (a) Emotional support from peers can ease decision-making.
 (b) Some decisions defy logic, regardless of preparation.
 (c) Acting swiftly is sometimes better than waiting too long.
 (d) Deliberation, by contrast, reduces impulsivity and fosters wiser outcomes.
30. Instead of starting at the very beginning of the journey toward realizing your goals, start at the finish line. Picture the final step you took right before achieving that goal. Then identify the step that came before it, and the one before that, working your way backward.
 By reverse-engineering the process, you gain clarity on what it truly takes to succeed. That brings us to _____.
 (a) the psychological impact of focusing on past achievements to fuel future motivation.
 (b) the importance of maintaining consistency, even when the end goal remains unclear.
 (c) the power of backward planning—working in reverse to outline the precise steps needed to move forward.
 (d) the tendency to underestimate early-stage efforts while chasing long-term goals.

SECTION-B : Intelligence & Critical Reasoning

DIRECTIONS (Qs. 31-34): Study the following information and answer the given question.

Aman, Binod, Chanda, Dinesh, Esha, Fazal are seated in a circular table facing center. Chanda is third to the right of Fazal and Binod is sitting 2nd to the right of Chanda. Dinesh is not sitting next to Chanda. Aman is not sitting next to Binod.

31. Which is the following pairs sitting next to each other.
 (a) Fazal - Chanda (b) Chanda - Aman
 (c) Dinesh - Esha (d) Binod - Aman
32. What is Binod position with respect to Fazal?
 (a) 1st to the left of Fazal (b) 2nd to the left of Fazal
 (c) 1st to the right of Fazal (d) 5th to the left to Fazal
33. Who is sitting between Binod and Chanda?
 (a) Fazal (b) Esha
 (c) Dinesh (d) Aman
34. How many persons are seated to the left of Aman & to the right of Esha?
 (a) 2 (b) 4 (c) 3 (d) 5

DIRECTIONS (Qs. 35-38): Read the given information and answer the question asked.

Chhaterjee Family has 8 members: A, B, C, D, E, F, G, H. There are 3 generations in the family. They go to 4 different countries: Ireland, India, Australia and USA. They make 4 groups of 2 members of each. Each group go to 1 country. The family consists of 3 married couples and each couple forms a group

- The oldest member of the family goes to India.
- H, a female, is married to E, who doesn't go to Australia.

3. B and D forms a group and agreed to go to USA.
4. E's mother-in-law is mother of C, who is the father of B and brother of H.
5. A is grandfather of I of male members, who goes to USA
6. D is unmarried and Niece of C.
7. F is the oldest member of Family.
35. Who is the mother-in-law of E.
 - (a) G (b) F
 - (c) A (d) cannot be determined
36. Which of the following members will go to the India.
 - (a) A and F (b) C and F
 - (c) D and B (d) A and G
37. How many male members are there in family.
 - (a) 3 (b) 5 (c) 4 (d) CBD
38. How is D related to E?
 - (a) Daughter (b) Niece
 - (c) Sister (d) CBD
39. If MADRAS is coded at LZCQZR, and DELHI is coded as CDKGH, then in the same language how BOMBAY will be coded as
 - (a) ANLAZX (b) AQBUMN
 - (c) APLABX (d) AOZTML
40. A person Mayank start from a point and walks 35 m towards north, then he walks 45 m towards west and then he takes a left turn and walks 35 m and then he takes another left turn and walks 55 m. Calculate the distance from the starting point and direction too.
 - (a) 55 m, East (b) 20 m, South
 - (c) 35 m, East (d) 10 m, East
41. The present age of Raja is $\frac{2}{5}$ th of the age of Laila. After 2 years, the age of Laila will be 2 times the age of Raja. Two years back, the age of Laila was 4 times the age of Raja. Find the present age of Raja.
 - (a) 10 (b) 6
 - (c) 4 (d) cannot be determined
42. Arun and Sudesh are standing in a queue. Arun is 5th from the front and Sudesh is 6th from the end. Now, they interchange their position. Now, Arun is 13th from the front. Find the position of Sudesh from the end after the interchange.
 - (a) 18th (b) 15th
 - (c) 14th (d) cannot be determined
43. There are 6 members in a family Z, Y, X, W, V, U, Y is brother of V's husband. W is the father of Z and grandfather of U. X is the sister of U. There are 2 fathers, 3 brothers, 1 mother then who is the U's father ?
 - (a) Z (b) Y
 - (c) X (d) cannot be determined
44. Find the wrong number in the series: 10, 30, 68, 130, 221, 343.
 - (a) 10 (b) 30 (c) 130 (d) 221

DIRECTIONS (Qs. 45-47): Read the information below and answer the following questions.

