Work Sheet- 2 for class- Nine **Chapter- Thirteen Exercise-13.1, Finite Series Creative Multiplication Choice Ouestions** 1. If the common term of a series is $\frac{1}{3^n}$ then what is the 2nd term? [D.B.- 20] b) $\frac{1}{3}$ a) c) <u>4</u> d) -2. What is the sum of the first n even numbers? [Mv.B.- 20] a) n^2 b) $2n^2$ c) $n^2 + n$ d) 2n + 1 3. In a series: 6 + 10 + 14 +...... [R.B.- 20] i. Common difference is 4 ii. 20^{th} term is 82. iii. Sum of 1st 10 terms is 20. Which one of the following is correct? a) i and ii b) i and iii c) ii and iii d) i, ii and iii 4. Which one is the sum of the (2n + 2)terms of the series: -2 + 2 - 2 + 2 - 2+....? [Dj.B.- 20] a) 4 b) 2 c) 0 d) -1 5. Which one is the general term of the sequence $\frac{1}{2}, \frac{2}{3}, \frac{3}{4}, \dots, 2$ [C.B.- 20, 15] a) c) 6. What is the sum of 15 terms of the series: 3+6+9+....? [Ctg.B.- 20] **b**) 315 a) 270 c) 360 d) 405 7. $2+3+4+\ldots+50 =$ What? [S.B.- 20] a) 1274 b) 1275 d) 2548 c) 1325 8. Which one is the 10th term of the series: 3 -3+3-3+....?[J.B.- 20] a) -30 b) -3 d) 30 c) 3 9. If $f + g + h + k + l + \dots$ is an arithmetic series then – [J.B.- 20] i. $h = \frac{g+f}{2}$
ii. $k = \frac{h+1}{2}$

iii. $g = \frac{f+h}{2}$ Which one of the following is correct? b) i and iii a) i and ii d) i, ii and iii c) ii and iii 10. What is the sum of first n terms of the series 1 + 3 + 5 + 7 +....? [D.B.- 19] b) $\left\{\frac{n(n+1)}{2}\right\}^2$ a) n² d) <u>n</u>² c) $\frac{n(n+1)}{2}$ 11. How many numbers of terms of the series 1 + 3 + 5 ++ 101? [C.B.- 19] b) 101 a) 51 c) 201 d) 204 12. What is sum of first 2n terms of series: 1 -1+1-1+....? [B.B.- 19] a) -2 b) -1 d) 2 c) 0 13. Which one of the following is 19th term of the series: $2 - 2 + 2 - 2 + \dots$? [S.B.- 19] a) -2b) 2 c) -38 d) 38 14. What is the 12th term of the series: 5 + 7 + 9 + 11 +.....? [Ctg.B.- 19] a) 27 b) 29 c) 192 d) 194 Answer to the questions no. (15 - 16)based on: 1 + 3 + 5 + 7 +.... 15. Which one is the rth term of the above series? [**R.B.-** 19] a) 2r – 3 b) 2r – 1 c) 2r + 1 d) 2r + 3 16. What is the sum of 1st nine terms of the above series? [R.B.- 19] b) 81 a) 17 c) 256 d) 511 What is the 9th term of the series: 8 + 17. 16 + 24 +....? [All B.- 18] a) 72 b) 88 c) 360 d) 432 What is the 10th term of the series: 2 + 18. 4 + 6 +....? [D.B.- 17] b) 48 a) 110 c) 28 d) 20

	If a, b, c, d are four consecutive terms	
	of an arithmetic series then which one	
	is correct?	[R.B 17]
	a) $b = \frac{c+d}{2}$	b) $a = \frac{b+c}{2}$
	c) $c = \frac{b+d}{2}$	d) $d = \frac{c+a}{2}$
20.	$\log 2 + \log 4$ -	+ log 8 + then
	which is the 8 th te	erm of the series?
