Welcome to the Quant Sir Comprehensive Guide – Your Trusted Partner for SSC CGL Tier I Success

Cracking the SSC CGL Tier I exam takes more than dedication—it requires smart preparation, a solid understanding of concepts, and sharp problem-solving skills. This guide is crafted to elevate your preparation with a thorough analysis of the **SSC CGL 2024 Quant Previous Year Paper - 13 Sep 2024 - Shift 2**, complete with verified answer keys.

At **Quant Sir**, we bring you the actual question paper from the exam, enriched with clear, step-by-step solutions. Our aim is to help you grasp the exam pattern, understand the logic behind each solution, and develop the skills needed to tackle even the trickiest questions with confidence. By working through real exam content, you'll not only gain familiarity with the question types but also build the ability to solve them efficiently under exam conditions.

Whether you're a first-time candidate or looking to refine your preparation strategy, this guide will help you sharpen your approach and improve your performance. With **Quant Sir**, you're not just putting in the hours—you're preparing smarter, and preparing right.

SSC CGL 2024 Quant Previous Year Paper - Exam Pattern

Here's the exam pattern for SSC CGL Tier I exam held in 2024.

Tier I: Computer-Based Exam (Qualifying Nature)

Subject	No. of Questions	Maximum Marks	Duration
General Intelligence & Reasoning	25	50	60 minutes (80 min for PwD)
General Awareness	25	50	
Quantitative Aptitude	25	50	
English Comprehension	25	50	
Total	100	200	

SSC CGL 2024 Quant Previous Year Paper - Topicwise Weightage

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The table below provides a topic-wise breakdown of the SSC CGL 2024 Quant Previous Year Paper - 13 Sep 2024 - Shift 2. It highlights the key focus areas along with the number of questions asked from each topic, offering valuable insights into the exam pattern and helping you refine your preparation strategy.

Topic	Total Questions
Linear Equations	1
Divisibility Rules	1
Profit, Loss & Discount	3
Statistics (Mean/Mode)	1
Pipes & Cisterns	1
Percentage	1
Ratio & Proportion / Mixtures	2
Simplification	2
Time, Speed & Distance	1
Geometry (Triangles)	1
Trigonometry	3
Mensuration (2D & 3D)	4
Algebra (Identities)	1
Data Interpretation	3

SSC CGL 2024 Quant Previous Year Paper - Tips to Solve

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- **Analyze the Paper Pattern First:** Before solving, quickly scan the paper to understand the distribution of topics (e.g., Algebra, Geometry, Arithmetic, etc.). Focus more on high-weightage topics.
- **Prioritize Easy and Scoring Topics:** Attempt easier questions like Simplification, Number System, and Percentage first. These are usually quick to solve and help build momentum.
- **Use Shortcuts and Tricks:** Practice Vedic math techniques and topic-specific shortcuts to save time in calculations. For example, memorizing squares, cubes, and percentage values helps in quick approximation.
- **Avoid Lengthy Calculations:** If a question seems too time-consuming, mark it and move on. Come back later if time permits. Time management is crucial in the Quant section.
- **Work on Speed and Accuracy Together:** Set a timer while practicing previous year questions. Try to increase your speed without compromising accuracy.

SSC CGL 2024 Quant Previous Year Paper - 13 Sep 2024 - Shift 2

Q:1 For which of the following values of a and b do the given equations, have NO solution?

$x - ay = 2 - a$

$(1 - a)x + 6y = a + b$

1. $a = -3, b \neq 1$
2. $a = 3, b \neq -1$
3. $a = -3, b \neq -1$
4. $a = 3, b \neq 1$

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Q:2 Which digits should come in the place of x and y, respectively, if the number 62684xy is divisible by both 8 and 5?

1. 5 and 0

2. 4 and 0

3. 2 and 0

4. 0 and 5

Q:3 Ramesh sells rice at ₹36 per kg, which he purchased for ₹30 per kg. Moreover, he gives only 800 g of rice instead of 1 kg while selling. Find the actual profit percentage of Ramesh.

