Program: BE Civil Engineering

Curriculum Scheme: Revised 2012

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.	Largest dimension of a rail is its
Option A:	height
Option B:	foot width
Option C:	head width
Option D:	any of the above
Q2.	52 kg rails are mostly used in
Option A:	Broad Gauge
Option B:	Meter Gauge
Option C:	Narrow Gauge
Option D:	both (A) and (B)
Q3.	Track modulus is defined As:
Option A:	Load/unit length of sleeper
Option B:	Load/unit length of sleeper to produce depression in rail
Option C:	Load/unit length of rail to produce depression in sleeper
Option D:	Load/unit length of rail to produce unit depression/deflection in track
Q4.	The rail ends rest on a joint sleeper, the joint is termed as
Option A:	supported rail joint
Option B:	suspended rail joint
Option C:	bridge joint
Option D:	base joint
Q5.	Number of dog spikes normally used per rail seat on curved track is
Option A:	one on either side
Option B:	two outside and one inside
Option C:	one outside and two inside
Option D:	two outside and two inside
Q6.	Due to battering action of wheels over the end of the rails, the rails get bent down and are deflected at ends. These rails are called
Option A:	roaring rails
Option B:	hogged rails
Option C:	corrugated rails

Option D:	buckled rails
Q7.	The signals which control the despatch of trains from the station is known as
Option A:	Reception Signals
Option B:	Departure Signal
Option C:	Shunting Signals
Option D:	Special Signals
Q8.	Calculate the total number of rails required for 12 km of a Meter Gauge Track (assume rail length for B.G =11.8 m)
Option A:	1017 rails
Option B:	1236 rails
Option C:	2034 rails
Option D:	1875 rails
Q9.	Calculate the element of turnout for BG track such as Switch Lead,where R_0= 245 mt, N=8.5, G=1.676mt, d=0.114mt.
Option A:	8mt
Option B:	13mt
Option C:	15mt
Option D:	8mt
Q10.	On 8^0 MG track ,the average speed of different trains is 50kmph . Compute equilibrium cant for this meter gauge track
Option A:	7cm
Option B:	8cm
Option C:	10cm
Option D:	12cm
Q11.	The distance through which the tongue rail moves laterally at the toe of the switch for movement of trains is called
Option A:	Flange-way clearance
Option B:	Heel divergence
Option C:	Throw of the switch
Option D:	None of the above
Q12.	The slope of the transitional surface for A, B and C type of runway shall be
Option A:	1:5
Option B:	1:7
Option C:	1:10
Option D:	1:12
Q13.	Effective length of a runway is the distance between

Option A:	Ends of the runway
Option B:	Point of intersection of the obstruction clearance line and the extended plane of the runway surface, and the other end of the runway
Option C:	Point of intersection of the glide path and the extended plane of the runway surface and the other end of the runway
Option D:	Ends of the clear way on either side
Q14.	In instrument landing system
Option A:	L.O.M. and L.M.M. are installed on one side and Localizer antenna on the other side
Option B:	L.O.M. and Localizer are installed on one side and L.M.M. on the other side
Option C:	Localizer and L.M.M. are installed on one side and L.O.M. on the other side
Option D:	Localizer and L.M.M. are installed on both
Q15.	Which of these is not a component of basic aircraft
Option A:	Fuselage
Option B:	Rudder
Option C:	Aileron
Option D:	Radar
Q16.	What is the standard temperature considered for airport
Option A:	12^0C
Option B:	14^0C
Option C:	15^0C
Option D:	18^0C
Q17.	The Horonjeff's equation for Radius of taxiway is
Option A:	$(0.388W^2 /0.5T-S)$
Option B:	$(0.8W^2 /0.5T-S)$
Option C:	$(0.5W^2 /0.5T-S)$
Option D:	$(0.088W^2 /0.5T-S)$
Q18.	wind rose diagram type-II used for the orientation of runway shows
Option A:	Direction and intensity of wind
Option B:	direction of wind
Option C:	direction and duration of wind

Option D:	direction duration and intensity of wind
Q19.	The orientation of the runway should be kept in such a way that the minimum wind coverage of about _____% is obtained
Option A:	65
Option B:	75
Option C:	95
Option D:	55
Q20.	The reduced level of the proposed site of an air port is 100 m above M.S.L. If the recommended length by I.C.A.O. for the runway at sea level is 500 m, the required length of the runway is
Option A:	712 m
Option B:	512 m
Option C:	300m
Option D:	325 m
Q21.	The meteorologic condition which influences the size and location of an air port is
Option A:	atmosphere pressure
Option B:	air density
Option C:	wind direction
Option D:	all the above.
Q22.	At a certain station, the mean of the average temperature is 27° C and mean of the maximum daily temperature is 32°C. What is the airport reference temperature (ART)? All answers are in °C
Option A:	29°C
Option B:	25°C
Option C:	35°C
Option D:	30°C
Q23.	Conical surface of the approach area rises outwards
Option A:	1 in 10
Option B:	1 in 15
Option C:	1 in 20
Option D:	1 in 25
Q24.	is a type of utility based harbour.

Option A:	River harbour
Option B:	Artificial harbour
Option C:	Commercial harbour
Option D:	Canal harbour
Q25.	Platforms for loading and unloading of ships
Option A:	pier
Option B:	wharf
Option C:	quay
Option D:	pier head

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Question	Correct Option (Enter either 'A' or 'B' or 'C' or 'D')
Q1.	A
Q2.	A
Q3.	D
Q4	A
Q5	B
Q6	B
Q7	B
Q8.	C
Q9.	A
Q10.	A
Q11.	C
Q12.	C
Q13.	B
Q14.	B
Q15.	A
Q16.	D
Q17.	C

Q18.	A
Q19.	D
Q20.	C
Q21.	B
Q22.	D
Q23.	A
Q24.	C
Q25.	C