SSLC EXAM 2022

MATHEMATICS

Target 70+

Improve and Score > 90 %

PART – 3: Three Mark Questions

By Arun S

"Success is achieved and maintained by those who try and keep trying"

The Worksheet consists of 9 sets of questions, Practice all the questions

SET NO.	UNIT	REMARKS	Completed(Y/N)
1.	Circles		
2.	Statistics (Mean, Modem Median)		
3.	Statistics (Ogive)		
4.	Co-ordinate geometry		
5.	Constructions		
6.	Arithmetic Progression		
7.	Introduction to Trigonometry		
8.	Areas related to circles		
9.	Surface areas and volumes		

	SET - 01: Circles
1. Prove that "The	e lengths of tangents drawn from an external point to a circle are equal.

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1. Calculate the mean:

C-I	f
10-30	2
30-50	6
50-70	10
70-90	2

70-90	2
	480
	45 7

C-I	\mathbf{f}	
0-20	4	
20-40	7	
10-60	9	
60-80	8	
	2119	
		_

1-3 7 3-5 8 5-7 2 7-9 2 9-11 1	F	C-I	${f f}$	
5 - 7 2 7 - 9 2		1- 3	7	
7 - 9 2		3 - 5	8	
	-	5 - 7	2	
9-11 1	-	7 - 9	2	
		9 - 11	1	

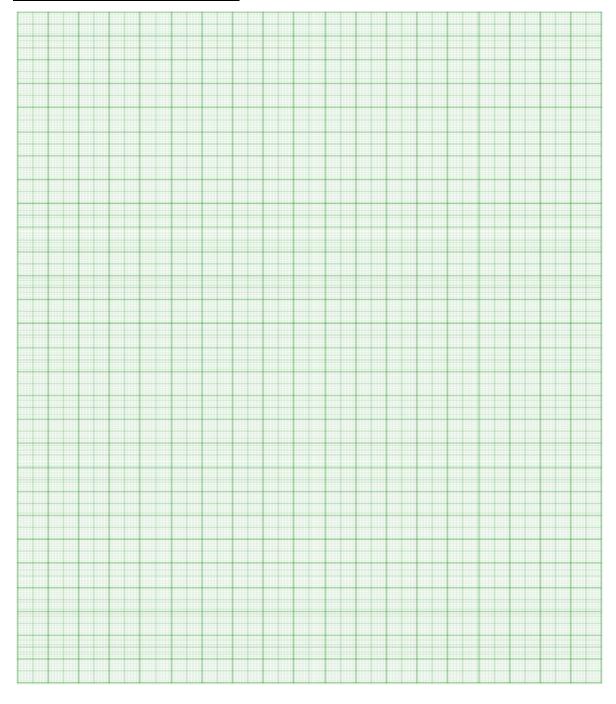
4. Find	d the mode of th		g data
	C-I	f	
	1- 4	7	
	4 - 7	4	
	7- 10	8	
	10 - 13	6	
	13 - 16	4	
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	0-10	10-20	20-30	30-40	40-50
Frequency	5	3	7	2	1
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${\bf SET}$ – ${\bf 03}$: Statistics (Ogive)

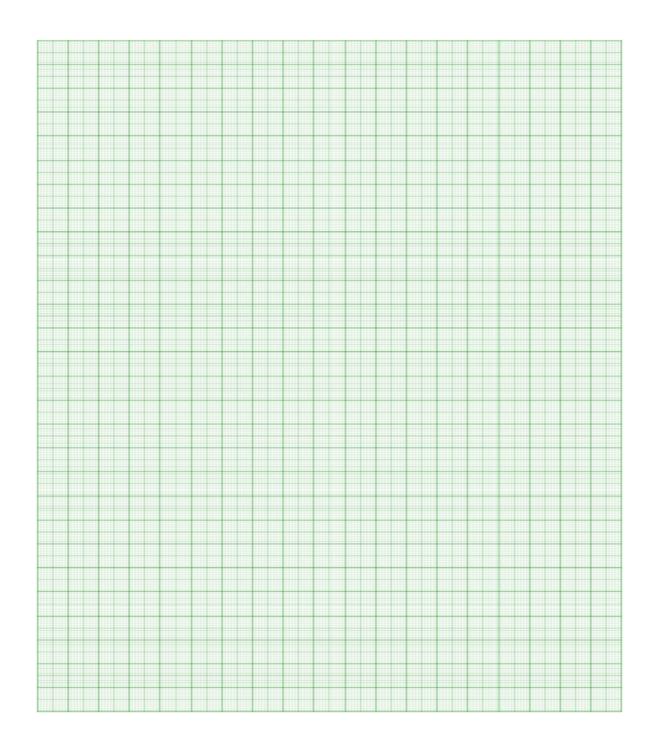
1. Draw "less than type" ogive.