A + B means that A is the brother of B
 A × B mean that A is the mother of B
 A ÷ B mean that A is the Sister of B
 A – B mean that A is the father of B
 A * B mean that A is the husband of B
 A # B mean that A is the daughter of B

45. If $(K - R)$ and $(S \times R)$, then the relation between K and S is
 - (a) $K + S$ (b) $S * K$
 - (c) $K * S$ (d) None of these
46. B is father of K and K is Husband of R. Find the relation between B and R?
 - (a) $B * R$ (b) $B + R$
 - (c) $B - R$ (d) None of these
47. It is known that B is father of K and R is son of B, then find the relation between K and R.
 - (a) $R \div K$ (b) $R - K$
 - (c) $K + R$ (d) cannot be determined

DIRECTIONS (Qs. 48-51): Each question consists of a statement followed by two arguments. You have to decide. Which is a strong argument and which is a weak argument.

- (a) Only argument I is strong
- (b) Only argument II is strong
- (c) Either I or II strong
- (d) Both I and II are strong
48. **Statement:** Should the government impose a strict limit on the number of private vehicles owned by a household?
Arguments:
 - I. Yes, Limiting private vehicles will reduce traffic congestion and air pollution, leading to a better quality of life for all citizens.
 - II. No, Such a restriction would infringe on personal freedom and may not be feasible to implement effectively.
49. **Statement:** Should the use of mobile phones be banned for students in schools?
Arguments:
 - I. Yes, Mobile phones distract students from studies and promote cheating in exams.
 - II. No, Mobile phones are essential for communication and emergencies.
50. **Statement:** Should the judiciary be independent of the executive?
Arguments:
 - I. Yes, This would help curb the unlawful activities of the executive.
 - II. No, The executive would not be able to take bold measures.
51. **Statement:** Should the government implement a law requiring all citizens to perform a minimum number of hours of community service each year?
Arguments:
 - I. Yes, It will encourage civic responsibility and help build a stronger, more compassionate society.
 - II. No, Forcing people to do community service violates individual freedom and may reduce the quality of volunteer work.

DIRECTIONS (Qs. 52-54): For the Assertion and Reason below, choose the correct alternative from the following.

- (a) Both (A) and (R) are true and (R) is the correct explanation of (A).
- (b) Both (A) and (R) are true but (R) is not the correct explanation of (A).
- (c) (A) is true but (R) is false.
- (d) (A) is false but (R) is true.

52. **Assertion:** Most of the ancient civilisations grew near the rivers.
Reason (R): The main occupation of man was agriculture.
53. **Assertion (A):** People living in high altitude often have a higher red blood cell count.
Reason (R): At higher altitudes, the oxygen level in the air is lower.
54. **Assertion (A):** Plastic waste is a major environmental concern.
Reason (R): Plastics are biodegradable and can be broken down quickly in the environment.

DIRECTIONS (Qs. 55-59): Read the information given below and answer the question that follows:

Brian, Maya, Kevin, Priya, Daniel, Farah and Helen are seven specialist doctors visiting a polyclinic on four days Tuesday, Wednesday, Friday and Saturday of a week. At least one person must come in a day but not more than two. Each person has different specialization and is an ENT, Orthopaedician, Paediatrician, Neurologist, Ophthalmologist, Radiologist and Oncologist.

Priya comes with ophthalmologist on Friday. The Paediatrician does not come on Saturday, and also not with Daniel or Helen. Only the Oncologist, Farah, comes on Tuesday. Maya, who is not Paediatrician, comes with Kevin on Wednesday. Helen is not a Radiologist. Paediatrician comes with the ENT specialist. Neurologist comes on Friday. Brian is neither an Orthopaedician nor a Radiologist.

55. What is the specialization of Brian?
(a) Ophthalmology (b) ENT
(c) Paediatrics (d) None of these
56. On which day of the week does Daniel visit?
(a) Wednesday (b) Saturday
(c) Friday (d) None of these
57. How many persons visit between the visit of Oncologist and Neurologist?
(a) 4 (b) 2
(c) 3 (d) None of these
58. Who visit's immediate after ophthalmologist?
(a) Maya
(b) The person who is Paediatrician
(c) The person who is Radiologist
(d) Helen
59. What is the specialization of Priya
(a) ENT (b) Oncologist
(c) Neurologist (d) None of these
60. **Statement:** Brand Y produces smartphones with the most advanced technology, ensuring users experience seamless performance without any lag or glitches.
Conclusions:
I. No other brand produces smartphones with advanced technology like Brand Y.
II. Anyone using Brand Y's smartphones will experience seamless performance without lag or glitches.
(a) Only conclusion I follows
(b) Only conclusion II follows
(c) Both conclusions follow
(d) Neither conclusion follows

