

Section B
Answer **all** questions.
(20 marks)

1. Match the term with the suitable statement

(4 marks)

Pascal's Triangle	•	•	Numbers that cannot be divided by 2 exactly.
Odd numbers	•	•	This sequence starts with 0, 1, 1 and the following terms can be determined by adding the previous two terms.
Fibonacci Numbers	•	•	Numbers that can be divided by 2 exactly.
Even numbers	•	•	Geometrical arrangements on the binomial coefficients of a triangle.

2. Complete the following sequence by filling in the blanks.

(4 marks)

a.

			1			
		1		1		
	1		2		1	
	1	3		3	1	
	1	4			4	1
1	5	10	10			1

- b. Complete the following Fibonacci Number sequence.

1, _____, 2, _____, _____, _____, _____, ...

3. Write YES for the sequence and NO if not a sequence.

(4 marks)

-10, -6, -7, 1, -12, 3, ...	
-2, -4, -8, -16, -32, ...	
$\frac{1}{4}, \frac{3}{8}, \frac{1}{2}, \frac{5}{8}, \frac{3}{4}$	
0.04, 0.16, 0.64, 2.56	

4. Determine the pattern for the given number sequences.

(4 marks)

7, 13, 19, 25, ...	
54, 50, 46, 42, ...	
-13, -39, -117, -351	
1296, 216, 6, 6	