

1. Nagpur road plan formulae were prepared by assuming

- a. Rectangular or block road pattern
- b. Radial or star and block road pattern
- c. Radial or star and circular road pattern
- d. Radial or star and grid road pattern

2. Select the correct statements.

- a. Nagpur road plan formulae take into account the towns with very large population
- b. Nagpur road plan has a target road length of 32 km per 100 square km.
- c. Second 20-years plan has provided 1600 km of expressways out of the proposed national highway.
- d. Second 20-years plan allowed deduction of length of railway track in the area while calculating the length of roads.

3. The sequence of four stage of survey in a highway alignment is

- a. Reconnaissance, map study, preliminary survey and detailed survey
- b. Map study, preliminary survey, reconnaissance and detailed survey
- c. Map study, reconnaissance, preliminary survey and detailed survey
- d. Preliminary survey, map study, reconnaissance and detailed survey

4. The shape of the camber, best suited for cement concrete pavements, is

- a. Straight line
- b. Parabolic
- c. Elliptical
- d. Combination of straight and parabolic

5. For water bound macadam roads in localities of heavy rainfall, the recommended value of camber is

- a. 1 in 30
- b. 1 in 36
- c. 1 in 48
- d. 1 in 60

6. The stopping sight distance depends upon

- a. Total reaction time of driver
- b. Speed of vehicle
- c. Efficiency of brakes
- d. All of the above

7. When the path travelled along the road surface is more than the circumferential movement of the wheels due to rotation then it results in

- a. Slipping
- b. Skidding
- c. Turning
- d. revolving

8. Coefficient of friction is less when the pavement surface is

- a. Rough
- b. Dry
- c. Smooth and dry
- d. Smooth and wet

9. The shoulder provided along the road edge should be

- a. Rougher than the traffic lanes
- b. Smoother than the traffic lanes
- c. Of same colour as that of the pavement
- d. Of very low load bearing capacity

10. Camber in the road is provided for

- a. Effective drainage
- b. Counteracting the centrifugal force
- c. Having proper sight distance
- d. None of the above

11. Compared to a level surface on a descending gradient the stopping sight distance is

- a. Less
- b. More
- c. Same
- d. Dependent on the speed

12. On a single lane road with two way traffic the minimum stopping sight distance is equal to

- a. Stopping distance
- b. Two times the stopping distance
- c. Half the stopping distance
- d. Three times the stopping distance

13. The desirable length of overtaking zone as per IRC recommendation is equal to

- a. Overtaking sight distance
- b. Two times the overtaking sight distance
- c. Three times the overtaking sight distance
- d. Five times the overtaking sight distance

14. Stopping sight distance is always

- a. Less than overtaking sight distance
- b. Equal to overtaking sight distance
- c. More than overtaking sight distance
- d. None of the above

15. Reaction time of a driver

- a. Increase with increase in speed
- b. Decrease with increase in speed
- c. Is same for all speed
- d. None of the above