**Task Allotment Date : 21 April,2020**

All my Dear students,

I have prepared study e-material of MA 112 S2 B.Tech -I. Mathematics-II. Unit No.V.,

1 Laplacian Operator

2 Line Integral

3 Surface Integral

4 Volume Integral

I hope all of you are understand Gradient, Divergence and Curl. This attachment contain the other concept of vector calculus. If you face some difficulty to understand the concept than you can refer attached video link.

Laplacian Operator:

<https://www.youtube.com/watch?v=X6TYgvh0lEY>

<https://www.youtube.com/watch?v=pCeo_C_W2s0>

Line integral Video

<https://www.youtube.com/watch?v=gQCIK0hlI2M>

<https://www.youtube.com/watch?v=JiQW1TQ5MMs>

<https://www.youtube.com/watch?v=qAM6xG8emkU>

<https://www.youtube.com/watch?v=b92PpVtUZvQ>

Surface Integral

<https://www.youtube.com/watch?v=Z8pD8dFvb60>

<https://www.youtube.com/watch?v=6fM7XXjPcFk>

<https://www.youtube.com/watch?v=K37VbB5Ukxk>

<https://www.youtube.com/watch?v=kA-zIC8euhU>

Volume Integral

<https://www.youtube.com/watch?v=_GRF5WaPBFU>

<https://www.youtube.com/watch?v=hG7h2g36jrQ>

- Jayesh Sir

Math subject Coordinator

**Task Allotment Date : 21 April,2020**

All my Dear students,

I have prepared study e-material of MA 112 S2 B.Tech -I. Mathematics-II. Unit No.V.,

1.Introduction

2 Gradient

3 Divergence

4 Curl

All of you are well familiar with Vectors and Scalars. This unit is extension of this concept, so hope you can understand. If you face some difficulty to understand the concept than you can refer IIT Bombay NPTL and other attached video link.

IIT bombay NPTL

<https://www.youtube.com/watch?v=NED2Cl8u9Q0>

<https://www.youtube.com/watch?v=SZCsFS9izfQ>

Others YouTube link

<https://www.youtube.com/watch?v=x1GDhByZPVM>

<https://www.youtube.com/watch?v=eiPInHzwxy8>

<https://www.youtube.com/watch?v=nCXUaOmD0qk>

<https://www.youtube.com/watch?v=tToA1TxYzZA>

If you are unable to understand the concept then no problem I will discussed these concepts in class room details.

Dr.Jayesh M. Dhodiya,

Applied Mathematics and Humanities Department

SVNIT, Surat

**Task Allotment Date : 25 April, 2020**

All my Dear students,

I have prepared study e-material of MA 112 S2 B.Tech -I. Mathematics-II. Unit No.V.,

1 Green's Theorem

2 Stocks Theorem

3 Gauss Divergence theorem

I hope all of you are understand earlier concept. This attachment contain the other concept of vector calculus. If you face some difficulty to understand the concept than you can refer attached video link.

Green’s Theorem

<https://www.youtube.com/watch?v=2YURnXX0pto>

<https://www.youtube.com/watch?v=a_zdFvYXX_c>

<https://www.youtube.com/watch?v=tj2aOyYPDS0>

Stoke’s Theorem

<https://www.youtube.com/watch?v=LNBz5XhD-zI>

<https://www.youtube.com/watch?v=cdFPYcYJ6wI>

<https://www.youtube.com/watch?v=kOsgDUHSHgI>

<https://www.youtube.com/watch?v=MZnymin9i3s>

Gauss Divergence Theorem

<https://www.youtube.com/watch?v=OGAeFlYVsXU>

<https://www.youtube.com/watch?v=tbJ_zgs84aY>

<https://www.youtube.com/watch?v=_PNsPatRNVA>

<https://www.youtube.com/watch?v=kQVPIwtTSxk>