

Building Materials

Question No. 01

Which of the following has more fire resisting characteristics?

- (A) Marble
- (B) Lime stone
- (C) Compact sand stone
- (D) Granite

Answer: Option C

Question No. 02

The rocks which are formed due to cooling of magma at a considerable depth from earth's surface are called

- (A) Plutonic rocks
- (B) Hypabyssal rocks
- (C) Volcanic rocks
- (D) Igneous rocks

Answer: Option A

Question No. 03

Plywood has the advantage of

- (A) Greater tensile strength in longer direction
- (B) Greater tensile strength in shorter direction
- (C) Same tensile strength in all directions
- (D) None of the above

Answer: Option C

Question No. 04

Due to attack of dry rot, the timber

- (A) Cracks
- (B) Shrinks
- (C) Reduces to powder
- (D) None of these

Answer: Option C

Question No. 05

Excess of alumina in brick earth makes the brick

- (A) Impermeable
- (B) Brittle and weak
- (C) To lose cohesion
- (D) To crack and warp on drying

Answer: Option D

Question No. 06

Pick up the correct statement from the following:

- (A) In stone arches, the stones are placed with their natural beds radial
- (B) In cornices, the stones are placed with their natural beds as vertical
- (C) In stone walls, the stones are placed with their natural beds as horizontal
- (D) All the above

Answer: Option D

Question No. 07

The constituent of cement which is responsible for all the undesirable properties of cement is

- (A) Di-calcium silicate
- (B) Tri-calcium silicate
- (C) Tri-calcium aluminate
- (D) Tetra calcium alumino ferrite

Answer: Option C

Question No. 08

Inner part of a timber log surrounding the pitch, is called

- (A) Sapwood
- (B) Cambium layer
- (C) Heart wood
- (D) None to these

Answer: Option C

Question No. 09

For testing compressive and tensile strength of cement, the cement mortar is made by mixing cement and standard sand in the proportions of

- (A) 1 : 2
- (B) 1 : 3
- (C) 1 : 4
- (D) 1 : 6

Answer: Option B

Question No. 10

If 'P' is the percentage of water required for normal consistency, water to be added for determination of initial setting time, is

- (A) $0.70 P$
- (B) $0.75 P$
- (C) $0.80 P$
- (D) $0.85 P$

Answer: Option D

Question No. 11

The basic purpose of a retarder in concrete is

- (A) To increase the initial setting time of cement paste in concrete

- (B) To decrease the initial setting time of cement paste in concrete
- (C) To render the concrete more water tight
- (D) To improve the workability of concrete mix

Answer: Option A

Question No. 12

Clay and silt content in a good brick earth must be at least

- (A) 50 %
- (B) 40 %
- (C) 30 %
- (D) 25 %

Answer: Option A

Question No. 13

Which of the following is the purest form of iron?

- (A) Cast iron
- (B) Wrought iron
- (C) Mild steel
- (D) High carbon steel

Answer: Option B

Question No. 14

If the iron ore contains clay as an impurity, the flux added during calcination, is

- (A) Clay
- (B) Lime stone
- (C) Argillaceous iron ore
- (D) All the above

Answer: Option B

Question No. 15

The stretcher bond in brick masonry can be used only when the thickness of wall is

- (A) 90 mm
- (B) 180 mm
- (C) 190 mm
- (D) 280 mm

Answer: Option A

Question No. 16

The plywood

- (A) Has good strength along the panel only
- (B) Can be spilt in the plane of the panel
- (C) Has greater impact resistance to blows than ordinary wood
- (D) Cannot be bent more easily than ordinary wood of same thickness

Answer: Option C

Question No. 17

Pick up the correct statement from the following:

- (A) The phenol is carbolic acid
- (B) The phenol is either extracted from coal-tar or prepared from benzene
- (C) Phenol reacts with formaldehyde, to form phenol formaldehyde resin
- (D) All the above

Answer: Option D

Question No. 18

Advantage of a clamp compared to a kiln for burning bricks is that

- (A) It takes less time for burning
- (B) It gives more output of first class bricks
- (C) It has less initial cost
- (D) It is suitable when bricks are required in large numbers

Answer: Option C

Question No. 19

Pick up the correct statement from the following:

- (A) Solder material is an alloy which melts at a temperature above 400°C
- (B) Brazing is done at temperature above 600°C to 1100°C
- (C) Brazing joint is stronger than the solder joint
- (D) All the above

Answer: Option D

Question No. 20

Assertion A : Pure lime takes a long time to develop adequate strength.

