



SSC MTS 2022-23



MATHS

**BEGINNERS के लिए
SSC MTS का**

MASTER PLAN



LIVE | 03:45 PM

BY SUNIL MAHENDRAS



UPCOMING ONLINE BATCHES

January 2023

18 JAN 2023

07:30 PM to 09:30 PM

BANK ONLINE LIVE CLASS

01:00 PM to 03:00 PM

SSC ONLINE LIVE CLASS

BILINGUAL

25 JAN 2023

03:00 PM to 05:00 PM

BANK ONLINE LIVE CLASS

07:30 PM to 09:30 PM

SSC ONLINE LIVE CLASS

BILINGUAL

18 JAN 2023

04:00 PM to 06:00 PM

BANK ONLINE LIVE CLASS

BENGALI



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An aerial photograph of a winding asphalt road that curves through a dense forest. The trees are mostly green, with some showing early autumn colors. The road has a white dashed center line and a solid white edge line. The text "No Shortcuts to Success" is written in a white, elegant cursive font across the middle of the image, with a subtle drop shadow. The overall lighting is soft, suggesting a late afternoon or early morning setting.

No Shortcuts to Success



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Exam
Pattern
(Tier-I)



Section	Subject	No. of Questions	Max Marks	Exam Duration
1	General Intelligence & Reasoning	25	25	90 minutes
2	General Awareness	25	25	
3	Numerical Aptitude	25	25	
4	General English	25	25	
Total		100	100	

Note: There would be a negative marking of 0.25 mark for every wrong answer attempted by the candidates.



Points to Remember

- 1. Syllabus**
- 2. Calculation**
- 3. Speed and accuracy**
- 4. Previous year Questions**
- 5. Mock test & Analysis**



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Number Systems,
Decimals and Fractions
Simplification,
Percentages,
Ratio and Proportion,
Averages,
Interest,
Profit and Loss,
Discount,

Tables and Graphs, (D I)
Mensuration,
Time and Distance,
Ratio
~~and Time,~~
Time and Work, etc.



Strategy & Approach in Choosing Topics

Ratio & Proport
Age
Partner
Alligation

Percentage
प्रतिशत
Profit & loss
Discount

Time & Distance
Train
Boat & stream



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Topic	No of Questions	Level
<u>S.I, CI, Profit/Loss</u>	02	Easy-Moderate
<u>Mensuration</u>	03	Easy-Moderate
<u>Simplification</u>	2-4	Easy-Moderate
Time and Work	2	Moderate
<u>Speed and Distance</u>	2-3	Easy-Moderate
Average	02	Moderate
<u>DI (bar graph)</u>	5	Easy-Moderate
Percentage	02	Easy
Miscellaneous	3-4	<u>Easy-Moderate</u>
Total	25	



STUDY PLAN

- TOPIC –WISE STUDY
- PREVIOUS YEAR QUESTIONS
- MOCK TEST
- MARATHON CLASSES



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The selling price of 15 oranges is the same as the cost price of 19 oranges.

What is the approximate profit percentage?

15 संतरों का विक्रय मूल्य 19 संतरों के क्रय मूल्य के बराबर है। अनुमनित लाभ प्रतिशत ज्ञात कीजिए।

$$15 \cdot SP = 19 \cdot CP$$

$$\frac{SP}{CP} = \frac{19}{15}$$

$$\text{Profit \%} = \frac{4}{15} \times 100$$

$$= 26.67\%$$

a) 15.34%

b) 18.75%

c) 33.5%

d) 26.67%



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At an event there are 500 guests, among whom 28% are adult males, 64% are adult females, and the rest are children. Find the total number of children at the event.

एक कार्यक्रम में 500 अतिथि हैं, जिनमें से 28% वयस्क पुरुष, 64% वयस्क महिलाएं और शेष बच्चे हैं। कार्यक्रम में बच्चों की कुल संख्या ज्ञात कीजिए।

500

28% Adult + male
64% " fem

92%

500 × 8 / 100 = 40

Remain (children) 500 - 92 = 8% = 40

a) 55
b) 45
c) 40
d) 50



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What is the average of the first 50 positive even numbers?

पहली 50 धनात्मक सम संख्याओं का औसत कितना होगा?

The average of all Even $H_n = (n+1)$ Where
 $n = \text{No. of terms}$

2, 4, 6, 8, ... 100

$$\text{Average} = \frac{(S_0 + 1)}{2} = 51$$



a) 50.5

b) 50

c) 51

d) 51.5



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A man buys a toy for Rs. 400 and sells it at a loss of 15%. What is the selling price of the toy?