SECTION-C : Mathematical Skills

61. Six years ago, the age of Allen was 9 times of his son. Four years ago, Allen's age was $6\frac{1}{3}$ times that of his son. How many times the age of Allen would be of his son's age after 6 years?
(a) 1 time (b) 2.5 times
(c) 3 times (d) 3.5 times
62. An aeroplane starts from New Delhi to reach its destination, Kanyakumari, 2,280 km in 3 hours 20 minutes. But due to turbulent weather, its speed had to be reduced. Thus, it reached its destination 40 minutes late. By how much was its speed reduced?
(a) 132 kmph (b) 125 kmph
(c) 121 kmph (d) 114 kmph
63. Two pipes A and B are used to fill a tank. Pipe A is three times faster than Pipe B and takes 36 minutes less than Pipe B to fill a tank. Find the time taken to fill the tank if both pipes are opened together.
(a) $13\frac{1}{2}$ min (b) 16 min
(c) 18 min (d) 12 min
64. A sum of 1,75,000 was distributed among 4 employees, such that B gets 17.5% more than A while C gets an amount equal to $\frac{1}{3}$ of the sum of what A and B get. If D gets 42,760. What is the difference in the amounts received by B and C?
(a) 20,520 (b) 21,020
(c) 22,250 (d) 23,440
65. A jug was full with juice. A person drew out $\frac{1}{6}$ of juice from the jug and replaced it with water. He repeated the process 3 times and thus there was only 1,250 ml of juice left in the jug, the rest part of the jug was filled with water. What was the initial quantity of juice in the jug?
(a) 2.675 ltr (b) 2.465 ltr
(c) 2.230 ltr (d) 2.160 ltr
66. The probability of selecting a red ball at random from a jar that contains red, blue, and orange balls is $\frac{1}{7}$. The probability of selecting a blue ball at random from the same jar is $\frac{1}{6}$. If the jar contains 29 orange balls, find the total number of balls in the jar.
(a) 39 balls (b) 40 balls
(c) 42 balls (d) 44 balls
67. In a class test, the average for the entire class was 69.7 marks. If 13% of the students scored 79 marks and 15% scored 89 marks, what are the average marks of the remaining students of the class?
(a) 66 marks (b) 64 marks
(c) 70 marks (d) 72 marks
68. Vishwas sells his goods 20% cheaper than Gopal's goods and 20% costlier than Dino. How much percentage are Dino's goods cheaper than Gopal's goods?
(a) 30% (b) $33\frac{1}{3}\%$
(c) 36% (d) 40.5%

