



**Dr. V. N. Bedekar Institute of Management, Thane**  
**Teaching Plan (MMS/PGDM)**  
**Academic Year (2016-2017)**

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Programme Name: PGDM

Term: I

Name of the Course: Quantitative Techniques I

Maximum marks: 100

No. of Sessions: 10

Name of the Faculty: Prof. Vibhuti Save

Mobile No: 9029066875

Email: [vsave@vpmthane.org](mailto:vsave@vpmthane.org)

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**Learning Objectives:**

1. To understand statistical methods
  2. To study when to use these methods
  3. To understand how decision making will be efficient using quantitative techniques
  4. To study QT by using Application software
  5. To study how to analyse the data & How to predict the result from that analysis
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**Reference Books:**

- Quantitative techniques in management 4th ed. /by Vohra, N D. – New Delhi: TMH, 2010.
  - Quantitative techniques for managerial decisions /by Sharma, J K. – New Delhi: Macmillan, 2010.
  - Quantitative methods in management: Problems & solutions/by Selvaraj, R.- New Delhi: Excel, 2008.
  - Quantitative techniques for management /by Jaisankary, S. - New Delhi: Excel Books, 2005.
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**Plan:**

<b>Session No</b>	<b>Topics to be covered</b>	<b>Books referred/ Recommended/ References-Print/Articles/ News/Research papers/ Online database/ Software /Simulations used</b>	<b>Learning outcomes</b>	<b>Evaluation of Students understanding by MCQs, Quiz, Short Test</b>
1	Charts and Graphs & Measures of Central Tendencies for Grouped and Ungrouped Mean, Median and Mode	Quantitative techniques in management 4th ed. /by Vohra, N D. – New Delhi: TMH, 2010.  Quantitative techniques for managerial decisions /by Sharma, J K. - New Delhi: Macmillan, 2010.	How to calculate mean median mode	Problem solving, discussions
2	Measures of Variability and Shape	Quantitative methods in management: Problems & solutions/by Selvaraj, R.- New Delhi: Excel, 2008.  Quantitative techniques for management /by Jaisankary, S. - New Delhi: Excel Books, 2005.	Graphical representation of data	Problem solving, discussions



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3	Probability Theory & Application	Quantitative techniques in management 4th ed. /by Vohra, N D. – New Delhi: TMH, 2010.  Quantitative techniques for managerial decisions /by Sharma, J K. - New Delhi: Macmillan, 2010.	Decision making	Problem solving, discussions
4	Probability Distribution & Uses (Discrete & Continuous)	Quantitative techniques in management 4th ed. /by Vohra, N D. – New Delhi: TMH, 2010.  Quantitative techniques for managerial decisions /by Sharma, J K. - New Delhi: Macmillan, 2010.		Problem solving, discussions
5	Sampling Techniques & Sample surveys, Estimation & Testing Of Hypotheses	Quantitative techniques in management 4th ed. /by Vohra, N D. – New Delhi: TMH, 2010.  Quantitative techniques for managerial decisions /by Sharma, J K. - New Delhi: Macmillan, 2010.	Population parameter	Problem solving, discussions



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6	Analyzing Bi-Variate Data & Analysis of variance	Quantitative techniques in management 4th ed. /by Vohra, N D. – New Delhi: TMH, 2010.  Quantitative techniques for managerial decisions /by Sharma, J K. - New Delhi: Macmillan, 2010.	ANOVA Response Variable F ratio	Problem solving, discussions
7	Correlation & Regression Analysis	Quantitative techniques in management 4th ed. /by Vohra, N D. – New Delhi: TMH, 2010.  Quantitative techniques for managerial decisions /by Sharma, J K. - New Delhi: Macmillan, 2010.	Determine whether a linear relationship actually exists	Problem solving, discussions
8	Multiple Regression Analysis & Model Building in Regression analysis	Quantitative methods in management: Problems & solutions/by Selvaraj, R.- New Delhi: Excel, 2008.  Quantitative techniques for management /by Jaisankary, S. - New Delhi: Excel Books, 2005.	<ul style="list-style-type: none"> <li>• Least Square Method</li> <li>• Value prediction using Dependent &amp; Independent variables</li> </ul>	Problem solving, discussions



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9	Time Series Analysis & Developing Forecasting Models	Quantitative techniques in management 4th ed. /by Vohra, N D. – New Delhi: TMH, 2010.  Quantitative techniques for managerial decisions /by Sharma, J K. - New Delhi: Macmillan, 2010.	How to decompose time series data into their various components & to forecast by using decomposition techniques	Problem solving, discussions
10	Non Parametric Analysis & Decision Analysis	Quantitative techniques in management 4th ed. /by Vohra, N D. – New Delhi: TMH, 2010.  Quantitative techniques for managerial decisions /by Sharma, J K. - New Delhi: Macmillan, 2010.	Test significance association between categorical variables	Problem solving, discussions

**2. Practical Approach : Other activities (Atleast 4 distinct activities)**

Sr. No.	Activity Name	Topic Coverd	Learning outcomes	Source
1	Role Play			
2	Industry Visit			



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3	Academic Projects	Sampling	How to apply population parameter	Case
4	Book Review			
5	Group Discussion			
6	Business Quiz / Business News sharing	Quiz on testing	Which test for what data	
7	Videos / Simulation	Simulation on Decision Making	Decision on available of data	Dummy Data
8	Use of Softwares and Labs	SPSS & Excel	Use of IT in QT	Dummy Data
9	Any other activity			



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**Evaluation:**

**I) Internal:**

<b>Component</b>	<b>Details</b>	<b>Marks</b>
Class Test		10
Presentation	Primary data collection and analysis of that data	5
Case Study		3
Participation		2
Others		

**Signature of Faculty**

**Signature of the Co-ordinator**