Reason R : Pure lime has slow hardening characteristics.

Select your answer according to the coding system given below:

- (A) Both A and R is true and R is correct explanation of A
- (B) Both A and R is true and R is not a correct explanation of A
- (C) A is true but R is false
- (D) A is false but R is true

Answer: Option A

Question No. 21

During puddling

- (A) Molten metal is kept clear of the fuel
- (B) Carbon is converted into carbonic acid gas
- (C) Silicon forms a slag
- (D) All the above

Answer: Option D

Question No. 22

Early attainment of strength in rapid hardening cement is mainly due to

- (A) Gypsum

- (B) Finer grinding
- (C) Tri-calcium silicate
- (D) Tri-calcium aluminate

Answer: Option B

Question No. 23

Pick up the correct statement from the following:

- (A) Quick lime is obtained by burning pure lime stone
- (B) Hydraulic lime is obtained by burning lime stone containing clay 5% to 30%
- (C) Poor lime is obtained by burning lime stone containing impurities more than 5%
- (D) All the above

Answer: Option D

Question No. 24

Which of the following cements contains maximum percentage of dicalcium silicate?

- (A) Ordinary Portland cement
- (B) Low heat cement
- (C) Rapid hardening cement
- (D) Sulphate resisting cement

Answer: Option B

Question No. 25

Pick up the incorrect statement from the following:

- (A) Hydraulic lime is generally obtained by burning kankar
- (B) Hydraulic lime sets slowly as compared to fat lime
- (C) Hydraulic lime is generally used in lime mortar
- (D) None of these

Answer: Option D

Question No. 26

Which of the following stresses is used for identifying the quality of structural steel?

- (A) Ultimate stress
- (B) Yield stress
- (C) Proof stress
- (D) None of the above

Answer: Option B

Question No. 27

Quick lime

- (A) Generates heat when added to water
- (B) Reacts with carbon dioxide
- (C) May be used for white-washing
- (D) All the above

Answer: Option D

Question No. 28

Assertion A : Normally turpentine oil is recommended as thinner for indoor painting.

Reason R : Turpentine oil is costlier than other thinners.

Select your answer according to the coding system given below:

- (A) Both A and R is true and R is the correct explanation of A
- (B) Both A and R is true but R is not the correct explanation of A
- (C) A is true but R is false
- (D) A is false but R is true

Answer: Option B

Question No. 29

Putty is

- (A) Made with finely powdered chalk and linseed oil
- (B) Used for fixing glass panes
- (C) Softened by a solution of pearl ash and quick-lime soaked in water
- (D) All the above

Answer: Option D

Question No. 30

A mortar joint in masonry which is normal to the face of wall is known as

- (A) Bed joint
- (B) Wall joint
- (C) Cross joint
- (D) Bonded joint

Answer: Option C

Question No. 31

A volatile substance added to a paint to make its application easy and smooth, is known as

- (A) Base
- (B) Solvent
- (C) Vehicle
- (D) None to these

Answer: Option B

Question No. 32

Jumper is a tool used for

- (A) Testing of stones
- (B) Quarrying of stones
- (C) Dressing of stones
- (D) None of the above

Answer: Option B

Question No. 33

Pick up the volcanic rock from the following:

- (A) Granite

- (B) Dolerite
 - (C) Basalt
 - (D) All the above
- Answer: Option C

Question No. 34

Sapwood consists of

- (A) Innermost annular rings around the pith
 - (B) Portion of timber between heartwood and cambium layer
 - (C) Thin layers below the bark
 - (D) Thin fibre which extends from the pith outwards and holds the annular rings together
- Answer: Option B

