



Late Shri. Vishnu Waman Thakur Charitable Trust's

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Civil Engg. Department

Topic Name:	TRANSPORTATION ENGINEERING II
Name of the Guest Speaker:	Mr. Vivek Mamdapur
Designation:	Visiting Faculty
Organization/Institution:	M.G.M. College of Engineering
Date:	04/04/19
Time:	11.00 Onwards

Programme/ Summary Details: The speaker advised the students to pursue this domain in civil engineering, as it would greatly increase in the coming few years. Flexible pavements will transmit wheel load stresses to the lower layers by grain-to-grain transfer through the points of contact in the granular structure. The wheel load acting on the pavement will be distributed to a wider area, and the stress decreases with the depth. Taking advantage of this stress distribution characteristic, flexible pavements normally have many layers. Hence, the design of flexible pavement uses the concept of a layered system. The lower layers will experience a lesser magnitude of stress and low-quality material can be used. Flexible pavements are constructed using bituminous materials. These can be either in the form of surface treatments (such as bituminous surface treatments generally found on low-volume roads) or, asphalt concrete surface courses (generally used on high-volume roads such as national highways). Flexible pavement layers reflect the deformation of the lower layers onto the surface layer (e.g., if there is any undulation in the subgrade then it will be transferred to the surface layer). In the case of flexible pavement, the design is based on the overall performance of flexible pavement, and the stresses produced should be kept well below the allowable stresses of each pavement layer.

