


Course No: CVL 4324  
Course Title: Transport. Eng. 2  
Date: 28/03/2013  
No. of Questions: (5)  
Time: 90 Minutes  
Using Calculator (Yes)

University of Palestine  
  
Open-Book Midterm Exam  
2<sup>nd</sup> Semester 2012/2013  
Total Grade: 20

Instructor: Dr. Wa'el M. Albawwab  
Student No.: \_\_\_\_\_  
Student Name: \_\_\_\_\_  
College Name: \_\_\_\_\_  
Dep. / Specialist: \_\_\_\_\_  
Using Dictionary (Yes)

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**Q1-** List all the principal elements of highway cross section models. Enhance your answer with the necessary detailed schematic diagrams. **(4 Marks)**

**Q2-** A parking lot is to be designed for a shopping center. If the area available is 400 ft × 500 ft, design a suitable layout for providing the maximum number of spaces while facilitating traffic circulation by utilizing one-way flow on each aisle. Enhance your answer with the necessary detailed schematic diagrams. **(8 Marks)**

**Q3-** A proposed curve is to connect a descending 1.5% grade with an ascending 2.5% grade on a rural arterial highway. If the criterion selected for design is the minimum stopping sight distance, and the design speed of the highway is 70 mph, if the grades intersect at station (475+00) at an elevation of 300 ft. Determine the elevation and station of the lowest point. **(4 Marks)**

**Q4-** Discuss all the factors influencing the aging and temperature sustainability. **(2 Marks)**

**Q5-** How does the effort of compaction affect the soil densification process? **(2 Marks)**

*End of Questions*

*Good Luck*