The workability of concrete is defined as the

(a) Ease with which it can be mixed, transported and placed in position in a homogeneous state.

(b) Bearing up of cohesion in a mass concrete.

(c) Separation of water from the freshly mixed concrete.

(d) None of these.

The length of the vicat plunger is

(a) 40mm

(b) 60mm

(c) 50mm

(d) 30mm

Sand that is recommended for R.C.C work should have fineness modulus.

(a) 0-2

(b) 2-3.5

(c) 3-4.5

(d) 4-5

Water cement ratio is

(a) Weight of water to that of cement.

(b) Weight of concrete to that of water.

(c) Volume of concrete to that of water.

(d) All the above.

Segregation in concrete results in

(a) Honey combing

(b) Porous Layers

(c) Surface scaling

(d) All the above

Reinforced cement concrete is equally strong in taking

(a) Tensile and compressive stress

(b) Compressive and shear stresses.

(c) Tensile, compressive and shear stresses.

(d) Tensile and shear stresses.

The removal of excess air after placing concrete helps in increasing the strength of concrete by

(a) 15 to 20%

(b) 20 to 30%

(c) 30 to 50%

(d) 50 to 70%

Cement concrete is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_to moisture

(a) Permeable

(b) Impermeable

(c) Rapid Harden

(d) None of these

Calcareous and argillaceous materials used in manufacture of cement consists of

(a) Lime stone

(b) Chalk

(c) Shales

(d) All the above

Which of the following ingredient of cement when added in excess quantity, causes the cement to set slowly.

(a) Lime

(b) Silica

(c) Alumina

(d) Iron oxide

After the final grinding, the cement is sieved through IS sieve number

(a) 9

(b) 12

(c) 24

(d) 48

The presence of dicalcium silicate in cement.

(a) Hydrates the cement slowly.

(b) Generates less heat of hydration.

(c) Has more resistance to sulphate attack.

(d) All of these

The rate of hydration is \_\_\_\_\_\_\_\_\_\_\_proportional to the generation of heat

(a) Directly

(b) Indirectly

(c) Equally

(d) None of these

Which of the following cements is expected to have the highest compressive strength after 3 days

(a) Ordinary Portland cement

(b) Rapid hardening cement

(c) High alumina cement

(d) Sulphate resisting cement.

The degree of grinding of cement is called

(a) Fineness

(b) Soundness

(c)Impact value

(d) Bulking

The percentage of water for making a cement paste of normal consistency varies from

(a) 15 to 25%

(b) 25 to 35%

(c) 35 to 50%

(d) 50 to 60%

For performing the compressive strength test of cement, the size of cube mould should be

(a) 7.06cm

(b) 75mm

(c) 80mm

(d) All the above

For reinforced concrete, the aggregate used is

(a) Sand

(b) Gravel

(c) Crushed rock

(d) All of these

An aggregate which may contain some moisture in the pores but having dry surface is known as.

(a) Dry aggregate

(b) Moist aggregate

(c) Saturated surface dry aggregate

(d) All the above

The resistance of an aggregates to wear is known as

(a) Shear value

(b) Crushing value

(c) Abrasion value

(d) Impact value

The standard sand now used in India is obtained from

(a) Ennore (Chennai)

(b) Mumbai

(c) Orissa

(d) Jajpur

The development of first 28 days strength is on account of the hydration of

(a) Tricalcium silicate

(b) Dicalcium silicate

(c) Tricalcium aluminate

(d) Tetra calcium alumina ferrite