



Time Allowed :3 Hours	Maximum Marks :95	Total Questions :95
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General Instructions

Read the following instructions very carefully and strictly follow them:

1. Please read the instructions carefully.
2. This Question Paper consists of **95 questions** in four sections.
3. The total duration of the XAT examination is 180 minutes (3 hours).
4. Sectional Timing: While the overall exam time is 180 minutes, specific sections are included within this time frame, except for the General Knowledge (GK) section, which is allotted 10 minutes.
5. All questions of a particular section must be attempted in the correct order.
6. Answering Format: Use a blue or black ball-point pen to mark answers on the answer sheet. Ensure markings are clear and within the designated spaces.

1. **A and B each purchased plots of land on the Moon from an e-store. A bought a plot in the shape of a square, while B bought a circular plot. Both plots were described by the same diameter. Calculate the ratio of the area of A's land to B's land.**
2. **A bought a phone from some store and paid $\frac{1}{6}$ on UPI, $\frac{1}{3}$ with cash, and the rest of the balance a year later with 10% interest. What was the original price of the phone?**
3. **ABCD is a rectangle, with C and D having respective coordinates (-2, 0) and (2, 0). If the area of the rectangle is 24, what would be the best way to describe the equation of line AB (the length)?**
4. **A chose an integer X, which is between 2 and 40. A noticed that the integer X is such that when X is divided by any integer between 2 and 40, the remainder is always 1. What is the value of X?**
5. **An iron beam made with rare materials has a market price dependent on the square of its diameter. The beam broke into two pieces in the ratio of 4 : 9. What would be the profit or loss if the broken pieces are sold as they are?**
6. **In an office with 8 employees, the average rating is 30. The top five employees have an average rating of 38, and the bottom three have an average rating of 25. Which of the following is not possible?**

Data Interpretation Set 1

1. In an office, there are 4 reviewers named R_1, R_2, R_3, R_4 , responsible for reviewing products A, B, C, D . Ratings are between 1 and 5. Due to a technical glitch, the data for their ratings was deleted, and only the averages were preserved. The data is provided below:

Reviewer	A	B	C	D	Average
R_1	?	3	?	4	4
R_2	3	?	5	?	4
R_3	?	4	?	3	4
R_4	?	5	?	?	4.25
Average	4	4	4	4.25	

Determine the missing ratings such that the given averages hold true.

2. A teacher conducted a test every week in an 8-week course, and the scores ranged from 1 to 4. There are two students enrolled, R and S. The following conditions are given:

- R and S had the same score on the first test.
- From the second test onwards, R maintained the same non-zero score.
- The total of R's first three scores equals the total of S's first two scores.
- From the fifth test onwards, S maintained the same score as R.
- S's scores for the first test, the total of the first two tests, and the total of all eight tests form a geometric progression.

DI set 2 (R and S set)

Question 1: If R had a score of 4 on the third test, what would S have scored on the third test?

Decision Making - Set 1:

Scenario: There is a community located 30 km outside the main city. Mr. S started a grocery business in the community after winning a bid by offering a rent significantly higher than initially proposed by the community council, led by Mr. D. He also agreed to provide an additional 15% of his grocery sales to the council, expecting to benefit from higher sales volumes.

After establishing his business, Mr. S observed that SUV owners in the community purchased goods in bulk from the city weekly and relied on his store only for daily necessities or occasional large purchases like a mixer grinder. Over time, Mr. S noticed that his business was barely breaking even, especially considering the rent would increase every 3 years.

1: To maximize profits, which option should Mr. S choose?

1. Promote his business through leaflets and pamphlets.
2. Introduce a 'Wednesday Sale' with a 40% discount on that day.
3. Provide goods that are not available but required by the community residents.
4. Do nothing and wait to see the outcomes.

5. Negotiate with the council to reduce the rent.

2: Due to the expansion of the startup "Rush Em'," which promises grocery delivery to the suburbs within 50 minutes, Mr. S's business begins to decline. What should Mr. S do to counter this challenge?

1. Make his own app and provide goods on delivery to the city to counter the startup's business.
2. Recruit a few employees and provide home delivery to the community residents within 10 minutes.
3. Provide more discounts.

Question 3: As Mr. S's business expands to include selling vegetables, the local vegetable vendors in the community are affected and cease their operations. This impacts some community employees who used to receive free or low-priced vegetables. The community council decides to intervene. What action should they take?

1. Threaten Mr. S to stop selling vegetables since that was not mentioned in the initial agreement.
2. Ask Mr. S to provide free or low-priced vegetables to lower-class employees.

Decision Making - Set 2:

Arya, a graduate from a reputable institute, got a job in an IT company but became bored just after a year of working. Her best friend, S, from the company, joins a top-tier B-school, making Arya tempted to follow the same path. Her friend tells her that doing an MBA will provide a career boost and a higher salary. Arya starts preparing for the same, but preparation alongside her job becomes quite tough, prompting her to ask her friend if she should leave the job.

Question 1:

Arya gets an offer from a top B-school for an agribusiness program. After the initial elation, she starts deliberating since the program does not align with her career path. Meanwhile, she receives an offer for a one-year executive MBA program from a third-tier college, which has stellar placements for its first batch. However, the program is designed for individuals with significant work experience, making Arya, who has only one year of experience, hesitate.

Which of the following factors would make Arya choose the one-year executive program?

Question 2: After receiving offers from both programs, Arya learns that her IT company is tying up with a top-tier B-school to provide their best 30 employees an opportunity to do a management certification course. However, the selection process, as stated by the founder, will depend on employees' performance or exceptional academic records. Since Arya lacks exceptional academic credentials, she fears she might not be selected for the program.

Which of the following options would alleviate Arya's concern the most?