Question : 1 The dducttiliy values of bitumen is_____

A: Equal to that of tar
B : More than that of tar
C : Less than that of tar
D : None of these

Question : 2 In CBR test, the value of CBR is calculated at

A: 2.5 mm penetration only
B : 5.0 mm penetration only
C : 7.5 mm penetration only
D : Both 2.5 mm and 5.9 mm penetrations

Question : 3 If L is the length of vehicles in meters C is the stear distance between two consecutive vehicles (Stopping sight distance), V is the speed of vehicles in km per hour, the maximum number N of vehicles/hour is_____

A: N=1000 VL + CN=1000 VL + C
B : N=L + C1000 VN=L + C1000 V
C : N+1000 VC + VN+1000 VC + V
D : N=1000 CL + VN=1000 CL + V

Question : 4 Which of the following are correct values for coefficient of lateral and longitudinal friction as per IRC?

A: 0.10, 0.15
B : 0.15, 0.35
C : 0.30, 0.10
D : 0.35, 0.15

Question : 5 Calculate the length of one division of the vernier scale, if least count of the combination of main and vernier scale is 0.02 mm. The least count of the main scale is 1mm

A: 1
B : 0.98
C : 1.02
D : 1.03

Question : 6 Which one of the following survey is used to define the property line ?

A: City Survey
B : Candastral survey
C : Land Survey
D : Toppgraphical Survey

Question : 7 Which one is the the upper limit of survey area (square kilometer) for use of palne survey?

A: 250
B : 300
C : 350
D : 450

Question : 8 Which of the following statement in respect of a map A having scale 1:1000 and another map B having scale 1:1000 and is true ?

A: Map A is a large scale map compared to Map B.
B : Map B is a large scale map compared to Map A.
C : Map B is a more detailed map compared to Map A.
D : None of the above

Question : 9 The triaxial test is usually carried out as

A: unconsolidated undrained test
B : Consolidated undrained test
C : Drained test
D : All of the above

Question : 10 In triaxial test, the intermediate principal stress is:

A: Equal to zero
B : Equal to confining pressure
C : Equal to deviator stress
D : Equal to deviator stress minus the confining stress

Question : 11 Average rate of water consumption per head per day as per Indian standard is :

A: 100 litres
B : 135 litres
C : 165 litres
D : 200 litres

Question : 12 A well constructed in ground without passing any impervious stratum, is called as:

A: An infiltration well
B : A tube well
C : An artesian well
D : A shallow well

Question : 13 The total water requirement of a city is generally assessed on the basis of:

A: Maximum hourly demand
B : Maximum daily demand + fire demand
C : Average daily demand + fire demand
D : Greater of (a) and (b)

Question : 14 Water supply includes:

A: Collection, transportation and treatment of water
B : Distribution of water consumers
C : Provision of hydrants for fire fighting
D : All the above

Question : 15 The total water demand may be taken as:

A: 135 l/c/d
B : 160 l/c/d
C : 210 l/c/d
D : 270 l/c/d

Question : 16 The distribution system in water supplies is designed on the basis of:

A: Average daily demand
B : Peak hourly demand
C : Coincident of draft
D : Greater of (b) and (c

Question : 17 The ratio between peak hourly water demand and maximum daily demand (Per hour of course) is:

A: 1.5
B : 1.8
C : 2
D : 2.7

Question : 18 The total water consumption including domestic, commercial demands for average Indian people is:

A: 135 lpcd
B : 210 lpcd
C : 240 lpcd
D : 270 lpcd

Question : 19 The population of a town as per census records were 2,00,000; 2,30,000 for the year 1981, 1991 and 2001 respectively.Find the population of town in the year 2011, Using arithmetic mean method.The answer is

A: 250000
B : 255000
C : 240000
D : 245000

Question : 20 The population of a town as per census records were 2,00,00;2,10,000 and 2,30,000 for the year 1981,1991,and 2001 respectively.The population of the town as per geometric mean method in year 2009 is:

A: 277872
B : 245872
C : 246820
D : None of the above

Question : 21 The velocity of exit waste gases should be a minimum of_____of wind speed to prevent down draught.