Question No. 35

Strength of cement concrete primarily depends upon

- (A) Quality of water
 - (B) Quantity of aggregate
 - (C) Quantity of cement
 - (D) Water-cement ratio
- Answer: Option D

Question No. 36

The main function of alumina in brick earth is

- (A) To impart plasticity
 - (B) To make the brick durable
 - (C) To prevent shrinkage
 - (D) To make the brick impermeable
- Answer: Option A

Question No. 37

Cast iron

- (A) Is obtained by purifying pig iron
 - (B) Is manufactured in required shapes
 - (C) May contain 2 to 5 per cent of carbon with other impurities
 - (D) All the above
- Answer: Option D

Question No. 38

Which of the following pairs gives a correct combination of the useful and harmful constituents respectively of a good brick earth?

- (A) Lime stone and alumina
 - (B) Silica and alkalies
 - (C) Alumina and iron
 - (D) Alkalies and magnesium
- Answer: Option B

Question No. 39

Pick up the correct statement from the following:

- (A) The distinct plane of division along which a stone can easily be split, is called natural bed of stone
- (B) The natural bed of sedimentary rocks is along the planes of stratification
- (C) The natural bed of igneous rocks is not defined
- (D) All the above

Answer: Option D

Question No. 40

Hydraulic lime is obtained by

- (A) Burning of lime stone
- (B) Burning of kankar
- (C) Adding water to quick lime
- (D) Calcination of pure clay

Answer: Option B

Question No. 41

Oil varnish generally consists of

- (A) Synthetic resin and spirit
- (B) Oil, wax and resin
- (C) Resin, oil and turpentine
- (D) Spirit, oil and wax

Answer: Option C

Question No. 42

For testing compressive strength of cement, the size of cube used is

- (A) 50 mm
- (B) 70.6 mm
- (C) 100 mm
- (D) 150 mm

Answer: Option A

Question No. 43

When a brick is immersed in water for 24 hours and then dried, if

- (A) No grey or white deposits appear on the surface, the brick is free from soluble salts
- (B) 10 percent surface is covered with grey or white deposits, the brick has slight efflorescence
- (C) 50 percent surface is covered with grey or white deposits, the brick has serious efflorescence
- (D) All the above

Answer: Option D

Question No. 44

Gypsum consists of

- (A) H_2S and CO_2
- (B) $CaSO_4$ and H_2O

- (C) Lime and H₂O
 - (D) CO₂ and calcium
- Answer: Option B

Question No. 45

For sanitary pipes and chemical stonewares,

- (A) Salt glazing is used
- (B) Lead glazing is used
- (C) Opaque glazing is used
- (D) None of these

Answer: Option A

Question No. 46

The most commonly used retarder in cement is

- (A) Gypsum
- (B) Calcium chloride
- (C) Calcium carbonate
- (D) None of the above

Answer: Option A

Question No. 47

The rocks which are formed due to cooling of magma at a relatively shallow depth from the earth's surface are called

- (A) Plutonic rocks
- (B) Hypabyssal rocks
- (C) Volcanic rocks
- (D) Igneous rocks

Answer: Option B

Question No. 48

The ratio of the thickness of web to that of flange of steel rolled structural beams and channels is

- (A) Less than 1
- (B) Equal to 1
- (C) Greater than 1
- (D) Less than 1 in beams but greater than 1 in channels

Answer: Option A

Question No. 49

Non acid-resistant asbestos is:

- (A) Tremolite asbestos
- (B) Chrysotile asbestos
- (C) Amosite asbestos
- (D) None of these

Answer: Option B

Question No. 50

The pressure acting on the stones in stone masonry construction should be

- (A) Along the direction of bedding planes
- (B) At 45° to the direction of bedding planes
- (C) At 60° to the direction of bedding planes
- (D) Perpendicular to the direction of bedding planes

Answer: Option D

Question No. 51

Pick up the constituent of good brick earth whose excess causes the raw bricks shrink and warp during drying and burning, from the following:

- (A) Alumina
- (B) Lime
- (C) Iron-oxide
- (D) Magnesia

Answer: Option A

Question No. 52

The type of bond provided in brick masonry for carrying heavy loads is

- (A) Single Flemish bond
- (B) Double Flemish bond
- (C) English bond
- (D) Zigzag bond

Answer: Option C

Question No. 53

Blister steel

- (A) Is obtained by cementation process
- (B) Is full of fissures and cavities
- (C) Can be easily welded
- (D) All the above

Answer: Option D

Question No. 54

Gypsum is a

- (A) Mechanically formed sedimentary rock
- (B) Igneous rock
- (C) Chemically precipitated sedimentary rock
- (D) Metamorphic rock

Answer: Option C

Question No. 55

Seasoning of timber is done

- (A) To make it water proof
- (B) To paint its surface

- (C) To increase its temperature
- (D) To remove water

Answer: Option D

Question No. 56

Which of the following is a rock?

- (A) Quartz
- (B) Mica
- (C) Gypsum
- (D) None of the above

Answer: Option C

Question No. 57

The tendency of a stone is, to split along:

- (A) Texture
- (B) Fracture
- (C) Cleavage
- (D) Structure

Answer: Option C

Question No. 58

Which of the following stone is best suited for construction of piers and abutments of a railway bridge?

- (A) Granite
- (B) Sand stone
- (C) Lime stone
- (D) Quartzite

Answer: Option A

Question No. 59

Cast iron contains carbon approximately

- (A) 1.5% to 5.5%
- (B) 0.05% to 1.75%
- (C) 0.250 %
- (D) None to these

Answer: Option A

Question No. 60

Which of the following trees yields hard wood?

- (A) Deodar
- (B) Chir
- (C) Shishum
- (D) Pine

Answer: Option C

Question No. 61

Soundness of cement is tested by

- (A) Vicat's apparatus
- (B) Le-chatelier apparatus
- (C) Compressive strength testing apparatus
- (D) None of these

Answer: Option B

Question No. 62

First class timber has an average life of

- (A) Less than one year
- (B) 1 to 5 years
- (C) 5 to 10 years
- (D) More than 10 years

Answer: Option D

Question No. 63

Bitumen may be dissolved in

- (A) Carbondioxide
- (B) Water
- (C) Sodium chloride
- (D) Carbon disulphide

Answer: Option D

Question No. 64

Which of the following ingredients of the brick earth enables the brick to retain its shape?

- (A) Alumina
- (B) Silica
- (C) Iron
- (D) Magnesia

Answer: Option B

Question No. 65

Veneering means

- (A) Carving out designs on timber planks
- (B) Chemically treating timber planks
- (C) Thick layer of superior wood glued to inferior wood
- (D) Thin layer of superior wood glued to inferior wood

Answer: Option C

Question No. 66

Number of bricks required for one cubic metre of brick masonry is

- (A) 400
- (B) 450
- (C) 500

(D) 550

Answer: Option C

Question No. 67

Which one of the following is used for preparing porcelain?

- (A) Clay
- (B) Feldspar
- (C) Quartz
- (D) All of these

Answer: Option D

Question No. 68

The main ingredients of Portland cement are

- (A) Lime and silica
- (B) Lime and alumina
- (C) Silica and alumina
- (D) Lime and iron

Answer: Option A

Question No. 69

Pick up the correct statement from the following:

- (A) Blistering may be cured by applying water paint finished with oil paint dried with a little copal varnish
- (B) Cracked paints may be cured by removing paint and giving a fresh coat of paint
- (C) Crawling paints may be cured by sand preparing the surface and giving a fresh coat with plenty of turps
- (D) All the above

Answer: Option D

Question No. 70

After storage, the strength of cement

- (A) Decreases
- (B) Increases
- (C) Remains same
- (D) May increase or decrease

Answer: Option A

Question No. 71

A bull nose brick is not used for

- (A) Rounding off sharp corners
- (B) Pillars
- (C) Decoration purpose
- (D) Arches

Answer: Option D

Question No. 72

The most common admixture which is used to accelerate the initial set of concrete is

- (A) Gypsum
- (B) Calcium chloride
- (C) Calcium carbonate
- (D) None of the above

Answer: Option B

Question No. 73

Chlorite, a green colour mineral is mainly derived from the decomposition of

- (A) Augite
- (B) Biotite
- (C) Hornblende
- (D) All of these

Answer: Option A

Question No. 74

The ultimate tensile strength of structural mild steel is about

- (A) 160 N/mm²
- (B) 260 N/mm²
- (C) 420 N/mm²
- (D) 520 N/mm²

Answer: Option C

Question No. 75

Asbestos

- (A) Is a natural fibrous mineral substance
- (B) Is composed of hydrous silicates of calcium and magnesium (CaSiO_3 , 3MgSiO_3)
- (C) Contains iron oxide and alumina
- (D) All the above

Answer: Option D

Question No. 76

A queen closer is a

- (A) Brick laid with its length parallel to the face or direction of wall
- (B) Brick laid with its breadth parallel to the face or direction of wall
- (C) Brick having the same length and depth as the other bricks but half the breadth
- (D) Brick with half the width at one end and full width at the other

Answer: Option C

Question No. 77

The percentage of alumina and silica in good fire clay vary respectively is

- (A) 25, 75
- (B) 30, 70
- (C) 35, 65

(D) All of these

Answer: Option A

Question No. 78

The proportions of lime and sand in the mortar normally used in brick construction are

(A) 1 : 2

(B) 1 : 4

(C) 1 : 6

(D) 1 : 8

Answer: Option A

Question No. 79

Index number expressing the relative sizes of both coarse and fine aggregates, is called

(A) Proportioning of aggregates

(B) Fineness modulus

(C) Grading of aggregates

(D) None of these

Answer: Option B

Question No. 80

Which of the following sedimentary rocks changes into quartzite by metamorphic action?

(A) Sand stone

(B) Lime stone

(C) Shale

(D) Gypsum

Answer: Option A

Question No. 81

Lime putty

(A) Is made from hydraulic lime

(B) Is made by adding lime to water

(C) Can be used only upto three days

(D) All of above

Answer: Option D

Question No. 82

The stone suitable for rubble masonry should be.

(A) Hard

(B) Tough

(C) Heavy

(D) Light

Answer: Option A

Question No. 83

Pick up the correct statement from the following:

- (A) Air bubbles in casting produce a dull sound by tapping their surfaces lightly with a hammer
- (B) Cupola furnace is used for the manufacture of cast iron
- (C) Red short iron is of no value for welding purpose
- (D) All the above

Answer: Option D

Question No. 84

Spalling hammer is used for

- (A) Driving wooden headed chisels
- (B) Rough dressing of stones
- (C) Carving of stones
- (D) Breaking small projection of stones

Answer: Option B

Question No. 85

Bullet proof glass is made of thick glass sheet sandwiched by a layer of

- (A) Steel
- (B) Stainless steel
- (C) High test plastic
- (D) Chromium plate

Answer: Option C

Question No. 86

Plywood is made by bonding together thin layers of wood in such a way that the angle between grains of any layer to grains of adjacent layers is

- (A) 0°
- (B) 30°
- (C) 45°
- (D) 90°

Answer: Option D

Question No. 87

According to IS 399-1963, the weight of the timber is specified at

- (A) 8% moisture content
- (B) 10% moisture content
- (C) 12% moisture content
- (D) 14% moisture content

Answer: Option C

Question No. 88

The internal size of mould used in brick preparation is

- (A) Equal to the size of a fully burnt brick
- (B) Smaller than the size of a fully burnt brick
- (C) Greater than the size of a fully burnt brick
- (D) None of the above

Answer: Option C

Question No. 89

Pick up the correct statement from the following:

- (A) The free quartz suddenly expands at a temperature lower than 600°C
- (B) The lime stone resists fire upto about 800°C and at higher temperature it splits into CaO and CO₂
- (C) The sand stone with silicates resist a fire in a better way
- (D) All the above

Answer: Option D

Question No. 90

Quick lime is

- (A) Calcium carbonate
- (B) Calcium oxide
- (C) Calcium hydroxide
- (D) None of the above

Answer: Option B

Question No. 91

Pick up the correct statement from the following:

- (A) Styrene resin is produced from ethylene which is made from petroleum
- (B) Styrene resin is light in weight
- (C) Styrene resin transmits ultraviolet waves of light
- (D) All the above

Answer: Option D

Question No. 92

The initial setting time for ordinary Portland cement as per IS specifications should not be less than

- (A) 10 minutes
- (B) 30 minutes
- (C) 60 minutes
- (D) 600 minutes

Answer: Option B

Question No. 93

Rapid hardening cement attains early strength due to

- (A) Larger proportion of lime grounded finer than normal cement
- (B) Lesser proportion of lime grounded coarser than normal cement
- (C) Lesser proportion of lime grounded finer than normal cement
- (D) Excess percentage of gypsum

Answer: Option A

Question No. 94

With increase in moisture content, the bulking of sand

- (A) Increases
- (B) Decreases
- (C) First increases to a certain maximum value and then decreases
- (D) First decreases to a certain minimum value and then increases

Answer: Option C

Question No. 95

Plywood is normally available

- (A) 1 mm thick
- (B) 2 mm thick
- (C) 2 to 3 mm thick
- (D) 3 mm to 4 mm thick

Answer: Option D

Question No. 96

Compared to mild steel, cast iron has

- (i) High compressive strength**
- (ii) High tensile strength**
- (iii) Low compressive strength**
- (iv) Low tensile strength**

The correct answer is

- (A) (i) and (ii)
- (B) (ii) and (iii)
- (C) (iii) and (iv)
- (D) (i) and (iv)

Answer: Option D

Question No. 97

In a mortar, the binding material is

- (A) Cement
- (B) Sand
- (C) Surkhi
- (D) Cinder

Answer: Option A

Question No. 98

The vehicle used in case of enamel paints is usually

- (A) Linseed oil
- (B) Water
- (C) Varnish
- (D) None of the above

Answer: Option C

Question No. 99

In the method of condensation polymerization,

- (A) Low-molecular substances are removed from the high molecular substance
- (B) The reaction proceeds with an evolution of ammonia
- (C) The reaction proceeds with an evolution of hydrogen chloride
- (D) All of the above

Answer: Option D

Question No. 100

The slenderness ratio for masonry walls should not be more than

- (A) 10
- (B) 20
- (C) 30
- (D) 40

Answer: Option B

Question No. 101

Sand stone is

- (A) Sedimentary rock
- (B) Metamorphic rock
- (C) Igneous rock
- (D) Volcanic rock

Answer: Option A

Question No. 102

Which of the following represents a metamorphic rock?

- (i) Slate
- (ii) Shale
- (iii) Quartzite

The correct answer is

- (A) Only (iii)
- (B) Both (i) and (iii)
- (C) Both (ii) and (iii)
- (D) All (i), (ii) and (iii)

Answer: Option B

Question No. 103

For the manufacture of Portland cement, the proportions of raw materials used, are

- (A) Lime 63% ; silica 22% ; other ingredients 15%
- (B) Lime 22% ; silica 63% ; other ingredients 15%
- (C) Silica 40% ; lime 40% ; other ingredients 20%
- (D) Silica 70% ; lime 20% ; other ingredients 10%

Answer: Option A

Question No. 104

A good building stone should not absorb water more than

- (A) 5 %
- (B) 10 %
- (C) 15 %
- (D) 20 %

Answer: Option A

Question No. 105

Good quality stones must

- (A) Be durable
- (B) Be free from clay
- (C) Resist action of acids
- (D) All the above

Answer: Option D

Question No. 106

Specific gravity for most of the building stones lies between

- (A) 1.5 to 2.0
- (B) 2.0 to 2.5
- (C) 2.5 to 3.0
- (D) 3.0 to 3.5

Answer: Option C

Question No. 107

Initial setting time of cement for asbestos cement products should be not less than

