Question : 1 If 1500 g of water is required to have 1875 g cement paste of normal consistency, the percentage of water is _____.

A : 0.2
B : 0.25
C : 30
D : 35

Question : 2 The approximate ratio of strength of cement concrete at 3 moths to that at 28 days of curing is -

A : 1.15
B : 1.3
C : 1
D : 0.75

Question : 3 Lime putty _____.

A : Is made from hydraulic lime
B : Is made by added lime to water
C : Can be used only upto three days
D : All option are correct

Question : 4 The diameter of the Vicat Plunger is 10 mm and its length varies from -

A : 20mm to 30 mm
B : 30 mm to 40
C : 40 to 50 mm
D : 50 to 60 mm

Question : 5 Pick up the incorrect statement from the following:

A : Cement and standard sand mortar are used in the ratio of 1:3
B : Water is added to the rate of P/4 + 3 percentage of water where P is the percentage of water for standard consistency
C : The prepared mould of 10 cm \times 10 cm \times 10 cm is used
D : The prepared moulds are kept in an atmosphere of 50% relative humidity

Question : 6 The centre needle of the attachment of the Vicat plunger projects the circular cutting edge by

A : 0.2 mm
B : 0.5 mm
C : 1 mm
D : 5 mm

Question : 7 The cement becomes useless if its absorbed moisture content exceeds.

A : 0.01
B : 0.02
C : 0.03
D : 0.05

Question : 8 Which of the below is not a plaster finish?

A : Rough-cast
B : Pebble dash
C : Sand faced
D : Wooden

Question : 9 What is the main reason to use lime in the cement slurry during the plastering in the top cost?

A : To make the surface bright
B : To harden the cement
C : To make the plaster non shrinkable
D : To improve the workability of plaster

Question : 10 Plastering is also called :

A : Pre-casting
B : Pargeting
C : Porting
D : Polishing

Question : 11 In plastering the 1st cost in called _____ and its thickness should be _____ mm.

A : Under coat, 6-9
B : Floating coat, 6-9
C : Floating coat, 0-15
D : Under coat, 10-15

Question : 12 The concrete having slump of 6.5 cm is said to be

A : Dry
B : Earth moist
C : Semi plastic
D : Plastic

Question : 13 While compacting the concrete by a mechanical vibrator, the slump should not exceed :

A : 2.5 cm
B : 5.0 cm
C : 7.5 cm
D : 10 cm

Question : 14 The datum temperature for maturity by Plowman, is -

A : 23°C
B : 0°
C : -5.6°C
D : -11.7°

Question : 15 Which of the following represents the correct expression for maturity (m) of the concrete sample?

A : $M = \sum(Time \times Tempreture)$
B : $M = \sum\left(\frac{Time}{Tempreture}\right)$
C : $M = \sum\sqrt{\left(\frac{Time}{Tempreture}\right)}$
D : $M = \sum(Time + Tempreture)$

Question : 16 Transport of concrete by pumps, is done for a distance of

A : 100 m
B : 200 m
C : 300 m
D : 400 m

Question : 17 How many types of chemical admixture are there?

A : 2
B : 3
C : 4
D : 5

Question : 18 Compaction factor for heavily reinforced section with vibration is:

A : < 0.75
B : 0.75 - 0.85
C : 0.85-0.92
D : >0.92

Question : 19 The base material for distemper is :

A : Chalk
B : Lime
C : Clay
D : Lime putty

Question : 20 The detachment of the paint film from the surface is known as____

A : Chalking
B : Cracking
C : Flaking
D : Wrinkling

Question : 21 Dog legged stairs are:

A : Quarter turn stairs
B : Three quarter turn stairs
C : Half turn stairs
D : Straight stairs

Question : 22 For polishing mosaic floors we used;

A : Carbolic acid
B : Muriatic acid
C : Acetic acid
D : Oxalic acid

Question : 23 Bullet proof glass is made of thick glass sheet and a sandwiched layer of_____.

A : Steel
B : Stainless steel
C : High strength plastic
D : Chromium plate

Question : 24 Which one of the following material is used as a bonding admixture.

A : natural rubber
B : synthetic rubber
C : Organic polymers
D : All option are correct

Question : 25 Which of the following tests are used for testing of tiles?
1. Breaking strength test
2. Impact test
3. Transverse strength test
4. Water absorption test

A : 1 and2
B : 1,2 and 3
C : 1,2 and 4
D : 1,2,3 and 4

Question : 26 The permissible limit of arsenic in drinking water as per the guidelines of WHO is

A : 0.01 ppm
B : 0.01 ppb
C : 0.05 ppm
D : 0.05 ppb

Question : 27 Which of the following is the minimum limit (ppm) of the dissolved oxygen that must be in the water for survival of aquatic life ?

