

**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 - III - MCQ Bank**

1. The surface of the highway pavement should be designed to allow _____

- a) High rolling resistance
- b) Low rolling resistance**
- c) No rolling resistance
- d) Very high rolling resistance

Answer: (b)

2. The soil becomes weak in _____

- a) Summer
- b) Winter
- c) Rainy season**
- d) Spring season

Answer: (c)

3. The pavement layer is considered superior if it distributes load like a _____

- a) Point load**
- b) Uniformly distributed load
- c) Uniformly varying load
- d) Triangular load

Answer: (a)

4. Which of the following pavement has greater life?

a) Bituminous pavements

b) Cement concrete pavements

c) Gravel roads

d) Earth roads

Answer: (b)

5. Which of the following requirement is given most importance in highway design?

a) Structural

b) Functional

c) Seasonal

d) Maintenance

Answer: (a)

6. The most superior material is used in _____

a) base

b) sub base

c) surface

d) soil

Answer: (c)

7. The soil sub grade suitable for pavement is _____

a) Gravel

b) Sand

c) Black cotton soil

d) Red soil

Answer: (a)

8. The drainage layer is _____

a) Sub grade

b) Sub base

c) Base

d) Surface

Answer: (b)

9. What is the minimum thickness of compacted sub grade?

a) 300 mm

b) 500 mm

c) 700 mm

d) 900 mm

Answer: (a)

10. The number of factors considered for flexible pavement is _____

a) One

b) Two

c) Three

d) Five

Answer: (d)

11. What is the most common test used in evaluating soil strength?

a) CBR

b) DCP

c) Triaxial

d) Plate bearing test

Answer: (a)

12. The contact pressure is given by _____

- a) Pa
- b) a/P
- c) P/A**
- d) PA

Answer: (c)

13. The distribution of circular load was obtained by _____

- a) Westergaard
- b) Boussinesq**
- c) McAdam
- d) Taylor

Answer: (b)

14. What is the last step in the design of flexible pavement?

- a) Design of sub grade
- b) Design of base
- c) Design of mix
- d) Design of the pavement thickness**

Answer: (d)

15. If one or more wheels act as a single load then it is called as _____

- a) EASEL**
- b) EQWL
- c) EQML
- d) EQVL

Answer: (a)

16. Boussinesq assumed soil as _____

a) Homogeneous

b) Heterogeneous

c) Rigid

d) Flexible

Answer: (a)

17. Two elastic theory was developed by _____

a) Boussinesq

b) Westergard

c) Burnister

d) McAdam

Answer: (c)

18. The z is a function of _____

a) P, a

b) P, z

c) P, a, z

d) P only

Answer: (c)

19. Boussinesq assumed the load as a _____

a) Point load

b) UDL

c) UVL

d) Triangular load

Answer: (a)

20. The ratio of $z/a=0$ represent the stress at _____

a) Top surface

b) Bottom surface

c) Middle

d) Maximum stress point

Answer: (a)

21. How many types of methods are there to design a flexible pavement?

a) One

b) Two

c) Three

d) Four

Answer: (c)

22. Empirical method is dependent on the strength of _____

a) Soil

b) Sub base

c) Base

d) Surface

Answer:(a)

23. The stress strain approach is used in _____

a) Empirical method

b) Semi empirical method

c) Theoretical

d) CBR method

Answer: (b)

24. CBR is a _____

- a) Measure of soil strength
- b) Flexible pavement design method**
- c) Rigid pavement design method
- d) Measure of soil characteristics

Answer: (b)

25. The design charts are prepared based on _____

- a) Climate
- b) Past experience**
- c) Location
- d) Traffic

Answer:(b)

26. What is the most commonly used overlay?

- a) Flexible over rigid
- b) Rigid over flexible
- c) Flexible over flexible**
- d) Rigid over rigid

Answer:(c)

27. The average vehicles considered for pavement studies are _____

- a) 150
- b) 1500
- c) 150 to 1500**
- d) 15000

Answer:(c)