

Shantilal Shah Engineering College, Bhavnagar

Applied Mechanics Department

[BE / PDDC – 6th Semester] Civil Engineering

Syllabus of Progressive Assessment Test (March – 2025)

<u>Sr no</u>	<u>Subject code</u>	<u>Name of subject</u>	<u>Syllabus-topics</u>
1	3160621/ 2960611	Earthquake Engineering	<p>1. <u>Earthquake Basics</u></p> <p>Interior of Earth, plate tectonics, faults, consequences of earthquake, Basic parameters of earthquake, seismic waves, magnitude & intensity, scales, Seismic zones of India, damages caused during past earthquakes (worldwide).</p> <p>2. <u>Fundamentals of Earthquake Vibrations of buildings</u></p> <p>Static load v/s Dynamic load, simplified single degree of freedom system, mathematical modelling of buildings, natural frequency, resonance v/s increased response, responses of buildings to different types of vibrations like free and forced, damped and un-damped vibration, response of building to earthquake ground motion.</p>

Sd/-
Prof D P Advani
Asst Prof
Applied Mechanics
SSEC Bhavnagar

Sd/-
Dr M V Bhatti
HOD
Applied Mechanics
SSEC Bhavnagar