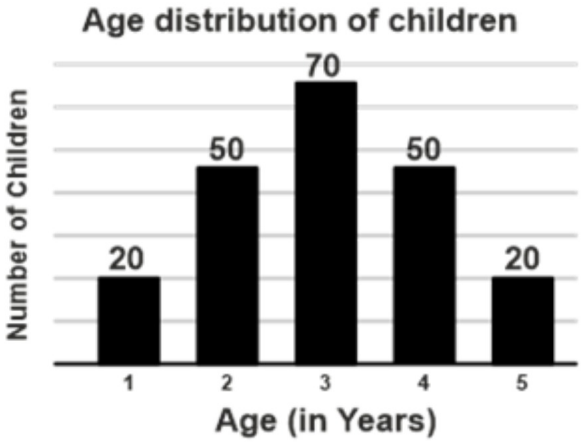
1. 46%

2. 50%

3. 48%

4. 52%

Q:4 Directions: The graph given represents data on the ages of various children. Study the given graph and answer the following question.



What is the difference between the mean and mode of the ages?

1. 2

2. 0.5

3. 1

4. 0

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Q:5 A pipe can fill an empty tank in 5 minutes and another pipe can empty it in 6 minutes. If both the pipes are opened simultaneously, then in how much time will the tank be filled?

1. 33 min

2. 30 min

3. 35 min

4. 25 min

Q:6 P and Q are two fixed points 10 cm apart, and R is a point on PQ such that PR = 6 cm. By what percentage is the length of QR decreased when the length of PR is increased by 5%?

1. 8.5%

2. 7.5%

3. 7%

4. 8%

Q:7 Two different quantities of the same solution having ingredients A and B are stored in two different containers. In the first container, there are 252 litres of A and 441 litres of B. In the second container, the total quantity of the solution was 1188 litres. How much of the solution in the second container was made up of ingredient B?

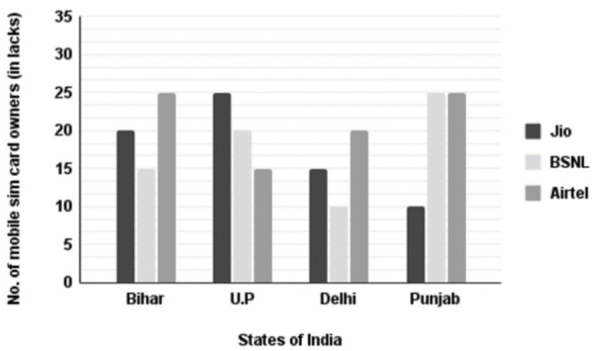
1. 765 litre

2. 756 litre

3. 752 litre

4. 760 litre

Q:8 Simplify:



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1. $2\frac{1}{3}$
2. $2\frac{1}{6}$
3. $2\frac{1}{5}$
4. $3\frac{1}{4}$

Q:9 P and Q start running in opposite directions on a circular track from the same point. If their speeds are 10 m/s and 8 m/s, respectively, then after what time will they meet if the length of the track is 1620 m?

1. 110 seconds
2. 70 seconds
3. 120 seconds
4. 90 seconds

Q:10 △ABC is an equilateral triangle. P, Q, and R are the mid-points of sides AB, BC and CA, respectively. If the length of the side of the triangle ABC is 11 cm, then the area (in cm2) of △PQR is:

1. $\frac{21\sqrt{3}}{16}$
2. $\frac{11\sqrt{3}}{16}$
3. $\frac{121\sqrt{3}}{16}$
4. $\frac{111\sqrt{3}}{16}$

Q:11 A discount series of 10% and 16% on an invoice is the same as a single discount of:

1. 24.4%
2. 22.4%
3. 21.4%
4. 23.4%

Q:12 If sinB = $\frac{15}{17}$, what is the value of cosB(secB − tanB)? [Given that 0 < B < π/2]

1. $\frac{1}{16}$
2. $\frac{2}{15}$
3. $\frac{8}{15}$
4. $\frac{2}{}$

Q:13 2 varieties of tea powders worth ₹250/kg and ₹300/kg are mixed with a third variety of tea powder in the ratio 1 : 1 : 2. If the mixture is worth ₹350/kg, find the price of the third variety tea powder.

1. ₹450/kg
2. ₹400/kg
3. ₹425/kg
4. ₹500/kg

Q:14 Directions: The given table shows the number of runs scored in IPL matches by four Indian batsmen in a particular year.

Player	Runs scored
P	800
Q	620
R	1200
S	650

What is the total number of runs scored by all four batsmen?

1. 3270
2. 2900
3. 3760
4. 3300

Q:15 If tanA= $\frac{5}{7}$, then find the value of $\frac{7sinA-3cosA}{7sinA+3cosA}+4$.