एक व्यक्ति एक खिलौना 400 रूपये में खरीदता है और उसे 15% की हानि पर बेच देता है। खिलौने का विक्रय मूल्य क्या है?

$$SP = 400 \times \frac{85}{100}$$

340



- a) Rs. 350
- b) Rs. 340
- c) Rs. 370
- d) Rs. 360



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S1 and S2 can do a piece of work together in 18 days, S2 and S3 can do the same work together in 27 days, while S3 and S1 can do it together in 54 days.

In how many days can all 3, working together, do 50% of the work?

S1 और S2 परस्पर एक कार्य को 18 दिनों में पूर्ण कर सकते हैं, S2 और S3 परस्पर उसी कार्य को 27 दिनों में पूर्ण कर सकते हैं, जबकि S3 और S1 परस्पर उसे 54 दिनों में पूर्ण कर सकते हैं। कुल तीनों, परस्पर कार्य करते हुए, कार्य का 50% कितने दिनों में पूर्ण कर सकते हैं ?

$$\begin{array}{l} S_1 + S_2 = \frac{1}{18} \\ S_2 + S_3 = \frac{1}{27} \\ S_3 + S_1 = \frac{1}{54} \end{array}$$

$$\frac{S_1 + S_2 + S_2 + S_3 + S_3 + S_1}{2} = \frac{1}{18} + \frac{1}{27} + \frac{1}{54}$$

$$S_1 + S_2 + S_3 = \frac{1}{9}$$

$$\frac{1}{9} \times \frac{1}{2} = \frac{1}{18}$$

27 / 3 = 9 days

- a) 8 days
- b) 6 days
- c) 7 days
- d) 9 days



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A policeman spots a thief at a distance of 200 m and starts chasing him. While the policeman runs at a speed of 9 km/h, the thief runs at a speed of 7 km/h.

After how long will the policeman catch the thief?

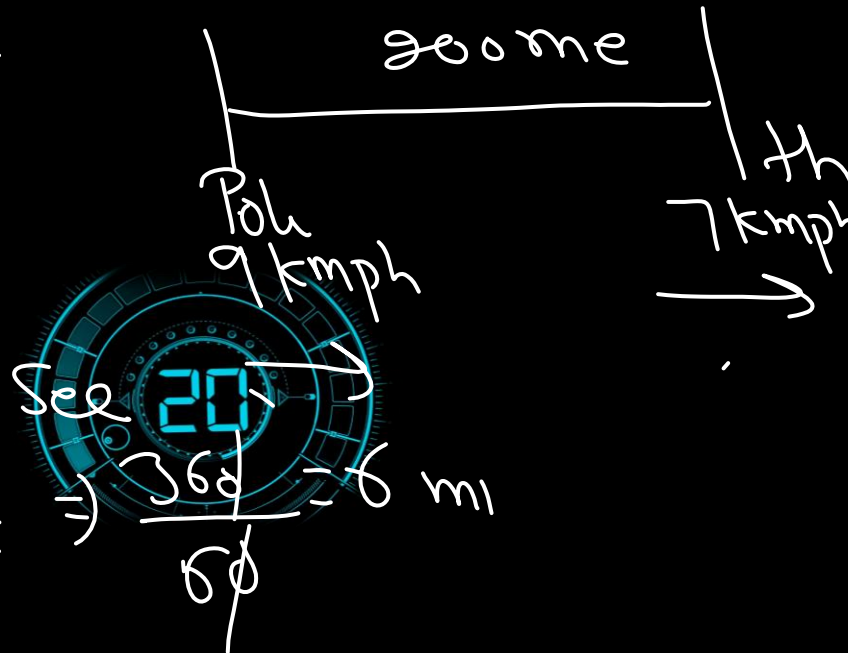
एक पुलिसकर्मी 200 मीटर की दूरी पर एक चोर को देखता है और उसका पीछा करना शुरू कर देता है। पुलिसकर्मी 9 किमी/घंटा के वेग से दौड़ता है, चोर 7 किमी/घंटा के वेग से दौड़ता है।
पुलिसकर्मी कितने समय बाद चोर को पकड़ लेगा ?

