Chapter – Three	(Mathematics) e, Exercise- 3.4	
Algebraic Expression	n ( <b>26.09.2020</b> )	
Creative Multiplication	<b>Choice Questions</b>	
1. If $f(x) = x^3 - x - 24$	then what values of	
x, where $f(x) = 0$ ?	[ <b>R.B</b> 20]	
a) 2	b) 3	
c) 4	d) 6	
2. What is the constant	t term of the equation	
$4x^3 - 5x - 2\sqrt{9} = 0$	then where x is a	
variable?	[J.B 20]	
a) –2	b) 2	
c) A	d) a – 2	
3. Which of the following is the factorized		
form of $2\sqrt{2}x^3 + 12$	5? [B.B 20]	
a) $(\sqrt{2}x + 5)(2x)$		
b) $(\sqrt{2}x - 5)(2x)$	$x^2 + 5\sqrt{2}x + 25$ )	
c) $(\sqrt{2}x + 5)(2x$		
d) $(\sqrt{2}x - 5)(2x)$		
4. If $f(x) = x^2 - 4x +$		
value of f(2)?	[R.B 17]	
a) 0	b) 1	
c) 2 5 Which are the r	d) 4	
5. Which are the $x^2 - x - 12 = 0^{\circ}$	coots of the equation [R.B 17]	
$\begin{array}{c} x - x - 12 = 0 \\ a)  3, 4 \end{array}$	(b) $-3, 4$	
c) 3, -4	d) 3,-4	
6. Which is the sol		
$2x^2 - 4ax = 0?$	[R.B 17]	
$2x^2 - 4ax = 0?$ a) 0	[ <b>R.B 17</b> ] b) 2a	
$2x^{2} - 4ax = 0?$ a) 0 c) 0, 2a	[ <b>R.B 17</b> ] b) 2a d) 2, 2a	
$2x^{2} - 4ax = 0?$ a) 0 c) 0, 2a 7. If (x - 3) is a 1	[ <b>R.B 17</b> ] b) 2a	
$2x^{2} - 4ax = 0?$ a) 0 c) 0, 2a 7. If (x - 3) is a 1	[R.B 17] b) 2a d) 2, 2a Factor of $f(x) = x^2 - x^2$	
$2x^{2} - 4ax = 0?$ a) 0 c) 0, 2a 7. If (x - 3) is a f 5x + p then what	[R.B 17] b) 2a d) 2, 2a factor of $f(x) = x^2 - t$ t is the value of P?	
$2x^{2} - 4ax = 0?$ a) 0 c) 0,2a 7. If (x - 3) is a 1 5x + p then what a) - 6 c) 5	[R.B 17] b) 2a d) 2, 2a factor of $f(x) = x^2 - t$ t is the value of P? b) - 5	
$2x^{2} - 4ax = 0?$ a) 0 c) 0,2a 7. If (x - 3) is a f 5x + p then what a) - 6 c) 5 8. If f(x) is divide	[R.B 17] b) 2a d) 2, 2a factor of $f(x) = x^2 - t$ t is the value of P? b) - 5 d) 6 rd by (ax + b) then	
2x <sup>2</sup> - 4ax = 0? a) 0 c) 0,2a 7. If (x - 3) is a 1 5x + p then what a) - 6 c) 5 8. If f(x) is divide quotient is $f(-\frac{b}{a})$	[R.B 17] b) 2a d) 2, 2a factor of $f(x) = x^2 - t$ t is the value of P? b) - 5 d) 6 rd by (ax + b) then	
2x <sup>2</sup> - 4ax = 0? a) 0 c) 0,2a 7. If (x - 3) is a 1 5x + p then what a) - 6 c) 5 8. If f(x) is divide quotient is $f(-\frac{b}{a})$	[R.B 17] b) 2a d) 2, 2a factor of $f(x) = x^2 - t$ t is the value of P? b) - 5 d) 6 d by (ax + b) then when?	
