Q: 1 A bull nose brick is not used for .

OP 1: Rounding off sharp

corners

OP 2 : Pillars

OP 3: Decoration purpose

OP 4 : Arches

Q: 2 When a brick is cut into two halves longitudinally, one part is called:

OP 1 : King closer OP 2 : Cornice brick OP 3 : Queen closer OP 4 : Voussoir

Q: 3 If the depth of moist sand in a cylinder is 15 cm and the depth of the sand when fully inundated with water is 12 cm, then what is the bulking of the moist sand?

OP 1: 0.1 OP 2: 0.2 OP 3: 0.15 OP 4: 0.25

Q: 4 If 't' is the thickness of MS plate in mm, the standard weight (in kg) of the MS plate per sq. meter is:

OP 1: 5.87 t OP 2: 7.85 t OP 3: 8.75 t OP 4: 8.57 t

Q: 5 The total number of links provided in a Gunter's chain is

OP 1: 132 OP 2: 100 OP 3: 66 OP 4: 50

Q: 6 The grain size (mm) of medium grained sand lies between

OP 1: 0.425 to 0.075 OP 2: 2.0 to 0.425 OP 3: 4.75 to 2.0 OP 4: 20 to 4.75

Q: 7 A turbidimeter using blue cobalt palte is :

OP 1 : Jackson turbidimeter OP 2 : Baylis turbidimeter OP 3 : Tube turbidimeter OP 4 : Plate turbidimeter

Q: 8 Asbestos is:

OP 1 : A corrugated sheet used

for roofing.

OP 2 : An incombustible

fireproof material

OP 3: An organic substance

OP 4: All the above

Q: 9 If the stopping distance and average length of a vehicle are 18 m and 6 m respectively, then the theoretical maximum capacity (vehicles per hour) of a traffic lane at a speed of 10 m/sec is:

OP 1: 1500 OP 2: 2000 OP 3: 2500 OP 4: 3000

Q: 10 Which one of the following is used as a carrier in paint?

OP 1 : Almond oil OP 2 : Linseed oil OP 3 : Mustard oil OP 4 : Olive oil

Q: 11 The ingredient of paint which are used to hide the surface irregularities and imparts color is known as _____.

OP 1 : Adultrants OP 2 : Drier OP 3 : Pigments OP 4 : Solvents

Q: 12 The distemper is used to coat:

OP 1 : External concrete surface

OP 2 : Interior surface not exposed to weather
OP 3 : Woodwork
OP 4 : Compound wells

OP 4 : Compound walls

Q: 13 The operation of removing humps and hollows of uniform concrete surface is known as:

OP 1: Floating
OP 2: Screeding
OP 3: Trowelling
OP 4: Finishing
Q: 14 Resins are:

OP 1 : Not soluble in water OP 2 : Soluble in spirit OP 3 : Used in varnishes OP 4 : All of above

Q: 15 The amount of standard soap solution required to obtain a permanent lather with a water sample of known volume with constant shaking determines the total hardness in:

OP 1 : Dr. Clark's process OP 2 : Hehner's process OP 3 : William's process OP 4 : Durkheim's process Q: 16 Which one is the correct order of the tapes based on their accuracy?

OP 1: Linen tape > Invar tape > Metallic tape > Steel tape
OP 2: Invar tape > Steel tape > Metallic tape > linen tape
OP 3: Metallic tape > steel tape
> Linen tape > Invar tape
OP 4: Metallic tape > Steel tape
> Invar tape > Invar tape

Q: 17 For one cubic meter of concrete (1 : 2 : 4), the number of cement bags required is

OP 1: 4.5 OP 2: 5 OP 3: 5.3 OP 4: 6.3

Q: 18 Break point' in break point chlorination curve is a point for which the residual chlorine for an applied dose of chlorine is:

OP 1 : Maximum OP 2 : Minimum OP 3 : zero

OP 4 : In the stage when chlorination of water should be stopped

Q: 19 The value which protect the water meter from the damages of water hammer:

OP 1: Pressure relief valve

OP 2 : Stop cock
OP 3 : Reflux value

OP 4: Water hammer valve

Q: 20 The commonly used thinner in oil paints is:

OP 1 : Naptha
OP 2 : Turpentine
OP 3 : Both (a) and (b)
OP 4 : Neither (a) and (b)

Q: 21 The ultimate tensile strength of the structural mild steel is:

OP 1: 160 N/mm² OP 2: 260N/mm² OP 3: 420 N/mm² OP 4: 520 N/mm²

Q: 22 Putty is made up of:

OP 1 : Red lead and linseed oil OP 2 : Zinc oxide and boiled linseed oil

OP 3: White lead and turpentine OP 4: Powdweed chalk and raw linseed oil



Q: 23 Which of the following is the main composition of granite?

OP 1: Quartz, feldspar and mica

OP 2 : Quartz and lime OP 3 : Quartz and silica

OP 4 : Silica, lime and alumina

Q: 24 Pick cross sections for a highway is taken at____

OP 1 : Right angle to the center

OP 2: 30 meters apart OP 3: Intermediate points having abrupt change in gradient

OP 4 : All option are correct

Q: 25 A stone is rejected if it absorbs water more than

OP 1: 0.05 OP 2: 0.1 OP 3: 0.2 OP 4: 0.25 Q: 26 Bitumen in

OP 1 : Solid state is called

asphalt

OP 2 : Semifluid state is called

mineral tar

OP 3 : Fluid state is called

petroleum

OP 4: All of the above

Q: 27 Difference in length of an arc and its subtended chord on earth's surface a distance of 18.2 km is-

OP 1 : 10 mm OP 2 : 15 mm OP 3 : 22 mm OP 4 : 100 mm

Upheaval

Q: 28 Geologic cycle for the formation of soil, is_____.

OP 1: Upheaval - Transportation - Deposition - Weathering OP 2: Weathering - Upheaval - Transportation - Deposition OP 3: Transportation - Upheaval - Weathering - Deposition OP 4: Weathering - Transportation - Deposition -

Q: 29 Which of the following statement is CORRECT for estimating the corrected area from a map of shrunk factor 'F'?

OP 1 : It is directly proportional to F

OP 2 : It is directly proportional to square of F

OP 3 : It is inversely proportional to F

OP 4 : It is inversely proportional to square of F

Q: 30 Nitrates more than 45 mg/l in water lead to disease called:

OP 1 : Gwastroenteritis

OP 2: Mottled teeth

OP 3: Polio

OP 4: None of these

Q: 31 The total water requirement of a city is generally assessed on the basis of:

OP 1 : Maximum hourly demand OP 2 : Maximum daily demand + fire demand

OP 3 : Average daily demand + fire demand

OP 4: Greater of (a) and (b)

Q: 32 The ratio of discharge and plan area of a continuous flow type setting tank is known as

OP 1 : Surface loading

OP 2 : Overflow OP 3 : Overflow rate OP 4 : All of above

Q: 33 Out of the following, which may be termed as an unstratified Rock?

OP 1 : Sandstone OP 2 : Limestone OP 3 : Marble OP 4 : Slate

Q: 34 Capillary pores in the hydrated cement paste:

OP 1: Are not interconnected and contain adsorbed water OP 2: Are interconnected and may not contain water

OP 3: Are interconnected and contain water that can be used for subsequent hydration of cement

OP 4 : Are not interconnected but contain some quantity of gel

Q: 35 Strength based classification of bric is made on the basis of

OP 1 : IS : 3101 OP 2 : IS : 3102 OP 3 : IS : 3495 OP 4 : IS : 3496

Q: 36 Calculate the number of bricks required for a 5 cubic metre brick wall/

OP 1: 250 OP 2: 600 OP 3: 1500 OP 4: 2500

Q: 37 If the void ratio and discharge velocity for soil is 0.5 and $6 \times 10^{-7}6 \times 10^{-7}$ m/s respectively, what is the value of seepage velocity (m/s)?

OP 1: $3 \times 10^{-7}3 \times 10^{-7}$ **OP 2**: $6 \times 10^{-7}6 \times 10^{-7}$ **OP 3**: $12 \times 10^{-7}12 \times 10^{-7}$ **OP 4**: $18 \times 10^{-7}18 \times 10^{-7}$

Q: 38 Snow create is one of the patent forms of

OP 1: Distemper

OP 2 : Water proof cement paint

OP 3 : Enamel paint OP 4 : Cellulose paint

Q: 39 Which of the following shows the correct order of increasing surface areas of the given soil?

OP 1 : Clay < silt < sand < colloids

OP 2 : Gravel < silt < colloids < clay

OP 3 : Sand < silt < clay < colloids

OP 4 : Silt < gravel < colloids <

Q: 40 What is the surface area (m²) of the setting tank used for design discharge of 1.5 m³/s?(Assume depth overflow rate for tank as 40 m³/m²/day)

OP 1: 2045.32 OP 2: 3240.44 OP 3: 4525.33 OP 4: 5076.13



Q: 41 Which of the following statements is true?

OP 1: Addition of pozzolana to cement decreases workability OP 2: Addition of pozzolana to cement increases strength OP 3: Addition of pozzolana to cement increases heat of

hydration

OP 4: None of these

Q: 42 Which of the following is used as the vehicle in the enamel paints?

OP 1 : Linseed oil OP 2 : Mustard OP 3 : Varnish OP 4 : Water

Q: 43 For bituminous materials, vacuum capillary viscometers are used for the determination of:

OP 1 : Absolute viscosity OP 2 : Industrial viscosity OP 3 : Both the above OP 4 : None of these

Q: 44 The viscosity and unitweight of the percolating fluid are reduced to 5% and 95% respectively due to rise in temperature. If other thing remains constant, the coefficient of permeability will be:

OP 1 : Increased by 26% OP 2 : Increased by 53%

OP 3: 0.343

OP 4: None of these

Q: 45 Determine the number of divisions required on the vernier scale, if it is combined with the main scale of least count 0.5 mm. The least count of the combination required is 0.05 mm for the direct vernier.