$$R.S = 2 \text{ kmph} \quad \text{Time} = \frac{\text{Distance}}{\text{Speed}}$$

$$\text{Time} = \frac{200 \times 18}{2 \times 5}$$

$$= 360 \text{ Sec}$$

$$1 \text{ mi} = 60 \text{ Sec} \Rightarrow \frac{360}{60} = 6 \text{ mi}$$



- a) 6 minutes
- b) 3 minutes
- c) 10 minutes
- d) 5 minutes



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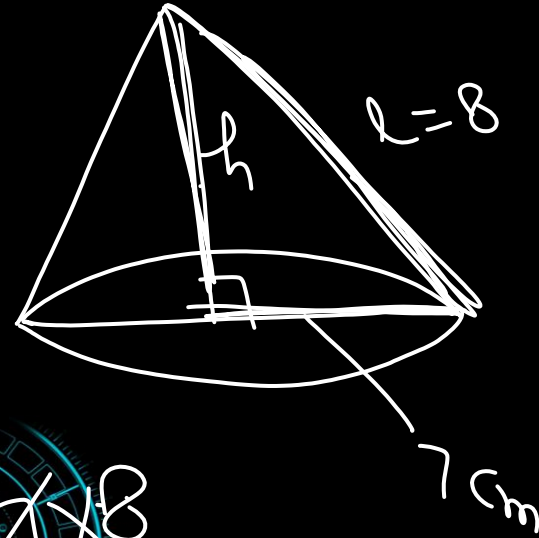


Find the curved surface area of a cone whose radius of base is 7 cm and slant height is 8 cm.

7 सेमी की आधार त्रिज्या और 8 सेमी की तिर्यक ऊंचाई वाले शंकु का वक्र पृष्ठीय क्षेत्रफल ज्ञात कीजिए

$$\begin{aligned}h^2 &= l^2 - r^2 \\h^2 &= 8^2 - 7^2 \\h^2 &= 64 - 49 \\h^2 &= 15\end{aligned}$$

$$\begin{aligned}\text{C.S.A} &= \pi r l \\&= \frac{22}{7} \times 7 \times 8 \\&= 176 \text{ cm}^2\end{aligned}$$



- a) 132 cm^2
- b) 198 cm^2
- c) 154 cm^2
- d) 176 cm^2



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The average of P1, P2 and P3 is 50. If the value of P1 is half of the average, then what is the average of P2 and P3?

P1, P2 और P3 का औसत 50 है। यदि P1 का मान इस औसत का आधा है, तो P2 और P3 का औसत ज्ञात कीजिए।

$$\textcircled{P_1} + P_2 + P_3 = 50 \times 3 = 150$$

$$25 + P_2 + P_3 = 150$$

$$P_2 + P_3 = 150 - 25$$

$$P_2 + P_3 = 125$$

$$\text{Average} = \frac{125}{2} = 62.5$$

a) 55

b) 57.5

c) 63.5

d) 62.5



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Simplify the following expression.

निम्नलिखित व्यंजक को सरल कीजिए।

$$25 + 12 - 2 + \{(4^2 \div 2)\}$$

$$25 + 12 - \cancel{2} + \cancel{2}$$

$$25 + 12 = 37 \quad \text{A}$$



- a) 42
- b) 37
- c) 35
- d) 44



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A camp of soldiers has food for 200 days. After 20 days, 100 more soldiers join the camp and the food now can last for 80 days. What was the initial number of soldiers in the camp?

सैनिकों के एक शिविर में 200 दिनों के लिए खाद्य सामग्री उपलब्ध है। 20 दिनों के बाद, शिविर में 100 और अधिक सैनिक में सम्मिलित हो जाते हैं जिससे शेष खाद्य सामग्री अगले 80 दिनों तक चलेगी। प्रारंभ में शिविर में कितने सैनिक थे ?

Let the Initial No of Sold in Camp = x
 $m_1 D_1 = m_2 D_2$

$$x \times 200 = x \times 20 + (x + 100) \times 80$$

$$200x = 20x + 80x + 8000$$

$$180x = 8000$$

$$x = 80$$

a) 140

b) 100

c) 120

d) 80



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What is the value of $14 \frac{2}{7} \%$ of 301 + 12.5% of 184?

301 का $14 \frac{2}{7} \%$ + 184 का 12.5% का मान क्या है?

H.W

Review
→ Topic -

त्रिकोणमिती
Trigonometry

8:15



- a) 64
- b) 70
- c) 66
- d) 68



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The value of का मान क्या होगा ?

$[50 - 6(6 + 1)] \div 8 + 18$ is:



- a) 18
- b) 17
- c) 19
- d) 20



Thanks For
WATCHING

