

## **Shri Gujrati English Medium Hr. Sec. School**

Class- XII A

Subject- Mathematics(041)

Teacher's Name-Dr. Badri Vishal Padamwar

### Lesson plan for the month-July 2020

Week	Chapter/Topic	Learning outcomes	Resources	Activity	Inculation of art integration
1st week	Differentiability	(1)Concept of exponential & logarithmic functions.	NCERT Book, NCERT Exemplar Book, Chalk, Duster, Desktop, Wifi Connection.	(1)Derivatives of exponential & logarithmic functions.	
2nd week	Differentiability	(1)Derivatives of the functions expressed in parametric form, 2 <sup>nd</sup> order derivatives, Rolle's & Mean value theorem.	NCERT Book, NCERT Exemplar Book, Chalk, Duster, Desktop, Wifi Connection.	(1)Concept of 2 <sup>nd</sup> order derivative. (2)Rolle's & Legranges Mean Value Theorem & their geometric interpretation.	
3 <sup>rd</sup> week	Application of derivatives (Increasing & decreasing functions)	(1)Concept of Increasing & Decreasing Functions and their graphical representations. (2)Finding the interval in which the given function is increasing or decreasing.	NCERT Book, NCERT Exemplar Book, Chalk, Duster, Desktop, Wifi Connection.	(1)f is strictly increasing in (a, b) if $f'(x)>0$ for each $x \in (a, b)$ . (2)f is strictly decreasing in (a, b) if $f'(x)<0$ for each $x \in (a, b)$ .	
4 <sup>th</sup> week	Application of Derivatives (Maxima & Minima)	(1)Concept of Maxima & Minima of a function and its graphical representations. (2)General method of finding Maxima & Minima. (3)Method of finding Maxima & Minima using 1 <sup>st</sup> derivative test.	NCERT Book, NCERT Exemplar Book, Chalk, Duster, Desktop, Wifi Connection.	(1)Application problems based on finding Maxima & Minima of a function. (2)Problems based on 1 <sup>st</sup> derivative test.	