



- Notes :
1. All question carry marks. as indicated.
 2. Answer **any five** questions.
 3. Due credit will be given to neatness and adequate dimensions.
 4. Assume suitable data wherever necessary.
 5. Illustrate your answer necessary with the help of neat sketches.
 6. Use of pen Blue/Black ink/refill only for writing the answer book.

1. a) Explain technological characteristics of Ropeways with reference to components. **8**
b) Enumerate and explain salient features of third 20 year road plan (1981-2001). **8**
2. Attempt **any two**.
a) Explain the characteristics of airway and railway transportation. **8**
b) Explain the terms **8**
 - CRRI
 - Vision 2021
c) Enlist important features of PMGSY, Explain, how it is beneficial for rural development. **8**
3. Attempt **any two**.
a) What is basic runway length? Explain with neat sketch 'Normal landing case'. **8**
b) What are the various facilities essential at goods terminal. **8**
c) Explain the working principle of centralized traffic control system. **8**
4. a) Explain with neat sketch Aircraft Parking system. **8**
b) A taxiway is to be designed for operating Boeing 707-320 which has the following characteristics - Determine radius of the taxiway. **8**
 - wheel base = 17.70 m
 - Trend of main loading gear = 6.62 m
 - Turing speed = 40 kmph.
 - Coefficient of friction between tire and pavement surface = 0.13
5. Attempt **any two**.
a) Explain the working principles of Inland water way. **8**
b) What are the floating signals? Describe different types of floating signals. **8**
c) Explain in brief pipe line transportation. **8**
6. a) Explain in brief **8**
 - Light Rail Transit
 - Dual Mode Bus.
b) Explain in brief. **8**
 - Para transit system.
 - Intermediate Public transport.