		[R.B 17]
	a) log 256	b) log 128
	c) log 64	d) log 32
21.	If the n th term of	f an arithmetic series
	is $(5n + 3)$ then what is the common	
	difference?	[Dj.B 17]
	a) –2	b) $\frac{13}{8}$
	c) 5	d) 8
22.	1+2+3+4+	+ 25 = What?
		[J.B 17]
	a) 35	b) 150
	c) 325	d) 625
23.	What is the com	mon difference of the
	series: - 16 - 8 -	0 +? [B.B I7]
	a) -8	b) 8
	c) 2	d) $\frac{1}{2}$
24.	What is the nun	nber of terms of the
	series: 5 + 11 + 1'	7 ++ 59?
		ID B - 161
		[D.D 10]
	a) 8	b) 9
	a) 8 c) 10	b) 9 d) 11
25.	a) 8 c) 10 What is the sum	b) 9 d) 11 of natural numbers
25.	 a) 8 c) 10 What is the sum of first 30 number 	b) 9 d) 11 of natural numbers rs? [C.B 16]
25.	 a) 8 c) 10 What is the sum of first 30 number a) 405 	b) 9 d) 11 of natural numbers rs? [C.B 16] b) 435
25.	 a) 8 c) 10 What is the sum of first 30 number a) 405 c) 445 	b) 9 d) 11 of natural numbers rs? [C.B 16] b) 435 d) 465
25. 26.	 a) 8 c) 10 What is the sum of first 30 number a) 405 c) 445 What is the sum of the sum of	b) 9 d) 11 of natural numbers rs? [C.B 16] b) 435 d) 465 of first n th terms of
25. 26.	 a) 8 c) 10 What is the sum of first 30 number a) 405 c) 445 What is the sum natural numbers 	b) 9 d) 11 of natural numbers rs? [C.B 16] b) 435 d) 465 of first n th terms of s of the series? [n =
25. 26.	 a) 8 c) 10 What is the sum of first 30 number a) 405 c) 445 What is the sum natural numbers 23] a) 128 	b) 9 d) 11 of natural numbers rs? [C.B 16] b) 435 d) 465 of first n th terms of s of the series? [n = [Ctg.B 16] b) 194
25. 26.	 a) 8 c) 10 What is the sum of first 30 numbers a) 405 c) 445 What is the sum natural numbers 23] a) 138 c) 253 	b) 9 d) 11 of natural numbers rs? [C.B 16] b) 435 d) 465 of first n th terms of s of the series? [n = [Ctg.B 16] b) 184 d) 276
25. 26.	 a) 8 c) 10 What is the sum of first 30 number a) 405 c) 445 What is the sum natural numbers 23] a) 138 c) 253 What is common 	b) 9 d) 11 of natural numbers rs? [C.B 16] b) 435 d) 465 of first n th terms of s of the series? [n = [Ctg.B 16] b) 184 d) 276 on difference of the
25.26.27.	 a) 8 c) 10 What is the sum of first 30 numbers a) 405 c) 445 What is the sum natural numbers 23] a) 138 c) 253 What is common series: 3 + 6 + 9 + 4 	b) 9 d) 11 of natural numbers rs? [C.B 16] b) 435 d) 465 of first n th terms of s of the series? [n = [Ctg.B 16] b) 184 d) 276 on difference of the 12 + 2
25.26.27.	 a) 8 c) 10 What is the sum of first 30 numbers a) 405 c) 445 What is the sum natural numbers 23] a) 138 c) 253 What is common series: 3 + 6 + 9 + 	b) 9 d) 11 of natural numbers rs? [C.B 16] b) 435 d) 465 of first n th terms of s of the series? [n = [Ctg.B 16] b) 184 d) 276 on difference of the · 12 +? [S.B 16]
