BCM SCHOOL, BASANT AVENUE, DUGRI, LUDHIANA.	
APRIL ASSIGNEMENT	
CLASS- X (MATHEMATICS)	
TOPICS: REAL NUMBERS, POLYNOMIALS & PAIR OF LINEAR EQUATIONS IN TWO	
VARIABLES.	
SECTION –A (MULTIPLE CHOICE QUESTIONS)	
1.	Let a and b are two positive integers such that $a = p^3q^4$ and $b = p^2q^3$ where p and q
	are prime numbers. If HCF(a,b) = $p^m q^n$ and LCM(a,b) = $p^r q^s$, then $(m + n)(r + s) =$?
	(a) 15 (b) 35 (c) 30 (d) 72
2.	A quadratic polynomial whose zeroes are 2 and -3/2 is:
	(a) $2x^2 - 4x - 3$ (b) $2x^2 + x - 6$ (c) $2x^2 - x - 6$ (d) $2x^2 - 2x - 6$
3.	The sum of two natural numbers is 240 and their ratio is 3:5, then the greater number
	is:
	(a) 180 (b) 160 (c) 150 (d) 90
SECTION – B(2 MARKS QUESTIONS)	
4.	There are some students in the two examination halls A and B. To make the number of
	students equal in each hall, 10 students are sent from A to B but, if 20 students are sent
	from B to A, the number of students in A becomes double the number of students in B,
	then find the number of students in the both halls.
5.	If p and q are the zeroes of $x^2 + px + q$, then find the values of p and q.
SECTION – C (3 MARKS QUESTIONS)	
6.	For which values of p and q, will the following pair of linear equations have infinitely
	many solutions? $4x + 5y = 2$; $(2p + 7q) x + (p + 8q) y = 2q - p + 1$
7.	A, B and C starts cycling around a circular path in the same direction at the same time.
	Circumference of the path is 1980 m. If speed of A is 330 m/min, speed of B is 198 m/min
	and that of C is 220 m/min and they start from the same point, then after what time will
	they be together at the starting point?
SECTION – D (3 MARKS QUESTIONS)	
0.	If α and β are zeroes of the polynomial $2x^2 - 5x + 7$, the find a polynomial whose zeroes
0	A railway half ticket eact half the full fare but the reconvertion charges are the same on a
9.	half ticket as on a full ticket. One reserved first class ticket from the stations A to B costs
	Rs. 2530 Also, one reserved first class ticket and one reserved first class half ticket from
	stations A to B costs Rs 3810. Find the full first class fare from stations A to B and also
	the reservation charges for a ticket.
SECTION – E (CASE STUDY)	
10.	Pro kabaddi league, is a professional level Kabaddi league, launched in 2014 in India.
	One successful defence is worth 1 point and one successful raid is worth 2 Points. In a
	match, Dabang Delhi team has 30 successful defences and raids and the number of raids
	was 10 more than the number of defences. Based on above information, answer the
	following questions:
	(a) If x and y are the numbers of successful defences and raids respectively, then find
	equations which represent the problem.
	(b) How many points were scored by raiders?
	(c) How many points were scored by defenders?
	(d) What was the total number of Points scored by Dabang Delhi in the match?