

MVN Unviersity, Palwal

Haryana

Scheme of studies & Syllabus 2014-2015

Three year (one year course work+ Two year research work)

Courses

:Phd Semester I

S.NO	Course Title	Paper code	Teaching Schedule			Total	Credit	Evaluation scheme		
			L	T	P			Ext	Int	Total
	Course work									
1	Research Methodology	MSL-901 A	4	0	0	4	4	100	50	150
2	Independent study seminar	CEC-903-A	-	-	-	-	4	****	50	50
	Total		4	0	0	4	8	100	100	200

Three year (one year course work+ Two year research work)

Courses

:Phd Semester II

S.NO	Course Title	Paper code	Teaching Schedule			Total	Credit	Evaluation scheme		
			L	T	P			Ext	Int	Total
	Course work									
1	Advanced Pavement Design	CEL-902-A	4	0	0	4	4	100	50	150
	Total		4	0	0	4	4	100	50	150

Annexure-VII

<i>CEL-902-A</i>	Design and Maintenance of Pavements	L	T	P	Cr.
		4	0	0	4

Theory

Class Work: 50 Marks

Exam: 100 Marks

Total: 150 Marks

Duration of Exam: 3Hrs

SECTION_A

Unit- I Design pavement structure. Stresses in rigid and flexible pavements, sub-grade evaluation.

Unit –II Design of flexible, semi-flexible and rigid pavements.

Unit III Pavement Inventories and Evaluation

SECTION-B

UNIT IV; Quality Control; Pavement Lifecycle and cost analysis.

Unit V Finite Element Approach. Temperature stresses and joints

Unit –VI. Pavement management System; Rehabilitation of Pavements;

TEXT BOOK

S.K. Khanna & C.E.G. Justo., —Highway Engg., Nem Chand & Brothers, 2009.

REFERENCE BOOKS

1 Rao, G. V., —Principles of Transportation and Highway Engg., Tata McGraw Hill Pub., N. Delhi.

2 Kadiyali, L. R., —Traffic Engg. And Transport Planning, Khanna Pub. Delhi, 2008.

Smith, T. M. W.S. and Hurd,, —Traffic Engg. McGraw Hill Book Co., New York.

LIST OF EXPERIMENTS

1. Aggregates impact test
2. loss –angles abrasion test on aggregates
- . dorry’s abrasion test on aggregates
4. Deval attrition test on aggregates
5. crushing strength test on aggregates
6. Penetration test on bitumen.
7. Ductility test on bitumen
8. Viscosity test on Bituminous materials
9. softening point test on Bitumen
10. Flash and Fire point Test on Bitumen.