Report on Expert Talk

Organized by

Mathematics Section

Applied Science & Humanities Department
SCET

on 7 February, 2018

Topic of the Expert talk:

"Solution of Ordinary differential equations / Partial differential equations using Numerical methods"

Objective of the Expert talk:

To enhance the knowledge of different Numerical techniques and to develop analysis skill for application.

Details of the talk:

The lecture was delivered by *Dr. Rupesh D. Shah* on **07 February, 2018** during 10:30 a.m. to 11:30 a.m in N.J. seminar hall, SCET.

Dr. Rupesh Shah is an Assistant Professor in Mechanical department, SVNIT, Surat. He is a distinguished person in the field of Numerical Methods and its analysis especially Finite Element Methods. His other areas of expertise are fluid flow and heat transfer. He has an experience of more than 15 years in this field.

He explained different techniques like shooting method and mid-point method to solve initial value problems. Using Excel sheet, he showed how different solutions can be obtained by changing the values of the parameters in the cell, with just a click. He also showed the graphs of different solutions which are obtained by changing values. He explained the significances of these solutions. He told that it is not the magic that you get different solutions by just a click but logic.

Budding engineers should understand the logic behind the solutions, its proper interpretation and should be able to apply in a correct way.

More than 100 students of computer and IT branches studying in second year have attended the lecture. Faculties were also present during this talk. Students were benefitted by his talk.

Few glimpses of the talk: