

No. of Printed Pages : 4 180752/170752/120752
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Civil Engg
Subject:- Highway Engg

Time : 3Hrs. M.M. : 100

SECTION-A

Note: Multiple choice questions. All questions are compulsory (10x1=10)

- Q.1 NHAI is working under the guidance of _____
a) MOST b) CRRI
c) IRC d) all of the these
- Q.2 A dividing strip is the middle of the road way is called
a) Central Strip b) Mid Street
c) Median strip d) Road Centre
- Q.3 The land width of a road is also termed as
a) Right of way b) Formation width
c) Shoulder d) Road margin
- Q.4 Viscosity test is used to determine fluidity of
a) Cutback b) Asphalt
c) Bitumen d) Tar

- Q.5 A layer of coating provided sometimes between base course and wearing coat is called
a) Base coat b) Prime coat
c) Sub surface course d) Wearing coat
- Q.6 A alternate bay method is used for construction of
a) WBM b) Flexible pavement
c) Rigid pavement d) All of these
- Q.7 The holes provided in protection works with slope outwards are _____
a) Catch drain b) Borrow pit
c) Weephole d) Side gutter drain
- Q.8 The strip of land between the side drain and the lower edge of embankment is called
a) Berm b) Borrow pit
c) Spoil bank d) Counter berm
- Q.9 The site is best for airport
a) Hill b) Valley
c) Hill top d) Mountain
- Q.10 A flying machine without an engine.
a) Aeroplane b) Glider
c) Airship d) Helicopter

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SECTION-B

Note: Objective type questions. All questions are compulsory. (10x1=10)

- Q.11 The part of road which is used only by vehicular traffic is called _____
- Q.12 The ruling gradient recommended in plain area _____
- Q.13 _____ Map shows the contours of the area.
- Q.14 Cutback can be used in all weather. (True/False)
- Q.15 _____ Pavements are also known as black top roads.
- Q.16 Downward and outward movement of a rock slope is _____
- Q.17 In cold climates regions, poor drainage leads to _____
- Q.18 WBM road are less prone to formation of corrugations than bituminous roads. (True/False)
- Q.19 A straight blade machine mounted on tractor for site clearance is _____
- Q.20 The portion of airport adjacent to hanger used for loading and unloading of aircrafts is called _____

SECTION-C

Note: Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

- Q.21 What you understand by gradient. Explain different types of gradients provided on Indian highways?
- Q.22 Explain the objectives of location survey?
- Q.23 What is the difference between tar and bitumen?

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- Q.24 What are the special problems faced during the maintenance of hill roads?
- Q.25 Draw the cross section of hill road.
- Q.26 What is sub surface drainage? Why it is provided?
- Q.27 State the importance of highway transportation.
- Q.28 Explain various types of construction maintenance that is carryout in highway.
- Q.29 Explain in detail WMM.
- Q.30 Write the name of different type of surfacing. Explain any one.
- Q.31 Explain the different types of joint in concrete pavement.
- Q.32 State common types of failure in flexible pavement.
- Q.33 Define patch work. Why it is needed? Explain the method of patching.
- Q.34 What is necessary of studying airport engineering in India. Explain.
- Q.35 Write a short notes on : Runway and taxiway

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. (2x10=20)

- Q.36 What is Subgrade Soil? What is its function? Explain CBR test to evaluate the strength of soil subgrade.
- Q.37 What is soil stabilization? What are the different methods of soil stabilization?
- Q.38 List down the different type of tool, equipment & plant used in road construction? Explain in details

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