2x <sup>2</sup> - 4ax = 0? a) 0 c) 0, 2a 7. If (x - 3) is a 1 5x + p then what a) - 6 c) 5 8. If f(x) is divide quotient is $f(-\frac{b}{a})$ i. The dimension positive.	[R.B 17] b) 2a d) 2, 2a factor of $f(x) = x^2 - t$ t is the value of P? b) - 5 d) 6 d by (ax + b) then when?	
2x <sup>2</sup> - 4ax = 0? a) 0 c) 0, 2a 7. If (x - 3) is a 1 5x + p then what a) - 6 c) 5 8. If f(x) is divide quotient is $f(-\frac{b}{a})$ i. The dimension positive.	[R.B 17] b) 2a d) 2, 2a factor of $f(x) = x^2 - t$ is the value of P? b) - 5 d) 6 d by (ax + b) then when? on of $f(x)$ will be	
$2x^{2} - 4ax = 0?$ a) 0 c) 0,2a 7. If $(x - 3)$ is a f 5x + p then what a) - 6 c) 5 8. If $f(x)$ is divide quotient is $f(-\frac{b}{a})$ i. The dimension positive. ii. The dimension	[R.B 17] b) 2a d) 2, 2a factor of $f(x) = x^2 - t$ is the value of P? b) - 5 d) 6 d by (ax + b) then when? on of $f(x)$ will be	
$2x^{2} - 4ax = 0?$ a) 0 c) 0,2a 7. If $(x - 3)$ is a f 5x + p then what a) - 6 c) 5 8. If $f(x)$ is divide quotient is $f(-\frac{b}{a})$ i. The dimension positive. ii. The dimension negative. iii. a $\neq 0$ . Which one of the	[R.B 17] b) 2a d) 2, 2a factor of $f(x) = x^2 - t$ is the value of P? b) - 5 d) 6 d by (ax + b) then when? on of $f(x)$ will be on of $f(x)$ will be	
$2x^{2} - 4ax = 0?$ a) 0 c) 0,2a 7. If $(x - 3)$ is a f 5x + p then what a) - 6 c) 5 8. If $f(x)$ is divide quotient is $f(-\frac{b}{a})$ i. The dimension positive. ii. The dimension negative. iii. $a \neq 0$ .	[R.B 17] b) 2a d) 2, 2a factor of $f(x) = x^2 - t$ is the value of P? b) - 5 d) 6 ed by (ax + b) then when? on of $f(x)$ will be	

	c) i and iii	d) iii
	Ans: c	
9.	Factors of 54x <sup>4</sup> +	$-27x^3a - 16x - 8a$
	are -	
	i. 2x + a	
	ii. 3x − 2	
	iii. $9x^2 + 6x + 4$ .	
	Which one of the f	collowing is correct?
	a) i and ii	b) i and iii
	c) ii and iii	
	If $f(x) = x^3 + 27$	7 then answer the
	questions (10 – 11)	
10.	f(-3) + f(3) = W	hat?
	a) 0	b) 27 d) 54
	c) 30	d) 54
11.	Which one of the	following is a factor
	of f(x)?	
	a) x – 3	b) x - 9
		d) $x^2 + 3x + 9$
	If $f(x) = x^2 - 5x - 5x$	+ 6 then answer the
	questions No. (12 -	- 13) using stem.
12.	What is the root it	
	a) – 3	b) – 2
	c) 2	d) 4
13.		nainder if $f(x)$ is
	divided by $(x + 4)$	
	a) – 30	
	c) 4	d) 42
14.		ots of the equation
	$x^3 - x^2 - 12x = 0$	)?
	a) $0, 3, 4$ c) $0, -3, 4$ lf $f(\mathbf{x}) = 54\mathbf{x}^4$ .	b) 0, 3, -4
	c) 0, −3, 4	d) 0, −3, −4
15		<b>n</b>
15.	$\mathbf{I}  \mathbf{I}(\mathbf{x}) = \mathbf{J} \mathbf{T} \mathbf{x}$	127X a 10X 0a
15.	$\mathbf{I}  \mathbf{I}(\mathbf{x}) = \mathbf{J} \mathbf{T} \mathbf{x}$	+ 27x <sup>3</sup> a – 16x – 8a then which of the
15.	and $f\left(-\frac{1}{2}a\right) = 0$	then which of the
15.	$\mathbf{I}  \mathbf{I}(\mathbf{x}) = \mathbf{J} \mathbf{T} \mathbf{x}$	then which of the
15.	and $f\left(-\frac{1}{2}a\right) = 0$ following is the fact	then which of the ctor of f(x)?
