

- c) A fixed time 2-phase signal is to be provided at an intersection having four arms. The design hour traffic and saturation flow are

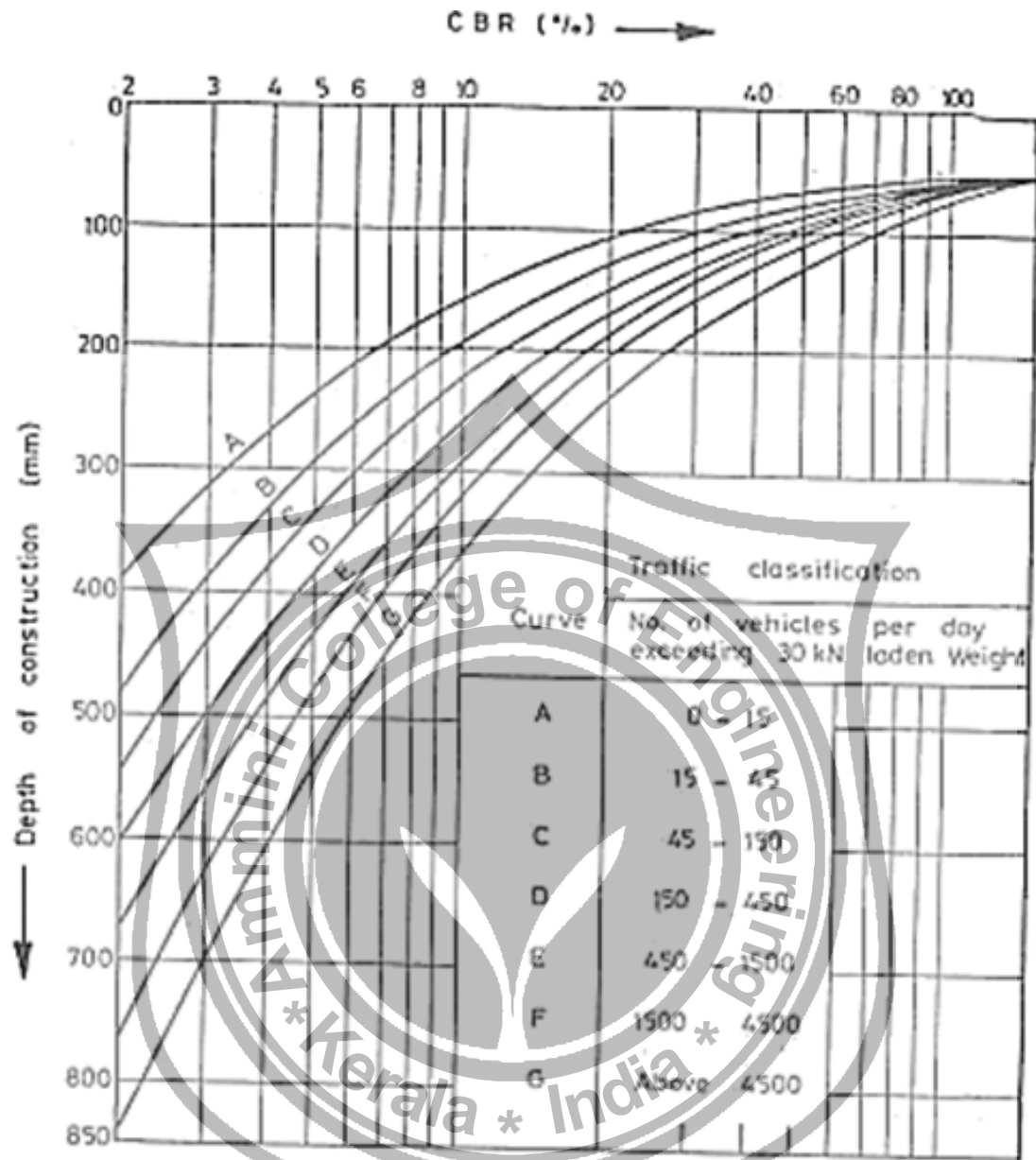
	North	South	East	West
Design hour flow (pcu/hr)	800	400	750	600
Saturation flow (pcu/hr)	2400	2000	3000	3000

Time lost per phase due to starting delay is 2 sec and All red period is 4 sec. (12)
Design two phase traffic signal using Webster's method. Draw the phase diagram also.

- 9 a) Describe the various markings on runways with sketches. (5)
- b) What are the primary functions of air traffic control? (3)
- c) The length of a runway under standard conditions is 1500m. The airport is to be provided at an elevation of 110m above mean sea level. The airport reference temperature is 32⁰C. Following data refers to the proposed longitudinal section of runway. Determine the corrected length of runway.

End to end of runway (m)	Grade(%)	End to end of runway (m)	Grade(%)
0 to 300	+1	1500 to 1800	+1
300 to 900	-0.2	1800 to 2100	-0.3
900 to 1500	+0.5		

(12)



CBR Design chart