- (A) 30 minutes
- (B) 50 minutes
- (C) 75 minutes
- (D) 90 minutes

Answer: Option D

Question No. 108

The age of a tree can be known by examining

- (A) Cambium layer
- (B) Annular rings
- (C) Medullary rays
- (D) Heart wood

Answer: Option B

Question No. 109

Pick up the correct statement from the following:

- (A) In basic Bessemer process, the steel heats the converter
- (B) In open-hearth process, the furnace heats the steel
- (C) In Siemens process, the impurities of pig iron are oxidised by the oxygen of the ore

(D) All the above

Answer: Option D

Question No. 110

Percentage of silica in a good brick earth lies between

(A) 5 to 10 %

(B) 20 to 30 %

(C) 50 to 60 %

(D) 70 to 80 %

Answer: Option C

Question No. 111

Resins are

(A) Not soluble in water

(B) Soluble in spirit

(C) Used in varnishes

(D) Left behind on evaporation of oil

Answer: Option C

Question No. 112

Quick lime is

(i) Slow in setting

(ii) Rapid in slacking

(iii) Good in strength

The correct answer is

(A) Only (i)

(B) Only (ii)

(C) Both (i) and (ii)

(D) Both (ii) and (iii)

Answer: Option C

Question No. 113

Pick up the correct statement from the following:

(A) Soft stones are required for carving

(B) Light stones are required for arches

(C) Hard stones are required to stand high pressure

(D) All the above

Answer: Option D

Question No. 114

As per IS specifications, the maximum final setting time for ordinary Portland cement should be

(A) 30 minutes

(B) 1 hour

(C) 6 hours

(D) 10 hours

Answer: Option D

Question No. 115

Shingle is

- (A) Decomposed laterite
- (B) Crushed granite
- (C) Water bound pebbles
- (D) Air weathered rock

Answer: Option A

Question No. 116

Proper amount of entrained air in concrete results in

- (i) Better workability**
- (ii) Better resistance to freezing and thawing**
- (iii) Lesser workability**
- (iv) Less resistance to freezing and thawing**

The correct answer is

- (A) (i) and (ii)
- (B) (i) and (iv)
- (C) (ii) and (iii)
- (D) (iii) and (iv)

Answer: Option A

Question No. 117

Pick up the correct statement from the following: Method of sawing timber

- (A) Tangentially to annual rings, is known as tangential method
- (B) In four quarters such that each board cuts annual rings at angles not less than 45° , is known as quarter sawing method
- (C) Cut out of quarter logs, parallel to the medullary rays and perpendicular to annual rings, is known as radial sawing
- (D) All the above

Answer: Option D

Question No. 118

Assertion A : Paints with white lead base are not recommended for painting of iron works.

Reason R : Paints with white lead base do not check rusting of iron.

Select your answer according to the coding system given below:

- (A) Both A and R is true and, R is the correct explanation of A
- (B) Both A and R is true but R is not the correct explanation of A
- (C) A is true but R is false
- (D) A is false but R is true

Answer: Option A

Question No. 119

Pick up the correct statement from the following:

- (A) Alexander Parkes, a Scottish chemist prepared a hard material by mixing camphor and alcohol with nitro cellulose and called it, as *Parkesite*
- (B) Dr. L. Bakeland, a Belgian scientist prepared a product known as Bakelite
- (C) Pollark, an Austrian scientist prepared a substance from urea and formaldehyde and called it Plastic
- (D) All the above

Answer: Option D

Question No. 120

Expansion Joints in masonry walls are provided in wall lengths usater than

- (A) 10 m
- (B) 20 m
- (C) 30 m
- (D) 40 m

Answer: Option D

Question No. 121

Cast steel is manufactured by

- (A) Cementation process
- (B) Crucible process
- (C) Bessemer process
- (D) Open hearth process

Answer: Option B

Question No. 122

Based on the following rocks and minerals, select the correct statement, quartz, shale, basalt, granite, marble, gypsum, mica