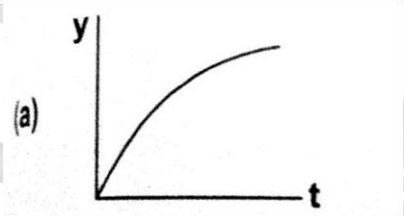
A: 1212
B : 1112112
C : 2122212
D : 3123312

Question : 22 Imhoff come used to determine:

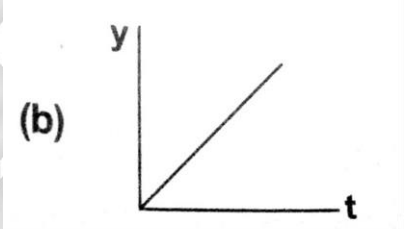
A: Dissolved solids
B : Suspended solids
C : Total solids
D : Setteable solids

Question : 23 The correct graphical representation of BOD and time 't' is given by:

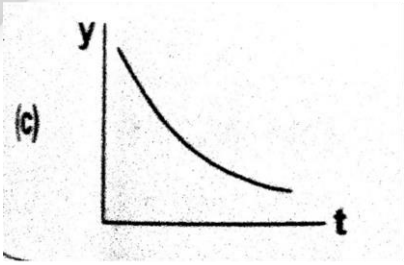
A:



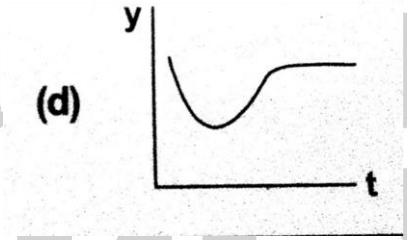
B :



C :



D :



Question : 24 A stream has flow of 20 cumec and BOD concentration of 10 mg/L recevies the industrial waste water having folow of 1.5 cumecs ans BOD concentration of 250 mg/L. What is the BOD concentration (mg/L) of stream at downstream point of meeting of stream with industrial ?

A: 2.67
B : 12.09
C : 13
D : 26.74

Question : 25 A sewer which receives the discharge of a number of house sewer is called :

A: House sewer
B : Lateral sewer
C : Interrupting sewer
D : Sub-Main sewer

Question : 26 The height of the sink of wash basin above floor level is kept

A: 60 cm
B : 70 cm
C : 75 cm
D : 80 cm

Question : 27 For sewage treatment units are normally designed for

A: For 5-10 year
B : For 15-20 year
C : For 30-40 year
D : 40-50 year

Question : 28 The detention period for oxidation ponds is usually kept as:

A: 4-8 hrs
B : 24 hrs
C : 10 to 15 days
D : 3 months

Question : 29 The most efficient method to conserve energy in the form on oil and gases is _____

A: Combusting
B : Fluidized-bed incineration
C : Incineration with hear recoverly
D : Pyrolysis

Question : 30 The moisture content of soil below which for soil volume become constant is called is

A: Liquid limit
B : Plastic limit
C : Shrinkage limit
D : All of these

Question : 31 Density index for a natural soil is used to express

A: Percentage voids
B : Relative compactness
C : Shear strength of clays
D : Specific gravity

Question : 32 Pick up the incorrect statement from the following :

A: Will-graded coarse-grained soil can be compacted to a very high density as compared to fine-graded soil.
B : The dry decreases after attaining optimistic content.
C : By compacting at a high enough water content, we can produce soil at 100% Saturation.
D : None to the above

Question : 33 The property of a soil which permits water to percolate through it, is called

A: Moisture content
B : Permeability
C : Capillarity
D : None of these

Question : 34 Which to the following type of roller is most suitable for proof rolling subgrades and for finishing operation of fills with clayey of sandy soils ?

A: Pneumatic rubber tired roller
B : Sheeps foot roller
C : Smooth wheel roller
D : Vibratory roller

Question : 35 The expression for the discharge (Q) through a flow net for isotropic soil is given by :

A: $Q=KH\times N_fN_oQ=KH\times NfNo$
B : $Q=KH\sqrt{N_F/N_o}Q=KHNF/NO$
C : $Q=KH(N_FN_o)_2Q=KH(NFNO)2$
D : $Q=KH(N_FN_o)_3Q=KH(NFNO)3$

Question : 36 The consolidation time for soils.

A: Increases with increasing compressibility
B : Decreases with increasing permeability
C : Is independent of the stress change
D : All of the above

Question : 37 The pore water pressure in the soil sample of consolidometer test is _____.

A: Maximum at bottom
B : Maximum at centre
C : Maximum at top
D : Minimum at center

Question : 38 In triaxial test, the intermediator principle stress is :

A: Equal to zero
B : Equal to confining pressure
C : Equal to confining pressure
D : Equal to deviator stress

Question : 39 The triaxial teat is usually carried out as

A: Unconsolidated undrained test
B : Consolidation undrained test
C : Drained test
D : All of the above

Question : 40 Which of the following statements in respect of a map A having scale 1 : 1000 and another map B having scale 1 : 5000 is true

A: Map A is a large scale map compared to map B.
B : Map B is a large scale map compacted to map A
C : Map B is a more detailed map compared to map A.
D : Nome of the above