

CONTINUOUS INTERNAL EVALUATION- 1

Dept: CV

Sem / Div: 5 sem

Sub: Highway Engg

S Code: 18CV56

Date: 03-12-2020

Time: 2.30-4.00 PM

Max Marks: 50

Elective: N

Note: Answer any 2 full questions, choosing one full question from each part.

Qn	Questions					Marks	RBT	COs
PART A								
1a	Explain the characteristics of road transport					8	L2	CO1
b	Describe the role of transportation in social and economic development of the country.					8	L2	CO1
c	Determine the length of different categories of roads in a state in India by the year 2021 as per 3 rd twenty year road plan. The area of state is 3,08,000 km ² . Number of towns as per 1981 census was 276. Overall road density aimed at 82 km per 100 km ² .					9	L4	CO1
OR								
2a	Detail the planning surveys for a highway project					8	L2	CO1
b	Briefly mention the various classification of roads.					8	L2	CO1
c	Write short notes on i) Jayakar Committee ii) Road Patterns iii) Saturation System					9	L4	CO1
PART B								
3a	With sketches indicate different road patterns.					8	L2	CO1
b	Explain briefly the salient features of third twenty-year road development plan					8	L2	CO1
c	There are three alternate proposals for a backward district shown below. Suggest the order of priority for phasing based on utility units of 0.5, 1, 2, 4 and 8 for the five population ranges and 1 & 5 per 1000T of agricultural and Industrial products.					9	L4	CO1
	Road link	Length km	No of villages served with population range			Productivity served in 1000 tonnes		
			< 500	501-1000	1001-2000	Agricultural	Industrial	
	A	500	100	150	40	250	20	
	B	600	200	250	68	320	25	
	C	700	270	350	82	500	35	
OR								
4a	Define "Master Plan" & "Saturation System".					8	L2	CO1
b	Explain the objectives of (i) CRRI (ii) IRC (iii) HRB (iv) CRF					8	L2	CO1
c	Three new roads A, B & C are to be completed in a district during 5 year plan period. Work out the order of priority for phasing the plan program by maximum utility principle, from the data given below. Adopt utility unit of 1.0 for serving a village with population range 2000-5000, for catering for 1000T of agricultural products or per 100T of industrial products. Assume any other required data suitably.					9	L4	CO1
	Road	Length km	No of villages served population			Productivity 1000 T		
			< 2000	2000-5000	>5000	Agricultural	Industrial	
	A	15	10	8	3	15	1.2	
	B	12	16	3	1	11	0.0	
	C	18	20	10	2	20	0.8	