



Chettinad

College of Engineering & Technology

Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai.

Department of Civil Engineering

CE 8604 – Highway Engineering

Unit - II - MCQ Bank

1. The changes in gradient and vertical curve are covered under which type of alignment?

a) Horizontal alignment

b) Vertical alignment

c) Geometric design

d) Highway specifications

Answer: (b)

2. The improper alignment of road will not result in _____

a) Increase in construction cost

b) Increase in maintenance cost

c) Increase of population

d) Increase in accidents

Answer: (c)

3. The basic requirement of alignment should be _____

a) Short

b) Easy

c) Safe

d) Short, easy, safe and economical

Answer : (d)

4. The economical option during the construction of a road around a hill is _____

- a) Cut the hill
- b) Provide a tunnel
- c) Provide a road around the hill**
- d) Look for other alternative approaches

Answer: (c)

5. Obligatory points through which the alignment should not pass are _____

- a) Religious structure and costly structures**
- b) Intermediate towns
- c) Important cities
- d) Important places of worship

Answer: (a)

6. The surveys of highway alignment are completed in how many stages?

- a) One
- b) Two
- c) Three
- d) Four**

Answer: (d)

7. The maps in India related to topography are prepared by _____

- a) Geological survey of India
- b) Survey of India**
- c) NHAI
- d) GOI

Answer: (b)

8. The survey in which details are covered roughly but not accurately is called _____

a) Reconnaissance

b) Rough survey

c) Map study

d) Detailed study

Answer: (a)

9. The soil survey is conducted in which of the following survey?

a) Preliminary survey

b) Reconnaissance survey

c) Map study

d) Topography study

Answer: (a)

10. A closed loop used for survey purpose is called _____

a) Open traverse

b) Closed traverse

c) Primary traverse

d) Secondary traverse

Answer: (b)

11. The index map shows _____

a) Topography

b) Soil

c) Area of the site

d) Plan

Answer: (a)

12. Detailed size drawings are prepared in which sheet?

a) A1

b) A2

c) A3

d) A4

Answer: (b)

13. A part of land that is acquired during the initial stages of construction for future expansion is called _____

a) Kerb

b) Footpath

c) Right of way

d) Camber

Answer: (c)

14. Which method is recommended by IRC for flexible pavements?

a) CBR

b) IRC 6

c) IRC 21

d) IRC 58

Answer: (a)

15. The first step in the detail checklist of DPR is _____

a) Executive summary

b) Background

c) Roadway features

d) General details of the project

Answer: (a)

16. The final step in the specifications and design of roadway elements is _____

- a) Specifications
- b) Design elements
- c) Geometric design
- d) Safety and audit of the design elements**

Answer: (d)

17. The design of horizontal and vertical alignments, super elevation, gradient is worst affected by _____

- a) Length of vehicle
- b) Width of vehicle
- c) Speed of vehicle**
- d) Height of vehicle

Answer: (c)

18. The most raised portion of the pavement is called _____

- a) Super elevation
- b) Camber
- c) Crown**
- d) Kerb

Answer: (c)

19. The extra width of pavement is provided on _____

- a) Horizontal curve**
- b) Width of pavement
- c) Length of pavement
- d) Super elevation

Answer: (a)

20. Transition curve is introduced in _____

- a) Horizontal curve
- b) Circular curve
- c) Between horizontal curve and circular curve**
- d) Vertical curve

Answer: (c)

21. The most important factor that is required for road geometrics is _____

- a) SSD
- b) OSD
- c) ISD
- d) Speed of vehicle**

Answer: (d)

22. The braking efficiency mainly depends on _____

- a) Sight distance
- b) PIEV theory
- c) Friction**
- d) Length of the curve

Answer: (c)

23. The braking efficiency for a vehicle moving with a speed of 18kmph, having a lag distance of 14m and coefficient of longitudinal friction is 0.36.

- a) 25.28%**
- b) 25.4%
- c) 25.6%
- d) 25.8%

Answer: (a)

24. A median is also called as _____

a) Traffic separator

b) Traffic junction

c) Traffic check post

d) Traffic flow

Answer: (a)

25. The desirable width as per IRC for median on rural roads is _____

a) 3m

b) 5m

c) 8m

d) 14m

Answer:(b)