A : 1
B : 4
C : 10
D : 40

Question : 28 In a B-coli test, the use of green lactose bile is made in

A : The presumptive test
B : The confirmed test
C : The completed test.
D : None of these

Question : 29 A fundamental difference between sedimentation tank for water and sewage is

A : Sewage sedimentation tanks are bigger
B : Sewage sedimentation tanks have more depth
C : Sludge from sewage sedimentation is to be removed more frequently
D : It can be the final treatment of operation in water treatment

Question : 30 The most suitable solid waste disposal method for rural area is :

A : Land filling
B : Deep well injection
C : Composting
D : Incineration

Question : 31 Pollutant Standards Index (PSI) value in between 101-199 denotes the air quality as

A : Good
B : Moderate
C : Unhealthy
D : Hazardous

Question : 32 Which of the following are primary air pollutants?

A : Sulphur dioxide and Nitrogen oxides
B : Ozone and carbon monoxide
C : Sulphur dioxide and ozone
D : Nitrogen oxide and zone

Question : 33 The path taken by the continuous discharge of gaseous effluent emitted from chimney of commonly known as

A : Lapse rate
B : Inversion
C : Plume
D : None of these

Question : 34 Standard penetration resistance in very stiff clays lies between:

A : 2 and 4
B : 4 and 8
C : 8 and 15
D : 15 and 30

Question : 35 Which one of the following has least bearing capacity?

A : Loose gravel
B : hard rocks
C : Soft rocks
D : Compact gravel

Question : 36 A raft foundation is provided if its area exceeds the plan area of the building by.

A : 0.1
B : 0.2
C : 0.3
D : 0.5

Question : 37 Undisturbed samples are obtained by:

A : Direct excavations
B : Thin walled samplers
C : Thick walled samplers
D : None of these

Question : 38 The lime stabilization is very effective in treating:

A : Sandy soils
B : Silty soils
C : Non-plastic soils
D : Plastic clayey soils

Question : 39 The recommended camber for water-bound macadam road is:

A : 1 in 40 to 1 in 50
B : 1 in 33 to 1 in 40
C : 1 in 25 to 1 in 33
D : 1 in 20 to 1 in 25

Question : 40 Gradient on a highway is 1 in 20. Radius of the curve is 200m. After grade compensation the grade to be provided should not be less than 4% Calculate the grade compensation.

A : 0.0038
B : 0.0115
C : 0.0463
D : 0.05

Question : 41 A flyover seggregates traffic with respect to

A : Direction
B : Grade
C : Speed
D : Class and vehicle

Question : 42 The traffic volume of a roadway is defined as the multiplication of

A : Speed and time headway
B : Speed and distance way
C : Traffic density and speed
D : Time head way and distance headway

Question : 43 Expansion joints are provided if the length of concrete structures exceeds :

A : More than 10 m
B : More than 15 m
C : More than 35 m
D : More than 45 m

Question : 44 The expression for the total volume of earth work for an embankment using simpson's one third rule, If $A^1, A^2, A^3, A^4, \ldots\ldots, A^{n-1}$ and A^n are the areas at n sections at an interval of h is

A : $\frac{h}{3} \times [(A_1 + A_n) + 4(A_2 + A_4 + \ldots.) + 2(A_3 + A_5) + \ldots.]$
B : $\frac{h}{3} \times [(A_1 + A_n) + 2(A_2 + A_4 + \ldots.) + 4(A_3 + A_5) + \ldots.]$
C : $\frac{h}{3} \times [(A_1 + A_n) + 4(A_2 + A_4 + \ldots.) + (A_3 + A_5) + \ldots.]$
D : $\frac{h}{3} \times [\frac{(A_1 + A_n)}{4} + (A_2 + A_4 + \ldots.) + (A_3 + A_5) + \ldots.]$

Question : 45 Plotting of inaccessible point on a plane table is done by

A : Intersection
B : Traversing
C : Radiation
D : None of these

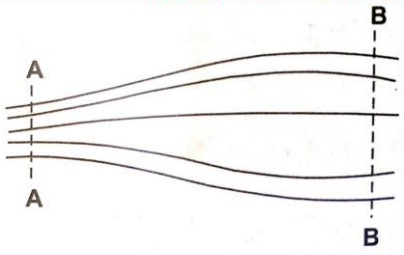
Question : 46 Incineration method in plane table surveying is most suitable for:

A : Plains
B : Forests
C : Urban areas
D : Hilly areas

Question : 47 The best method of interpolation of contour is by

A : Estimation
B : Graphical mean
C : Computation
D : All of these

Question : 48 Section A-A indicates -



A : Steep slope
B : Flat slope
C : Uniform slope
D : Ridge

Question : 49 Which one of the following is most important parameter for the removal of discrete particles in design of continuous flow rectangular sedimentation tank?

A : Depth of tank
B : Length of tank
C : Surface overflow rate
D : Temperature of water to be treated