OP 1: 0.025 OP 2: 0.1 OP 3: 1 OP 4: 10

Q: 46 The meniscus and dispersing agent corrections, in the hydrometer analysis, respectively are:

OP 1: Positive and negative OP 2: Negative and positive OP 3: positive and positive OP 4: Negative and negative Q: 47 Chemically, marble is known as

OP 1 : Metamorphic rock OP 2 : Argillaceous rock OP 3 : Calcareous rock OP 4 : Siliceous rock

Q: 48 The ratio of liquid limit to plasticity index for a soil mass is called:

OP 1: Liquidity index
OP 2: Shrinkage ratio
OP 3: Consistency index
OP 4: None of the above
Q: 49 The shape of the brick gets
deformed due to rain water
falling on hot brick. The defect is

OP 1 : Chuffs
OP 2 : Bloating
OP 3 : Nodules
OP 4 : Lamination

Known as

Q: 50 Pick up the incorrect statement:

OP 1 : Sluice valves are provided to allow flow of water only in one direction, preventing backflow

OP 2 : Air valves are provided at summits along a pipeline to admit/release air

OP 3: scour valves are provided at low points to empty a pipeline OP 4: Gate valves are provided to regulate flow of water through the pipelines

Q: 51 The sub classification of sedimentary rocks

OP 1 : Volcanic and plutonic

OP 2 : Mechanical, chemical, organic

OP 3 : Intrusive, extrusive OP 4 : Stratified, unstratified Q: 52 Bitumen emulsion is :

OP 1 : Liquid containing bitumen in suspension

OP 2 : Paint

OP 3 : Used as anti corrosive paint

OP 4 : All of these

Q: 53 If the soil sample is having porosity 50% and degrees of saturation at 90% then its percentage air voids is:

OP 1: 0.05 OP 2: 0.5 OP 3: 0.45 Q: 54 According to atterberg, the soil is said to be of medium plasticity index (PI) is:

OP 1: 0< PI < 7

OP 2: $7 \le PI \le 177 \le PI \le 17$

OP 3 : 17 < PI < 27 OP 4 : PI ≥ 27PI ≥ 27

Q: 55 A layer of dry bricks put below the foundation concrete, in the case of soft soils, is called:

OP 1 : Soling OP 2 : Shoring OP 3 : D.P.C.

OP 4: None of these

Q: 56 Rocks having alumina or clay as their major constituent are called

OP 1 : Siliceous rocks
OP 2 : Argillaceous rocks
OP 3 : Sedimentary rock
OP 4 : None of these

Q: 57 Which one of the following sequences is the most suitable for treating raw surface water to make it suitable for treating raw surface water to make it suitable for drinking purpose?

OP 1:

Screening $\rightarrow \rightarrow$ filtration $\rightarrow \rightarrow$ sedi mentation $\rightarrow \rightarrow$ disinfection OP 2 :

Screening $\rightarrow \rightarrow$ disinfection $\rightarrow \rightarrow$ sedimentation $\rightarrow \rightarrow$ filtration OP 3 :

Screening $\rightarrow \rightarrow$ sedimentation \rightarrow disinfection $\rightarrow \rightarrow$ filtration OP 4:

Screening $\rightarrow \rightarrow$ sedimentation \rightarrow \rightarrow filtration $\rightarrow \rightarrow$ disinfection

Q:58 An explosive which contains:65% saltpetre, 20% sulphur and 15% charcoal is

OP 1 : Dynamite
OP 2 : Nitrocellulose
OP 3 : Blasting powder
OP 4 : Cordite

Q: 59 The penetration test on bitumen is used for determining

OP 1 : Grade
OP 2 : Ductility
OP 3 : Viscosity
OP 4 : None of these



Q: 60 In ordinary Portland cement, the first one to react with water is: OP 1: C3AC3A OP 2: C2SC2S OP 3: C3SC3S OP 4: C4AFC4AF

OP 4: C4AFC4AF Q: 61 The shape of the STOP sign according to IS: 67-2001 is

OP 1 : Circular OP 2 : Triangular OP 3 : Rectangular OP 4 : Octagonal

Q: 62 What is the psychological widening of a pavement on horizontal curve of radius 230m for ruling speed 80 kmph?

OP 1: 0.455m OP 2: 0555m OP 3: 0.186m OP 4: 0.136m

Q: 63 Select cement out of the following which may be used in mass concrete construction?

I. Low heat Portland cement

II. Portland blast furnace slag cement

III. Portland pozzolana cement IV.Rapid hardening Portland cement

The correct answer is

OP 1 : Only I OP 2 : I and II OP 3 : I,II and III OP 4 : AII

Q : 64 correction per chain length of 100 links along a slope of $\alpha\alpha$ is

OP 1 : 1.5α2α2/100 OP 2 : 1.5αα/100 OP 3 : 1.5α3α3/100 OP 4 : 1.5α3α3

Q: 65 Clay bricks are made of earth having:

OP 1 : Nearly equal proportion of silica & Alumina

OP 2 : Nearly equal proportion of

Alumina, Silica & Lime OP 3: 35 - 70% silica and 10 20% alumina OP 4: 10 - 20% silica and 35 70% alumina OF 4: 10 - 20% silica and 35 Towns alumina