69. Avinash sold an article at 22.5% profit. Harish sold the same article at 20% profit. The profit made by Harish was ₹ 108 more than the profit made by Avinash. Find the cost price of the article.
(a) 6,000 (b) 5,000 (c) 5,650 (d) 5,400
70. In an election, a voter may vote for any number of the seven candidates but not greater than the number to be chosen. There are seven candidates, and four are to be chosen. In how many possible ways can a person vote?
(a) 78 ways (b) 89 ways (c) 98 ways (d) 107 ways
71. The vertices of a triangle PQR are (5, 3), (-5, -2), and (3, -8) respectively. What is the area of the triangle and the measure of the altitude?
(a) Area = 56 cm^2 , Altitude = 16 cm
(b) Area = 54 cm^2 , Altitude = 14 cm
(c) Area = 50 cm^2 , Altitude = 10 cm
(d) Area = 52 cm^2 , Altitude = 12 cm
72. Tickets numbered 51 to 80 are mixed, and then a ticket is drawn at random. What is the probability that the ticket drawn has a number which is a multiple of 3 or 5?
(a) $\frac{1}{2}$ (b) $\frac{3}{10}$ (c) $\frac{7}{15}$ (d) $\frac{8}{19}$
73. The area of a right-angled triangle is 210 cm^2 . The difference between the sides containing the right angle of the triangle is 23 cm. What is the perimeter of the triangle?
(a) 84 cm (b) 88 cm (c) 92 cm (d) 96 cm
74. Varun invested a sum of 6,40,000 on simple interest at the rate of 4.15% for 3 years and 9 months. At what rate of compound interest should he have invested the same amount for 2 years to get the same interest?
(a) 6.5% (b) 7% (c) 7.5% (d) 8%
75. In a festive season, a shopkeeper, with a view to increasing his earnings, gives a 9.5% discount on frocks. As a result, the volume of his sale of frocks jumps by 30%. How much increase is there in his earnings?
(a) 15.25% (b) 16.75% (c) 18.5% (d) 17.65%
76. In the given figure, DPQR is a right-angled triangle with $PQ = 35 \text{ cm}$ and $PR = 12 \text{ cm}$. A circle with center 'O' has been inscribed in the triangle. Find the value of r , the radius of the inscribed circle.
(a) 6 cm (b) 5 cm (c) 4 cm (d) 3 cm
77. A shopkeeper gives a discount of 25% on the market price of an electronic gadget and gains a profit of 27.5% only. Now, they want to make more profit and therefore, reduce the discount to 20%. Find how much profit does he earn now?
(a) 28% (b) 30% (c) 24% (d) 36%
78. The angle of elevation of an aeroplane from a point on the ground is 60° . After a flight of 25 seconds, the angle of elevation becomes 30° . If the aeroplane is flying at a constant height of $3200\sqrt{3} \text{ m}$, find the speed of the aeroplane.
(a) 256 m/s (b) 255 m/s (c) 254 m/s (d) 252 m/s
79. In a sports stadium, the seats are arranged in rows. The number of seats in the stadium form the terms of an arithmetic series. The fifth row has 22 seats and the tenth row has 37 seats. The theatre has 26 rows in total. Find the number of seats in the stadium.
(a) 1,130 seats (b) 1,184 seats
(c) 1,235 seats (d) 1,325 seats
80. Soap solution A and B of purity 35% and 60% respectively are mixed to obtain 60L of soap solution with purity 45%. Find the quantity of soap solution A and B required to be mixed to form the mixture.
(a) A = 24.5 L, B = 35.5 L (b) A = 33.2L, B = 27L
(c) A = 36L, B = 24L (d) A = 27.5L, B = 27.5L
81. If A gives 42 plastic rings to B, B now has $4\frac{2}{9}$ times the plastic rings that A has. If A gives 31 plastic rings to B, B together will have 3 times the plastic rings that A has. How many plastic rings are with A and B together?
(a) 169 (b) 175
(c) 181 (d) 188
82. Rupesh standing on the bank of a river observed that the angle of elevation of the point on the opposite bank is 60° . When he moves 30m away from the bank, the angle of elevation becomes 30° . Find the height and the width of the river. ($\sqrt{3} = 1.732$)
(a) 22.54 m (approx), 18 m
(b) 23.85 m (approx), 17 m
(c) 24.82 m (approx), 16 m
(d) 25.98 m (approx), 15 m
83. P, Q and R enter into a partnership in the ratio 7/6 : 9/7 : 11/9. After 7 months, P withdraws 40% of his share of investment, while after 8 months, Q withdraws 25% of his investment. If at the end of the year, the total profit was 3,18,750, then, what is P's share in the profit?
(a) 88,460 (b) 89,150
(c) 90,335 (d) 91,875
84. Find the outer and inner radii of a 42 cm long cylindrical metallic pipe when the difference between its external and internal surface areas is 396 cm^2 and the pipe is made up of $2,079 \text{ cm}^3$ of metal.
(a) 5 cm, 3.5 cm (b) 5.5 cm, 4 cm
(c) 6 cm, 4.5 cm (d) 6.5 cm, 5 cm
85. In an examination, the number of candidates who passed the number of those who failed in the ratio 5:1. Had 21 more candidates appeared and 11 less passed, the ratio of pass candidates to the failed candidates would have been 7:2. Find the number of candidates who appeared in the examination.
(a) 467 (b) 475
(c) 481 (d) 492
86. A is $2(1/2)$ times as good as a workman as B. Therefore, he can finish a job in 21 days less than B. In how many days they both working together can finish the job?
(a) 8 days (b) 9 days
(c) 10 days (d) 12 days
87. An edible oil tanker transfers oil into a storage tank measuring $80 \text{ cm} \times 45 \text{ cm} \times 40 \text{ cm}$. The storage tank already has 15.4L oil in it when oil was filled up to 35% of the height of the storage tank. $8/15$ th part of the tanker was still filled with oil. How much edible oil was there in the tanker in the beginning?
(a) 75 L (b) 78 L
(c) 81 L (d) 84 L

88. A man takes 24 minutes to row 10 km upstream, which is one-fifth more than the time he takes on his way downstream. What is his speed of rowing in still water?
(a) 27.5 kmph (b) 25.5 kmph
(c) 24 kmph (d) 22.5 kmph
89. The simple interest on a certain sum for 3 years at 4.5% per annum is ₹ 64,800. What is the difference between the compound interest calculated on 75% of the sum and double rate of interest for the same time period and the simple interest?
(a) ₹ 45,710 (b) ₹ 43,618
(c) ₹ 41,410 (d) ₹ 40,360
90. At the end of the year, profit of ₹ 3,15,000 is earned by a partnership firm having Neha, Anmol, Piya and Rahul as partners. In the business, the share of Anmol is $\frac{3}{4}$ of that of Neha's share and Piya share is $\frac{2}{3}$ of Anmol's share and Rahul's share is $\frac{3}{4}$ th of Piya's share. What is the difference between the share's profit of Neha and Rahul against that of Anmol and Piya?
(a) ₹ 19,700 (b) ₹ 17,280
(c) ₹ 15,000 (d) ₹ 14,830