15.	and $f\left(-\frac{1}{2}a\right) = 0$ following is the factor a) $2x - a$ c) $2x + a$	then which of the ctor of $f(x)$ ? b) $x + a$ d) $x + 2a$
	and $f\left(-\frac{1}{2}a\right) = 0$ following is the factorial data and $2x - a$	then which of the ctor of $f(x)$ ? b) $x + a$ d) $x + 2a$ $2x^2 - 5x - 6$ then
	and $f\left(-\frac{1}{2}a\right) = 0$ following is the factorial of $f\left(-\frac{1}{2}a\right) = 0$	then which of the ctor of $f(x)$ ? b) $x + a$ d) $x + 2a$ $2x^2 - 5x - 6$ then
	and $f\left(-\frac{1}{2}a\right) = 0$ following is the fact a) $2x - a$ c) $2x + a$ If $f(x) = x^3 + 2$ what would be a fact a) $x + 1$	then which of the ctor of $f(x)$ ? b) $x + a$ d) $x + 2a$ $2x^2 - 5x - 6$ then actor of $f(x)$ ?
	and $f\left(-\frac{1}{2}a\right) = 0$ following is the fact a) $2x - a$ c) $2x + a$ If $f(x) = x^3 + 2$ what would be a fact a) $x + 1$ c) $x^2 + 1$	then which of the ctor of $f(x)$ ? b) $x + a$ d) $x + 2a$ $2x^2 - 5x - 6$ then actor of $f(x)$ ? b) $x - 1$
16.	and $f\left(-\frac{1}{2}a\right) = 0$ following is the fact a) $2x - a$ c) $2x + a$ If $f(x) = x^3 + 2$ what would be a fact a) $x + 1$ c) $x^2 + 1$	then which of the ctor of $f(x)$ ? b) $x + a$ d) $x + 2a$ $2x^2 - 5x - 6$ then actor of $f(x)$ ? b) $x - 1$ d) $x$ of the factors of the
16.	and $f\left(-\frac{1}{2}a\right) = 0$ following is the factorial of $f\left(-\frac{1}{2}a\right) = 0$ what would be a factorial of $f\left(-\frac{1}{2}a\right) = 0$ following is the factorial of $f$	then which of the ctor of $f(x)$ ? b) $x + a$ d) $x + 2a$ $2x^2 - 5x - 6$ then actor of $f(x)$ ? b) $x - 1$ d) $x$ of the factors of the

18.	If $f(x) = x - y - z$	for which values of	
	x then the function	f(x) = 0?	
	a) y – z	b) y + z	
	c) x + y	d) x – y	
19.	If $f(x) = x^3 - x - $		
	then what is the val		
	a) – 6	b) 6	
20	c) 8 If $f(x) = x^3 - 21$	d) 16 <b>x – 20 for which</b>	
20.		x - 20 for which e value of $f(x)$ will	
	be zero?	e value of I(x) will	
	a) 2	b) 1	
	c) – 1	d) - 2	
21.		of <b>f</b> ( <b>x</b> ) then which of	
	the following is correct?		
	a) $f(a) = 0$	b) $f\left(\frac{a}{b}\right) = 0$	
	c) $x + a = 0$	d) $f(-a) = 0$	
22.		of $x^3 - x - 6$ then	
22.		factor of that	
	expression?		
