Program: TE Civil Engineering

## Curriculum Scheme: Revised 2016

## Examination: Third Year Semester V

## Course Code: CEC505 and Course Name: Transportation Engineering 1

Time: 1 hour

Max. Marks: 50

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

Q1.	Express highways are added in road plan
Option A:	Nagpur
Option B:	Bombay
Option C:	Nasik
Option D:	Delhi
Q2.	The contour interval is 15 meter and ruling gradient is 1 in 20, the road length
	between two consecutive contours has to be
Option A:	300 m
Option B:	75 m
Option C:	5 m
Option D:	100 m
Q3.	A truck weighing 2500 kg is moving through a curve of radius 100 meters on a
	road with a speed of 50 kmph. the amount of centrifugal force developed will be
	= kg
Option A:	491.59
Option B:	562.31
Option C:	378.24
Option D:	233.85
Q4.	With increase in speed of the vehicles in the traffic stream, the minimum spacing
	between the vehicles in the stream
Option A:	Increases
Option B:	Decreases
Option C:	First decreases and then increases after reaching a minimum value at optimum
	speed
Option D:	Remains constant
Q5.	If cross slope of a country is 10% to 25%, the terrain is classified as
Option A:	Rolling
Option B:	Mountainous
Option C:	Steep

Option D:	Plain
Q6.	Medians are provide to
Option A:	Remove water from surface
Option B:	To cultivate shrubs
Option C:	To channelize traffic in different directions
Option D:	Serve as emergency lanes
Q7.	Basic aim of Origin and Destination study is to find the
Option A:	Traffic Volume
Option B:	Turning Movement count
Option C:	Bypass able Traffic
Option D:	Vehicle Density
Q8.	If space mean speed of a vehicle is 50kmph, then the time mean speed will be
Option A:	Less than 50kmph
Option B:	Greater than 50kmph
Option C:	Equal to 50kmph
Option D:	Depends on the vehicle
Q9.	Which methods eliminates conflict point most effectively?
Option A:	Restricting the entry in one side
Option B:	Widening of the roads
Option C:	Use of traffic signals
Option D:	Diverting the traffic
Q10.	Design hourly volume is estimated as hourly volume
Option A:	30th highest
Option B:	50th highest
Option C:	85th highest
Option D:	98th highest
Q11.	The solvent used in cut back bitumen is
Option A:	Kerosene
Option B:	Oil
Option C:	Petrol
Option D:	Diesel
Q12.	If aggregate impact value is 20 to 30 percent, then it is classified as
Option A:	Exceptionally strong
Option B:	Strong
Option C:	Satisfactory for road surfacing
Option D:	Unsuitable for road surfacing
Q13.	In softening point test, Steel ball touches the bottom of plate at 70 degree

	Celsius. The softening point value of the given sample will be
Option A:	7
Option B:	70
Option C:	3
Option D:	30
Q14.	No warping stress is developed if the temperature
Option A:	Constant
Option B:	Less than normal
Option C:	More than normal
Option D:	Changes frequently
Q15.	In pavement design, the term 'a' denotes?
Option A:	Radius of wheel
Option B:	Radius of the area of contact
Option C:	Radius of the equivalent area of contact
Option D:	Radius of axle
Q16.	The deflection in Westergaard's analysis is
Option A:	0.125
Option B:	0.25
Option C:	0.375
Option D:	0.5
Q17.	The load dispersion is assumed at an angle of
Option A:	45°
Option B:	60°
Option C:	75°
Option D:	90°
Q18.	For a 24 thick cm pavement, if the radius of contact area is 18 cm, Equivalent
	radius of resisting section will be
Option A:	16.88
Option B:	24
Option C:	12
Option D:	8.44
Q19.	Tie bars are provided at joints
Option A:	Longitudinal
Option B:	Transverse
Option C:	Construction
Option D:	Expansion
Q20.	The statistical analysis of data doesn't require
Option A:	Mean deflection
Ontion D.	Standard deviation

Option C:	Characteristics deflection
Option D:	Settlement
Q21.	The characteristics deflection value is
Option A:	Dm+s
Option B:	Dm-s
Option C:	Dm*s
Option D:	Dm/s
Q22.	The sum of 15 deflection is 100, find mean deflection.
Option A:	3.33
Option B:	4.44
Option C:	6.66
Option D:	1.5
Q23.	The damage can be caused to a well-designed pavement in a hot region is by
Option A:	Rain
Option B:	Heat
Option C:	Snow
Option D:	Traffic
Q24.	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
Q25.	The maintenance works are not possible for
Option A:	Shoulder
Option B:	Pavement
Option C:	Embankment
Option D:	Sub grade