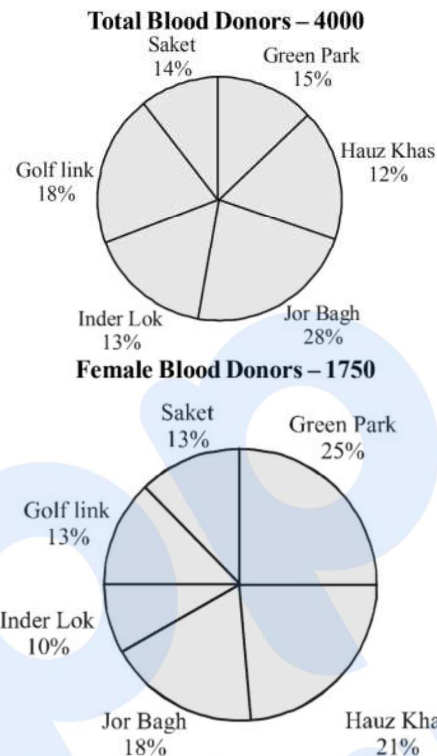
SECTION-D : Data Analysis & Sufficiency

DIRECTIONS (Qs. 91-95): The table shows the marks of 5 engineering students in thermodynamics and Hydraulics.

Name	Thermodynamics	Hydraulics
Parikh	130	80
Quesh	120	110
Rao	80	100
Sharma	70	120
Tahir	50	60

91. Total marks obtained by Tahir in both the subjects are more than the marks obtained by
(a) Quesh in Hydraulics
(b) Rao in thermodynamics
(c) Sharma in Hydraulics
(d) Parikh in Thermodynamics
92. What is the ratio between total marks obtained by Parikh in thermodynamics and Hydraulics together and the same by Rao
(a) 3:2 (b) 4:3
(c) 5:3 (d) None of these
93. What is the ratio between total marks obtained by Quesh and Sharma in Hydraulics together and total marks obtained by Parikh and Rao in Thermodynamics.
(a) 23:25 (b) 23:21
(c) 11:19 (d) 17:23
94. Marks obtained by Sharma in Hydraulics are what percentage of the total marks obtained by all students in Hydraulics.
(a) 25.5 (b) 28.5 (c) 35.5 (d) 31.5
95. If the marks obtained by Tahir in Thermodynamics were increased by 14% of the original marks, then what would be his new approximate percentage in Thermodynamics, when the maximum marks were 140.
(a) 57 (b) 32 (c) 38 (d) 41

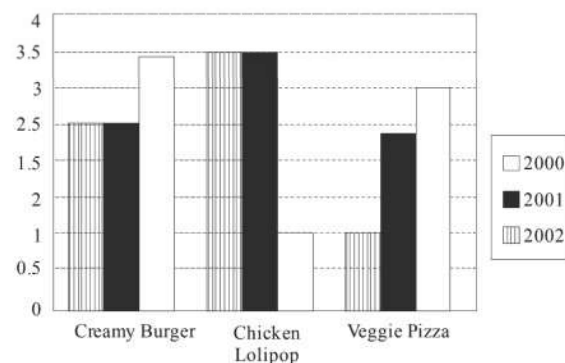
DIRECTIONS (Qs. 96-99): Read the following pie chart and answer the questions based on that:



96. What is the respective ratio between the numbers of female blood donors from the Inder Lok and Green Park
(a) 2:7 (b) 2:3 (c) 2:5 (d) 3:7
97. The total number of male blood donors from the Jor Bagh and Saket together is
(a) 1264 (b) 1088 (c) 1363 (d) 1138
98. Find the ratio between the male blood donors from Golf link and Saket.
(a) 197:133 (b) 199:133 (c) 123:83 (d) 197:135
99. Find the ratio of number of female blood donors from Inder Lok and the number of male donors from the same colony.
(a) 35:69 (b) 32:69 (c) 38:69 (d) 35:67

DIRECTIONS (Qs.100-102): Examine the graph to answer the question.