1. $4\frac{1}{4}$
2. $3\frac{5}{7}$
3. $3\frac{1}{5}$
4. $7\frac{1}{3}$

Q:16 Simplify $\frac{25a^2-10ab-48b^2}{5a+6b}\times(5a+8b)$.

1. $25a^2 - 64b^2$

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2. $(5a - 8b)^2$

3. $(5a + 8b)^2$

4. $25a^2 - 36b^2$

Q:17 The radius of the circle is 8 cm. The distance of a point lying outside the circle from the centre is 17 cm. The length of the tangent drawn from the outside point to the circle is:

1. 18 cm

2. 15 cm

3. 16 cm

4. 19 cm

Q:18 A circle's center is connected to its 50 cm long chord by a perpendicular that is 21 cm long. Find the circle's radius.

1. √1065 cm

2. √1068 cm

3. √1064 cm

4. √1066 cm

Q:19 If $\frac{tan(x)}{sec(x)} = \frac{1}{2}$, then the value of $(\sin x + \cos x)^2$ is _____.

1. $\frac{2+\sqrt{3}}{3}$

2. $\frac{2+\sqrt{3}}{2}$

3. $\frac{2-\sqrt{3}}{2}$

4. $\frac{2-\sqrt{3}}{3}$

Q:20 A trader owes a merchant ₹9,810 due in 1 year, but the trader wants to settle the account after 6 months. If the rate of simple interest is 9% per annum, how much cash (in ₹) should he pay?

1. 9550.56

2. 9450.56

3. 9385.56

4. 9387.56

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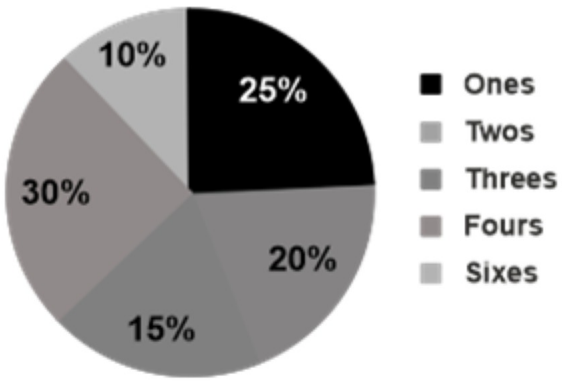
Q:21 What is the volume in cubic units of a cylinder with a height equal to the diameter and a radius is 4 units?

1. 128π
2. 64π/3
3. 32π
4. 32π/3

Q:22 Let a + b = 1, then the value of $\left(\frac{1}{a^2}+\frac{1}{b^2}+\frac{2}{ab}\right)$ is:

1. $1/a^2b^2$
2. 1/ab
3. $1/a^2b$
4. $1/ab^2$

Q:23 Directions: The pie chart given shows the percentage distribution of runs scored by a batsman in test innings. Study the chart and answer the question that follows.



If the batsman has scored a total of 440 runs, how many runs did he score by hitting fours?

1. 88
2. 172
3. 224
4. 132

Q:24 A chord of the larger among two concentric circles is of length 20 cm and it is tangent to the smaller circle. What is the area (in cm2) of the annular portion between the two circles?

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1. 100π

2. 164π

3. 122π

4. 175π

Q:25 Directions: The following table indicates the number of students studying in three subjects in four colleges.

Subjects	Colleges			
	W	X	Y	Z
Physics	420	435	412	285
Chemistry	380	340	315	420
Mathematics	256	310	295	345

What is the ratio of the total number of students studying in Physics to that of studying in Mathematics in all four colleges taken together?

1. 781 : 585

2. 775 : 601

3. 576 : 731

4. 776 : 603

SSC CGL 2024 Quant Previous Year Paper - Answer Key

You can view your score for this test here.

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

Each question carries 2 marks.

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- Scored above 45? Fantastic job! You're clearly on track to ace the exam. Keep up the great work.
- Scored between 35 and 45? That's a solid performance—continue building on this momentum to strengthen your chances.
- Scored below 30? Don't be discouraged. Treat this as a valuable opportunity to identify your weak spots and focus your practice accordingly.

To boost your performance further, make sure to go through the detailed solutions provided with this paper. They'll help you grasp the right techniques and refine your problem-solving skills.

Stay consistent with your preparation and practice time management to excel on exam day.
Keep checking Quant Sir in for more SSC CGL 2024 question papers along with answer keys and step-by-step solutions to take your prep to the next level.

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