	a) $x^2 + 2x + 3$		
	b) $x^2 + x + 3$		
	c) $x^2 + 2x$		
	d) $x^2 + x + 6$		
23.	If $f(x) = x^3 - x$	-24 then $f(3) = 0$	
23.	If $f(x) = x^3 - x^3$ which of the follow	- 24 then f(3) = 0 wing is a factor of	
23.	If $f(x) = x^3 - x^3$ which of the follow f(x)?		
23.	If $f(x) = x^3 - x + x^3$ which of the follow f(x)? a) $x^2 + 2x + 8$		
23.	If $f(x) = x^3 - x + x^3 + x^4$ which of the follow f(x)? a) $x^2 + 2x + 8$ b) $x^2 + 3x + 8$		
23.	If $f(x) = x^3 - x + x^3 + x^4$ which of the follow f(x)? a) $x^2 + 2x + 8$ b) $x^2 + 3x + 8$ c) $x^2 + x + 3$		
23. 24.	If $f(x) = x^3 - x + x^3$ which of the following f(x)? a) $x^2 + 2x + 8$ b) $x^2 + 3x + 8$ c) $x^2 + x + 3$ d) $x^2 + 3x + 5$	wing is a factor of	
	If $f(x) = x^3 - x + x^3 + x^4$ which of the follow f(x)? a) $x^2 + 2x + 8$ b) $x^2 + 3x + 8$ c) $x^2 + x + 3$	wing is a factor of $^2 - 6y^3$ then what	
	If $f(x) = x^3 - x + x^3$ which of the following f(x)? a) $x^2 + 2x + 8$ b) $x^2 + 3x + 8$ c) $x^2 + x + 3$ d) $x^2 + 3x + 5$ If $f(x) = x^3 - 7xy$	wing is a factor of $^2 - 6y^3$ then what	
	If $f(x) = x^3 - x + x^3 + x^4$ which of the follow f(x)? a) $x^2 + 2x + 8$ b) $x^2 + 3x + 8$ c) $x^2 + 3x + 8$ d) $x^2 + 3x + 5$ If $f(x) = x^3 - 7xy$ is the value of $f(-x)$	wing is a factor of $a^2 - 6y^3$ then what y)?	
	If $f(x) = x^3 - x + x^3 + x^3 + x^4$ which of the follow f(x)? a) $x^2 + 2x + 8$ b) $x^2 + 3x + 8$ c) $x^2 + 3x + 5$ If $f(x) = x^3 - 7xy$ is the value of $f(-x^3)$ a) $x^3$ c) $0$	<b>2</b> - 6y <sup>3</sup> then what y)? b) y	
24.	If $f(x) = x^3 - x + x^3 + x^$	<pre>wing is a factor of <sup>2</sup> - 6y<sup>3</sup> then what y)? b) y d) 1 of q(x) then what is</pre>	
24.	If $f(x) = x^3 - x + x^3 + x^$	wing is a factor of $2 - 6y^3$ then what y)? b) y d) 1 of q(x) then what is b) -3	
24. 25.	If $f(x) = x^3 - x + x^3 + x^$	wing is a factor of $2^{2} - 6y^{3}$ then what y)? b) y d) 1 of q(x) then what is b) -3 d) 0	
24.	If $f(x) = x^3 - x + x^3 + x^$	wing is a factor of $2 - 6y^3$ then what y)? b) y d) 1 of q(x) then what is b) -3 d) 0 a factor of $x^3 - x - a^3$	
24. 25.	If $f(x) = x^3 - x + x^3 + x^3 + x^4$ which of the follow f(x)? a) $x^2 + 2x + 8$ b) $x^2 + 3x + 8$ c) $x^2 + 3x + 5$ If $f(x) = x^3 - 7xy$ is the value of $f(-x)$ a) $x^3 + x^3 + 5$ If $f(x) = x^3 - 7xy$ is the value of $f(-x)$ a) $x^3 + 3x + 5$ If $f(x) = x^3 - 7xy$ is the value of $f(-x)$ a) $x^3 + 3x + 5$ If $f(x) = x^3 - 7xy$ is the value of $f(-x)$ a) $x^3 + 3x + 5$ If $f(x) = x^3 - 7xy$ is the value of $f(-x)$ a) $x^3 + 3x + 5$ If $f(x) = x^3 - 7xy$ is the value of $f(-x)$ b) $x^3 + 3x + 5$ If $f(x) = x^3 - 7xy$ is the value of $f(-x)$ b) $x^3 + 3x + 5$ If $f(x) = x^3 - 7xy$ is the value of $f(-x)$ b) $x^3 + 3x + 5$ If $f(x) = x^3 - 7xy$ is the value of $f(-x)$ b) $x^3 + 3x + 5$ If $f(x) = x^3 - 7xy$ is the value of $f(-x)$ b) $x^3 + 3x + 5$ If $f(x) = x^3 - 7xy$ is the value of $f(-x)$ b) $x^3 + 3x + 5$ is the value of $x^3 + 3x + 5$ b) $x^3 + 3x + 5$ is the value of $x^3 + 3x + 5$ b) $x^3 + 3x + 5$ is the value of (x^3 +	wing is a factor of $2 - 6y^3$ then what y)? b) y d) 1 of q(x) then what is b) -3 d) 0 a factor of $x^3 - x - b$	
24. 25.	If $f(x) = x^3 - x + x^3 + x^$	wing is a factor of $2^{2} - 6y^{3}$ then what y)? b) y d) 1 of q(x) then what is b) -3 d) 0 a factor of $x^{3} - x - b$ other factor of it? b) $(x - 2)$	
24. 25. 26.	If $f(x) = x^3 - x + x^3 + x^$	wing is a factor of $2^{2} - 6y^{3}$ then what y? b) y d) 1 of q(x) then what is b) -3 d) 0 a factor of $x^{3} - x - b$ other factor of it? b) $(x - 2)$ d) $\left(x + \frac{1}{2}\right)$	
24. 25. 26.	If $f(x) = x^3 - x + x^3 + x^$	wing is a factor of $2^{2} - 6y^{3}$ then what y? b) y d) 1 of q(x) then what is b) -3 d) 0 a factor of $x^{3} - x - b$ other factor of it? b) $(x - 2)$ d) $\left(x + \frac{1}{2}\right)$	
24. 25. 26.	If $f(x) = x^3 - x + x^3 + x^$	wing is a factor of $2^{2} - 6y^{3}$ then what y? b) y d) 1 of q(x) then what is b) -3 d) 0 a factor of $x^{3} - x - b$ other factor of it? b) $(x - 2)$ d) $(x + \frac{1}{2})$	

ii. f(0) = 1iii. (3x + 1) is a factor of f(x). Which one of the following is correct? a) i and ii b) i and iii c) ii and iii d) i, ii and iii If  $f(a) = a^3 + 3a + 36$  and (a + 3) is a 28. factor of f(a) then i. Then f(-3) = 0. ii. (a - 4) will be a factor of f(a). iii.  $(a^2 - 3a + 12)$  will be a factor of f(a). Which one of the following is correct? a) i and ii b) i and iii c) ii and iii d) i, ii and iii  $\left(x+\frac{b}{a}\right)$  will be a factor of the 29. polynomial f(x) = ax + b if i.  $a \neq 0$ ii. a = biii. f ( – = 0Which of the following is correct? a) i and ii b) i and iii d) i, ii and iii c) ii and iii 30. If (x - a) is factor of the polynomial **f**(**x**) i. f(a) = 0ii. f(x) = 0iii. The degree of (x - a) is 1. Which of the following is correct? a) i and ii b) i and iii d) i, ii and iii c) ii and iii If case of  $f(x) = x^3 - 3x^2 + 4x - 4$ 31. then i. f(1) = 0ii. f(2) = 0iii. If (x - 2) is the divisor then remainder is zero. Which of the following is correct? a) i and ii b) i and iii d) i, ii and iii c) ii and iii