Gross Receipts (Rs. mn) of Fast Food Restaurants 2000-2002

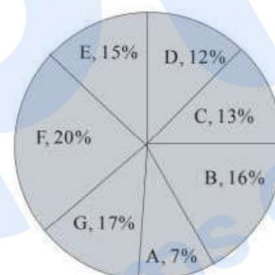


100. The 2000-2002 gross receipts for Creamy Burger exceeded those of Veggie Pizza by approximately ₹
(a) 2 million (b) 0.2 million
(c) 8.2 million (d) 8.4 million
101. The percent increase in (2000-2002) receipts for Veggie Pizza is how many times the percent increase of creamy Burger by approximately how much in the given period?
(a) 2 (b) 5 (c) 3 (d) 4
102. The 2002 decline in Chicken Lolipop receipts may be attributed to
(a) increase in popularity of pizzas
(b) increase in popularity of burgers
(c) decrease in demand for chicken
(d) cannot be determined

DIRECTIONS (Qs. 103-107): Study the table/s given below and answer the question that follows.

Year	Rural		Semi-urban		State capitals		Metropolises	
	Appeared	Passed	Appeared	Passed	Appeared	Passed	Appeared	Passed
2009	1652	208	7894	2513	5054	1468	9538	3214
2010	1839	317	8562	2933	7164	3248	10158	4018
2011	2153	932	8139	2468	8258	3159	9695	3038
2012	5032	1798	9432	3528	8529	3628	11247	5158
2013	4915	1668	9784	4015	9015	4311	12518	6328
2014	5628	2392	9969	4263	10725	4526	13624	6419

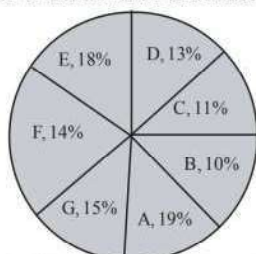
103. For the candidates from which of the following locations was there continuous increase both in appeared and passed?
(a) State capital and Rural
(b) State capital
(c) Semi-urban
(d) None of these
104. In which of the following years was the percentage passed to appeared candidates from Semi-urban area the least?
(a) 2009 (b) 2012 (c) 2010 (d) 2011
105. What approximate value was the percentage drop in the number of Semi-urban candidates appeared from 2010 to 2011?
(a) 15 (b) 10 (c) 5 (d) 8
106. In 2012, percentage of candidates passed to appeared was approximately 35 from which location?
(a) Semi-urban and Metropolises
(b) Rural and Metropolises
(c) Rural
(d) None of these
107. The total number of candidates passed from Rural in 2012 and Semi-urban in 2009 was exactly equal to the total number of candidates passed from State capital in which of the following years?
(a) 2013 (b) 2012 (c) 2009 (d) 2011



108. How many students of institutes A and G are studying at graduate level?
(a) 7486 (b) 8636 (c) 9046 (d) 9256
109. Total number of students studying at post-graduate level from institutes E and F is.
(a) 6070 (b) 6890 (c) 6510 (d) 6230
110. What is the difference of students studying at post-graduate level in C and D?
(a) 180 (b) 186 (c) 190 (d) 372
111. What is the ratio between the number of students studying at institute B in graduate and Institute E at post graduate?
(a) 212 : 218 (b) 212 : 216
(c) 279 : 254 (d) 254 : 279
112. What is the average between the number of students at post-graduate level in institute F and graduate level in institute E?
(a) 4264 (b) 4100
(c) 4146 (d) 4046

DIRECTIONS (Qs. 108-112): Go through the pie chart/s given below and answer the question that follows.

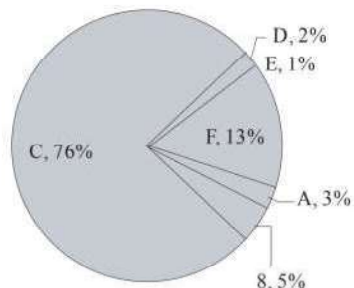
Total Number of Students of Graduate Level=25400



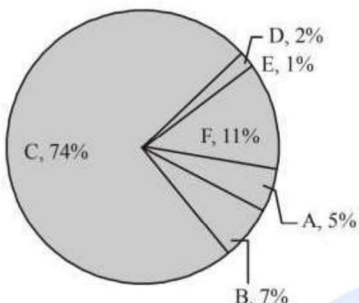
Total Number of Students of Post Graduate Level=18600

DIRECTIONS (Qs. 113-114): The location wise distribution of employees in a customer service for the years 2015 and 2016 are given below. The total employee strength of the company in 2015 was 90000 and there was a 20% increase in the number of employees in 2016 with no attrition.

