Program: BE Civil Engineering

Curriculum Scheme: Revised 2016

Examination: Third Year Semester V

Course Code: CEC505 and Course Name: Transportation Engineering-I

Time: 1 hour   Max. Marks: 50

Note to the students:- All the Questions are compulsory and carry equal marks .

Q1.	First operation during the detailed survey of a hill road, is
Option A:	hydrological and soil surveys
Option B:	derivation of longitudinal and cross-sections
Option C:	fixation of Bench Marks
Option D:	adjustment of alignment along with curves
Q2.	The soil survey is conducted in which of the following survey?
Option A:	Preliminary survey
Option B:	Reconnaissance survey
Option C:	Map study
Option D:	Topography study
Q3.	The width of formation is calculated by adding?
Option A:	Sum of the width of pavements

Option B:	Width of pavement+ separators
Option C:	Width of pavement + separators + shoulders
Option D:	Width of pavement + separator + shoulders + side drains
Q4.	The relationship between SSD and ISD is?
Option A:	ISD = SSD
Option B:	ISD = 1.5 SSD
Option C:	SSD = ISD + OSD
Option D:	ISD = 2 SSD
Q5.	Compared to a level surface, on a descending gradient the stopping sight distance is
Option A:	less
Option B:	more
Option C:	same
Option D:	dependent on the speed
Q6.	For water bound macadam roads in localities of heavy rainfall, the recommended value of camber is
Option A:	1 in 30
Option B:	1 in 48

Option C:	1 in 60
Option D:	1 in 33
Q7.	As Per IRC, for the Passenger Car Unit, the equivalent factor is
Option A:	0.5
Option B:	1
Option C:	2
Option D:	10
Q8.	The term 'Level of Service' is defined as
Option A:	Reciprocal of capacity
Option B:	Ratio of flow and speed
Option C:	Quantitative measure of facility
Option D:	Qualitative measure of traffic
Q9.	The fundamental relation between flow(q), density(k) and mean speed (v) is
Option A:	$k = q \times v$
Option B:	$q = k/v$
Option C:	$q = k \times v$

Option D:	k= q/v
Q10.	The layer which is constructed above embankment is called
Option A:	Sub grade
Option B:	Fill
Option C:	Base
Option D:	Sub base
Q11.	What is the most common method used for the removal of voids in soil?
Option A:	Compaction
Option B:	Consolidation
Option C:	Permeability
Option D:	Shear strength
Q12.	Impact value is used to measure?
Option A:	Hardness
Option B:	Toughness
Option C:	Wheel load
Option D:	Strength

Q13.	What is the most commonly used material for stabilization of soils
Option A:	Cement
Option B:	lime
Option C:	Heating
Option D:	Chemical
Q14.	The maximum thickness of expansion joint in rigid pavement
Option A:	zero
Option B:	25 mm
Option C:	50 mm
Option D:	100 mm
Q15.	In reinforced cement concrete pavement the steel is placed at
Option A:	near bottom
Option B:	in the middle
Option C:	near the top
Option D:	exactly at the neutral axis

Q16.	Flexible pavement distribute the wheel load
Option A:	Direct to subgrade
Option B:	through structure action
Option C:	by grain to grain transfer
Option D:	by slab action
Q17.	the CBR method was developed by
Option A:	California division of highway
Option B:	MORTH
Option C:	NHAI
Option D:	IRC
Q18.	The design life of rigid pavement is around
Option A:	15-20 years
Option B:	60-70 years
Option C:	50-60 years
Option D:	30-40 years
Q19.	In the concept of ESWL, each wheel load P acts independently upto a depth of X, if 'd' is clear gap between 2 wheels, then X is

Option A:	d/3
Option B:	d/2
Option C:	2d
Option D:	d
Q20.	Penetration test on bitumen is used for determining its
Option A:	Viscosity
Option B:	Grade
Option C:	ductility
Option D:	Temperature Susceptibility
Q21.	Benkelman beam deflection method is used for design of
Option A:	rigid overlay on rigid pavement
Option B:	flexible overlay on flexible pavement
Option C:	flexible overlay on rigid pavement
Option D:	rigid overlay on flexible pavement
Q22.	Which of the following is a cause of distress in rigid pavement only
Option A:	Inadequate compaction

Option B:	Inadequate drainage
Option C:	Dowel bars
Option D:	Defect in materials
Q23.	The WBM mostly get damaged in
Option A:	rainy season
Option B:	summer
Option C:	winter
Option D:	spring
Q24.	The surface texture may be calculated by
Option A:	Impact test
Option B:	abrasion test
Option C:	viscosity test
Option D:	British pendulum skid number
Q25.	For road construction, the ground water table should be at a minimum distance of X from the ground level, where X is
Option A:	0.5 m
Option B:	1.2 m

Option C:	0.6 m
Option D:	5 m

Program: BE Civil Engineering

Curriculum Scheme: Revised 2016

Examination: Third Year Semester V

Course Code: CEC505 and Course Name: Transportation Engineering-I

Time: 1 hour   Max. Marks: 50

Question	Correct Option
Q1.	C
Q2.	A
Q3.	C
Q4.	D
Q5.	B
Q6.	D
Q7.	B
Q8.	D
Q9.	C
Q10.	A
Q11.	A
Q12.	B
Q13.	A

Q14.	**B**
Q15.	**B**
Q16.	**C**
Q17.	**A**
Q18.	**D**
Q19.	**B**
Q20.	**B**
Q21.	**B**
Q22.	**C**
Q23.	**A**
Q24.	**D**
Q25.	**B**