C-I	f
Less than 50	2
Less than 75	4
Less than 100	9
Less than 125	10
Less than 150	11
Less than 175	13
Less than 200	15



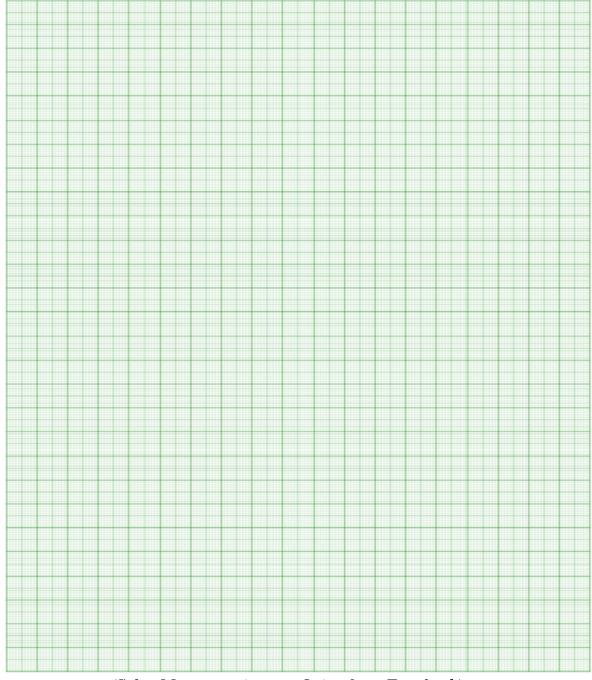
2. Draw "less than type" ogive.

C-I	f
Less than 100	0
Less than 120	8
Less than 140	20
Less than 160	34
Less than 180	44
Less than 200	50



3. Draw "More than type" ogive.

C-I	f
More than or equal to 5	30
More than or equal to 10	28
More than or equal to 15	16
More than or equal to 20	14
More than or equal to 25	10
More than or equal to 30	7
More than or equal to 35	3



(Solve More questions on Ogive from Text book)

rina the area of	triangle \triangle ABC, If A (0, 5), B (6, 11) and C (10, 7) are the ve	ertices.
	485	

433	
 	

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o 3:1 internally.	
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SET – 05: Constructions
1. Construct a pair of tangents to a circle of radius 4cm from a point 9cm away from its centre

CHECK SOLUTIONS AT → ▶ YouTube "ARUN MATHS HUB"

2. Construct a pair of tangents to a circle of radius 5 cm from a point 10cm away from its centre.

3. Draw a pair of t at 70^{0}	tangents to a circle of radius 3cm which are inclined to each other at angl

4. Draw a pair of to at 80°	angents to a circle of radius 4cm which are inclined to each other at an	ıgle
	B	

$\mathbf{SET}-\mathbf{06}: \mathbf{Arithmetic}\ \mathbf{Progression}$ 1. The sum of 4th and 8th terms of an A.P. is 24 and the sum of the 6th and 10th terms is 44. Find the first three terms of the A.P.

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SET - 07: Introduction to Trigonometry
1. Prove that $\frac{\sin(90-\theta)}{1+\sin\theta} + \frac{\cos\theta}{1-\cos(90-\theta)} = 2\sec\theta$

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 $\frac{\cos A}{1 + \sin A} + \frac{1 + \sin A}{\cos A} = 2 \sec A$		
	18	
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. Prove that	$\frac{\sin\theta - 2\sin^3\theta}{2\cos^3\theta - \cos\theta} = \tan\theta$
	40

· 60 10000	² 60° b) $\frac{5\cos^2 60^\circ + 4\sec^2 30^\circ - \tan^2 45^\circ}{\sin^2 30^\circ + \cos^2 30^\circ}$
	48
	,
<i>y</i>	

Evaluate	cos 45° sec 30° + cosec 30°
	>

rove that	$\sqrt{\frac{1+\sin A}{1-\sin A}} = \sec A + \tan A$
	45

1	$c(A - \sin A) (\sec A - \cos A) = \frac{1}{\tan A + \cot A}$	

45	

·	
	46

SET - 08: Areas Related to Circles

1. In figure, ABCD is a square of side 14cm. With centres A, B, C and D, four circles are

drawn such that each of area of the shaded regi	circle touch externally two of the remaining three circles. Find the on.
A B C	
	48
-	

2. In the figure, a squar area of the shaded region	e OABC is inscribed in a quadrant OPBQ. If OA = 20 cm, find the m. (Use π = 3.14)
0	
Q C	
-	
O A P	
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		410	
	 43.)	
_	N.P.	_	
	 A		

*	B	
P		
D	\sqcup_{c}	

Find the area of		
	4.4	
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A	he (i) quadrant OACB (ii) shaded region.
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D	
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SET	- 09 : Surface areas and volumes
	e form of a hollow hemisphere mounted by a hollow cylinder. The isphere is 14 cm and the total height of the vessel is 13 cm. Find ea of the vessel.

the conical he	p is 24 cm, find the radius and slant height of the heap.	
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	1 1/1	
		-

-	, find the area of the canvas used for making the tent.
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	432

s are 18 cm and 6 cm. Find the surface area of the frustum.	

r ends are 4 cm and 2 cm. Find the capacity of the glass.	

ime of air con	tained in the model that Rachel made.
	02

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20 per litre.
167
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Best Wishes for SSLC Exam 2022

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- Practice all the questions and write self-test
- Solve few more similar questions from Text book and from model papers
- Solve KSEEB Model paper and Preparatory paper
- Students you are very clever and intelligent just you need little practice and hard work to score good marks in exams.