Employees by location in 2015



Employees by location in 2016

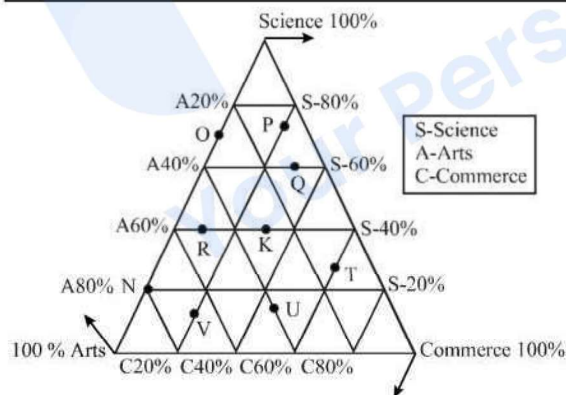


113. What is the ratio of number of employees at location B in 2015 to 2016?
(a) 25/42 (b) 42/25 (c) 41/26 (d) 26/41
114. What is the ratio of change in the number of employees at location E to change in the number of employees at location B in 2016?
(a) 1/2 (b) 1/17 (c) 2/29 (d) 35/53

DIRECTIONS (Qs. 115-116): Study the triangular graph to answer the question.

The triangular diagram represents the percentages of students in science arts and commerce section of the various schools. N, O, P, Q, K, T, U, V, R represent nine schools.

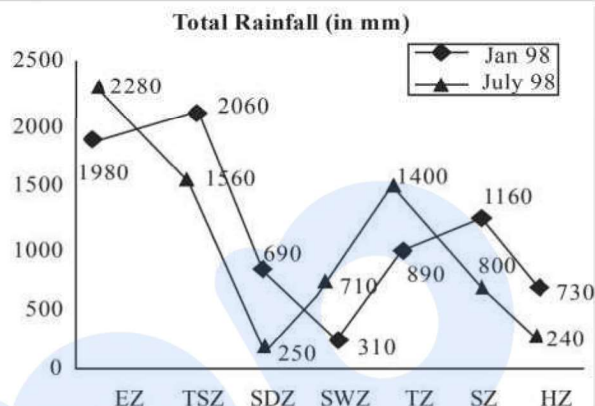
% Distribution of Science, Arts and Commerce Students



115. In which of the schools P, R, T, U and V is the sum of science and arts students the minimum, assuming that the total number of students in each school are 100, 120, 140, 160 and 50 respectively?
(a) P (b) T (c) R (d) V

116. What is the ratio of Arts & Science students in school K, if total number of the students in these sections are 50 and 100 respectively?
(a) 4:3 (b) 3:8 (c) 1:5 (d) 7:5

DIRECTIONS (Qs. 117-120): Study the graph below to answer the question.



EZ = Equatorial zone
TSZ = Tropical summer zone
SDZ = Subtropic dry one
SWZ = Subtropic winter zone
TZ = Temperate zone
SZ = Subpolar zone
HZ = Highpolar zone

117. Rainfall in equatorial zone in January is what per cent less/more than that of rainfall in temperate zone in July?
(a) 41.42% (b) 39.25%
(c) 36.04% (d) 23.68%
118. What is the average rainfall around the world in the month of July for the given year?
(a) 1075.71 mm (b) 1034.28 mm
(c) 1050 mm (d) 978.67 mm
119. In which of the following zones is maximum increase in rainfall from January to July?
(a) Subpolar (b) Equatorial
(c) Tropical Summer (d) Temperate
120. Decrease in rainfall subpolar zone is what percent of increase in subtropic winter zone in July?
(a) 80% (b) 85% (c) 72% (d) 90%

SECTION-E : Indian & Global Environment

121. As per the advance estimates released by the National Statistical Office (NSO) in February 2025, what was India's GDP growth rate for the third quarter (October-December 2024) of the fiscal year 2024-25?
(a) 6.5% (b) 7.2% (c) 7.8% (d) 6.9%
122. In the Union Budget presented in February 2025 for the fiscal year 2025-26, the government set a fiscal deficit target as a percentage of GDP at:
(a) 5.1% (b) 4.8% (c) 4.5% (d) 5.5%
123. According to data released by the Ministry of Commerce and Industry in March 2025, India's merchandise exports in February 2025 stood approximately at:

- (a) \$38.2 billion (b) \$33.5 billion
(c) \$41.0 billion (d) \$35.7 billion
124. The Reserve Bank of India (RBI), in its monetary policy review in April 2025, maintained the repo rate. What was the unchanged repo rate?
(a) 6.25% (b) 6.75% (c) 6.00% (d) 6.50%
125. India's Consumer Price Index (CPI) based inflation, or retail inflation, for January 2025, as reported in February 2025, was recorded at:
(a) 4.85% (b) 5.02% (c) 5.30% (d) 4.65%
126. According to the first-ever monthly Periodic Labour Force Survey (PLFS) data released in May 2025, what was India's overall unemployment rate in April 2025?
(a) 4.2% (b) 5.8% (c) 5.1% (d) 6.0%
127. As per recent IMF (International Monetary Fund) projections (April 2024 World Economic Outlook), what is the forecasted global GDP growth rate for 2025?
(a) 2.9% (b) 3.3% (c) 3.1% (d) 4.2%
128. According to data from the Ministry of Statistics and Programme Implementation MoSPI released in May 2025, what was India's retail inflation rate (CPI) for April 2025?
(a) 3.16% (b) 2.69% (c) 3.34% (d) 1.78%
129. In a major M&A deal announced in March 2025, Google acquired Wiz. What was the approximate value of this deal?
(a) \$23.7 Billion (b) \$13.4 Billion
(c) \$11 Billion (d) \$32 Billion
130. The OECD (Organisation for Economic Co-operation and Development) forecast in June 2025 that U.S. economic growth will slow down. What is the projected U.S. GDP growth for the current year (2025) according to this forecast?
(a) 2.8% (b) 1.5% (c) 1.6% (d) 2.5%
131. Which Indian cities were recently included in the list of wetland cities under the Ramsar Convention?
(a) Jaipur and Bhopal
(b) Ahmedabad and Kolkata
(c) Indore and Udaipur
(d) Bhopal and Jaisalmer
132. How many Tiger Reserves are there in India as of March 2025?
(a) 50 (b) 55 (c) 58 (d) 65
133. Who was the author of 'The General Theory of Employment, Interest and Money'?
(a) Prof. Marshall (b) Adam Smith
(c) J.M. Keynes (d) Thomas B. Lewis
134. Which among the following is the part of Porter's Five force Model?
(a) Bargaining power of Government
(b) Bargaining power of court
(c) Bargaining power of supplier
(d) None of the above
135. In which economic system Private sector and public sector co-exist together?
(a) Mixed Economy (b) Socialism
(c) Capitalism (d) None of the above
136. Operations of McDonalds in India was possible due to
(a) Industrialization (b) Globalization
(c) Transparency (d) None of the above
137. The internal factors of business environment are:
(a) Controllable factors
(b) Uncontrollable factors (External Factors - Micro and Macro)
(c) Planned factors
(d) None of the above
138. Coal is an output, belongs to:
(a) Primary Sector (Mining, agriculture, fishing, forestry)
(b) Secondary Sector (Manufacturing like car, textile)
(c) Tertiary Sector (Services like entertainment, media)
(d) None of the above
139. Monetary policy is announced by
(a) Railway Minister (b) Finance Minister
(c) Commerce Minister (d) None of the Above
140. L.P.G. era in context to Indian Economy stands for:
(a) Long Progressive Goals
(b) Lira Process Goals
(c) Liberalisation Privatisation Globalisation
(d) Liquefied Petroleum Gas
141. Select among following names as public sector under taking
(a) LIC of India (b) Indian Railways
(c) Air India (d) All of the above
142. Ease of doing business through simplification and flexible law frame work is a feature of:
(a) Liberalisation (b) World Bank
(c) Asian Development Bank (d) EXIM Bank
143. Fiscal Policy is related with:
(a) Profit and Loss accounts of private company
(b) Balance sheet of World Bank
(c) Income of South-East Asia
(d) None of the above
144. Production and sales in multiple countries is a feature of:
(a) Multi National Corporation
(b) International Company
(c) Both (a) and (b)
(d) None of the above
145. Entry of foreign companies is a source of for domestic firms.
(a) Manpower (b) Raw Material
(c) Technology (d) Market
146. GATT replaced:
(a) ADB (Asian Development Bank)
(b) EXIM Bank
(c) World Health Organisation
(d) None of the above
147. WTO holds objective
(a) To set and enforce rules for International trade
(b) To provide forum for negotiating and monitoring trade liberalisation
(c) Both (a) and (b)
(d) None of the above
148. Which among following is correct?
(a) Appropriate technology in business is key to profitability
(b) Technology has no role in profitability
(c) Obsolete technology is key to profitability
(d) All of the above

149. Facilitation of external trade and payment with orderly development and maintenance of foreign exchange in India is an objective of:
- (a) Foreign Development Board
 - (b) Foreign Trade Forum
 - (c) Foreign Exchange Management Act
 - (d) Freight Exchange Organisation
150. Which among the following is correct?
- (a) Appropriate policy for research and development is a factor of economic growth.
 - (b) Policy for research and development does not drive the growth of economy.
 - (c) Both (a) and (b)
 - (d) None of the above