

# Government Polytechnic Vaishali

## Lecture Plan

<b>Name of the Faculty</b>	<b>Dr. Rajesh Kumar</b>
<b>Email id and Mobile number</b>	<a href="mailto:drrajeshpatna7@gmail.com">drrajeshpatna7@gmail.com</a> 9431645350
<b>Semester/Branch</b>	3 <sup>rd</sup> Mechanical/Civil
<b>Subject Name/Subject (Code)</b>	Applied Mathematics-II
<b>Lecture/Week</b>	2 Periods/Week = 5 hrs per week

### Theory

Units	Week	Lecture Day	Topics	Methods of Teaching	Remarks
<b>Unit 1 : INTEGRATION</b>	1	1	Definition of integration as anti-derivative. Integration of standard function.	PDF/PPT/Video	
		2	<b>Rules of integration</b> (Integrals of sum, difference, scalar multiplication).	PDF/PPT/Video	
<b>Unit 1 : INTEGRATION</b>	2	1	<b>Methods of Integration.</b> 1. Integration by substitution	PDF/PPT/Video	
		2	<b>MCQ Test Unit 1</b>	Google form	
	3	1	Integration of rational functions.	PDF/PPT/Video	
		2	<b>MCQ Test Unit 1</b>	Google form	
<b>Unit 1 : INTEGRATION</b>	4	1	Integration by partial fractions.	PDF/PPT/Video	
		2	<b>MCQ Test Unit 1</b>	Google form	
<b>Unit 1 : INTEGRATION</b>	5	1	Integration by trigonometric transformation.	PDF/PPT/Video	
		2	<b>MCQ Test Unit 1</b>	Google form	

<b>Unit 1 : INTEGRATION</b>	6	1	Integration by parts.	PDF/PPT/Video	
		2	<b>MCQ Test Unit 1</b>	Google form	
<b>Unit 4 : NUMERICAL METHODS</b>	7	1	<b>Solution of algebraic equations:</b> Bisection method.	PDF/PPT/Video	
		2	<b>MCQ Test Unit 04</b>	PDF/PPT/Video	
<b>Unit 4 : NUMERICAL METHODS</b>	8	1	<b>Solution of algebraic equations:</b> Regulafalsi method	PDF/PPT/Video	
		2	<b>MCQ Test Unit 04</b>	Google form	
<b>Unit 4 : NUMERICAL METHODS</b>	9	1	<b>Solution of algebraic equations:</b> Newton – Raphson method.	PDF/PPT/Video	
		2	<b>MCQ Test Unit 04</b>	Google form	
<b>Unit 4 : NUMERICAL METHODS</b>	10	1	<b>Solution of simultaneous equations containing 2 and 3 unknowns</b> Gauss elimination method.	PDF/PPT/Video	
		2	<b>MCQ Test Unit 04</b>	Google form	
<b>Unit 4 : NUMERICAL METHODS</b>	11	1	<b>Iterative methods-</b> Gauss seidal and	PDF/PPT/Video	
		2	<b>MCQ Test Unit 04</b>	Google form	
<b>Unit 4 : NUMERICAL METHODS</b>	12	1	<b>Iterative methods-</b> Jacobi's methods.	PDF/PPT/Video	
		2	<b>MCQ Test Unit 04</b>	Google form	
<b>TOTAL</b>		24			

