

QUESTION BANK

SUBJECT-HIGHWAY ENGINEERING
SEM-4TH
BRANCH-CIVIL ENGG
BY-GAYATRI JENA

Short questions:

1. Define IRC.
2. What is camber?
3. What is gradient?
4. What are the four layers of pavement?
5. Define shoulder.
6. Define right of way.
7. What is WBM?
8. State efflorescence.
9. What is soundness of cement?
10. What is compaction of soil?
11. Define SSD.
12. Define OSD.
13. What is extra widening?
14. What is consolidation?
15. What are the equipment's used for soil compaction?
16. What is kerb?
17. What is super elevation?
18. Name important transportation organization.
19. Write down the examples of binders.
20. What are the layers of pavement?
21. Define flexible pavement.
22. Define rigid pavement.
23. What are the necessities of curve?
24. What are types of curve?
25. What are types of traffic signal?
26. What is breast wall?
27. State retaining wall.

Long Questions:

1. Describe briefly the transportation organization.
2. What are the significant recommendations of Jaykar committee report? How did this help in road development?
3. Calculate the minimum sight distance required to avoid a head on collision of two cars approaching in opposite direction at 90 & 60 kmph. Assume reaction time of 2.5 s, coefficient of friction is 0.7 & brake efficiency of 50% in either case.
4. Describe briefly the types of curve.
5. Describe briefly the types of soil stabilization.
6. Differentiate between compaction and consolidation.
7. Explain briefly the types of road failures.

8. Differentiate between flexible pavement and rigid pavement.
9. Explain the CBR test.
10. How the subgrade is prepared? Describe briefly.
11. Describe briefly impact test.
12. Explain the soundness test of aggregates.
13. What are the different types of bend are there? describe briefly.
14. Write down the necessity of road drainage work.
15. Describe the remedies of common type of road failures.
16. What are the construction equipment are used in road construction? describe it briefly.
17. Explain the modern construction equipment's for road.
18. Describe briefly the cross drainage works.
19. On a two way traffic road, speed of overtaking and overtaken vehicle are 65km/hr and 40km/hr. Average acceleration 0.92m/sec^2 . Calculate osd and minimum length of OSD zone.
20. What is traffic control signal? describe it briefly.

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