25. 26. 27.	 a) 8 c) 10 What is the sum of first 30 number a) 405 c) 445 What is the sum natural numbers 23] a) 138 c) 253 What is common series: 3 + 6 + 9 + a) 2 	b) 9 d) 11 of natural numbers rs? [C.B 16] b) 435 d) 465 of first n th terms of s of the series? [n = [Ctg.B 16] b) 184 d) 276 on difference of the · 12 +? [S.B 16] b) 3
25.26.27.	 a) 8 c) 10 What is the sum of first 30 numbers a) 405 c) 445 What is the sum natural numbers 23] a) 138 c) 253 What is common series: 3 + 6 + 9 + a) 2 c) 4 	b) 9 d) 11 of natural numbers rs? [C.B 16] b) 435 d) 465 of first n th terms of s of the series? [n = [Ctg.B 16] b) 184 d) 276 on difference of the · 12 +? [S.B 16] b) 3 d) 6
 25. 26. 27. 28. 	 a) 8 c) 10 What is the sum of first 30 numbers a) 405 c) 445 What is the sum natural numbers 23] a) 138 c) 253 What is common series: 3 + 6 + 9 + a) 2 c) 4 	b) 9 d) 11 of natural numbers rs? [C.B 16] b) 435 d) 465 of first n th terms of s of the series? [n = [Ctg.B 16] b) 184 d) 276 on difference of the 12 +? [S.B 16] b) 3 d) 6 a series. Find out the
 25. 26. 27. 28. 	 a) 8 c) 10 What is the sum of first 30 numbers a) 405 c) 445 What is the sum natural numbers 23] a) 138 c) 253 What is common series: 3 + 6 + 9 + a) 2 c) 4 2 + 4 + 6 + is ratio of its common series 	b) 9 d) 11 of natural numbers rs? [C.B 16] b) 435 d) 465 of first n th terms of s of the series? [n = [Ctg.B 16] b) 184 d) 276 on difference of the 12 +? [S.B 16] b) 3 d) 6 a series. Find out the top difference and n th

	a) 2n : 2	b) 2:2n
	c) 2:n	d) n:1
29.	The sum of 11 th	terms of which series
	of the following	is 121? [B.B 16]
	a) $1+2+3+$	
	b) $3+5+7+$	
	c) $1+4+9+$	
•	d) $1 + 3 + 5 + \dots$	
30.	$\log 3 + \log 9 + 1$	og 27 +[B.B 16]
	i. The next term	1 of the series is log 81.
	11. Is an arithmet	tic series.
	111. Common dif	terence of the series is
	log 6.	
	Which one of th	e following is correct?
	a) 1 and 11	b) Fand III
	c) 11 and 111	d) 1, 11 and 111
	Read the follo	wing statement and
	answer the ques	tions No. $(31 - 32)$:
	First term of an	i arithmetic series is –
31	What is its sooor	ninerence is 5. ad torm? [Di R 16]
51.	(13) (13) (13) (13) (13)	ы 0
	a) = 0	d) 6
32	What is its n th te	arm? [Di B - 16]
J 2 .	a) $3n$	h) 3n – 6
	c) $3n - 3$	d) $n - 3$
33.	Which term of t	the series: 6 + 9 + 12 +
	is 93?	[Ctg.B 15]
	a) 30	b) 29
	c) 28	d) 27
34.	1+2+3+4+	+ 100 = What?
		[S.B 15]
	a) 4750	b) 4950
	c) 5050	d) 5150
35.	What are the n	th terms of arithmetic
	series?	[S.B 15]
	a) ar ⁿ⁻¹	
	b) a + (n – 1)d	
	c) $s_n = \frac{n}{2} \{2a +$	(n-1)d
	d) $c = \frac{a(1 - r^n)}{a(1 - r^n)}$	
26	$\frac{1}{1-r}$	mmon difforence for
30.	what is the common difference for the series $\log 2 + \log 2 + \log 27$	
$\frac{10927}{1000} + \frac{1093}{1000} + \frac{10927}{1000} + \frac{10927}{1000} + \frac{1000}{1000} + \frac{1000}{1$		
	a) $2 \log 2$	h) log 6
	a) 210g 5	$\frac{1}{1} \frac{1}{1}$
	$-c_1$ 1003	(1) $(0 \sigma -$