- (A) Basalt and marble are the only metamorphic rocks
- (B) There is no sedimentary rock
- (C) Granite is the only igneous rock
- (D) Quartz and mica are minerals

Answer: Option D

Question No. 123

The foliated structure is very common in

- (A) Sedimentary rocks
- (B) Igneous rocks
- (C) Metamorphic rocks
- (D) None of these

Answer: Option C

Question No. 124

Cross cut saw is used for

- (A) Cutting soft stones
- (B) Cutting hard stones

- (C) Cutting large blocks of stones
- (D) Dressing stones

Answer: Option B

Question No. 125

Pick up the correct statement from the following:

- (A) Catalysts are added to assist and accelerate the hardening of resin
- (B) The fillers are inert materials and they impart strength and hardness
- (C) Fibrous fillers increase thermal resistance
- (D) All the above

Answer: Option D

Question No. 126

A first class brick when immersed in cold water for 24 hours should not absorb water more than

- (A) 15 %
- (B) 20 %
- (C) 22 %
- (D) 25 %

Answer: Option B

Question No. 127

The minimum compressive strength of 2nd class bricks should be

- (A) 75 kg/cm²
- (B) 90 kg/cm²
- (C) 100 kg/cm²
- (D) 120 kg/cm²

Answer: Option A

Question No. 128

Which of the following bricks are used for lining of furnaces?

- (A) Over-burnt bricks
- (B) Under-burnt bricks
- (C) Refractory bricks
- (D) First class bricks

Answer: Option C

Question No. 129

Bulking of sand is caused due to

- (A) Surface moisture
- (B) Air voids
- (C) Viscosity
- (D) Clay contents

Answer: Option A

Question No. 130

According to IS specifications, the compressive strength of ordinary Portland cement after three days should not be less than

- (A) 7 MPa
- (B) 11.5 MPa
- (C) 16 MPa
- (D) 21 MPa

Answer: Option C

Question No. 131

Pick up the correct statement from the following:

- (A) Plastics have generally low melting point
- (B) The coefficient of thermal expansion of plastics is about three times than that of steel
- (C) The acoustical boards prepared by impregnating fibre-glass with phenolic resins has absorption coefficient of about 0.67
- (D) All the above

Answer: Option D

Question No. 132

The amount of water used for one kg of distemper is

- (A) 0.2 liter
- (B) 0.4 liter
- (C) 0.6 liter
- (D) 0.8 liter

Answer: Option C

Question No. 133

Smith's test of stones is performed to find out

- (A) The presence of soluble matter of stone
- (B) The compressive strength of the stone
- (C) The hardness of the stone
- (D) The toughness of the stone

Answer: Option A

Question No. 134

The most important tool in brick laying for lifting and spreading mortar and for forming joints is

- (A) Trowel
- (B) Square
- (C) Bolster
- (D) Scutch

Answer: Option A

Question No. 135

The weight of 1 m³ of brick earth, is about

- (A) 1200 kg

- (B) 1500 kg
- (C) 1800 kg
- (D) 2000 kg

Answer: Option C

Question No. 136

Which of the following is a mineral?

- (A) Basalt
- (B) Granite
- (C) Quartz
- (D) Syenite

Answer: Option C

Question No. 137

Age of a tree may be ascertained by

- (A) Radius of its stem
- (B) Circumference of its stem
- (C) Number of branches
- (D) Number of annual rings

Answer: Option D

Question No. 138

Crushing strength of a good building stone should be more than

- (A) 50 MPa
- (B) 100 MPa
- (C) 150 MPa
- (D) 200 MPa

Answer: Option B

Question No. 139

Generally wooden moulds are made from

- (A) Ply wood
- (B) Shishum wood
- (C) Deodar wood
- (D) Teak wood

Answer: Option B

Question No. 140

The nominal size of the modular brick is

- (A) 190 mm × 90 mm × 80 mm
- (B) 190 mm × 190 mm × 90 mm
- (C) 200 mm × 100 mm × 100 mm
- (D) 200 mm × 200 mm × 100 mm

Answer: Option C

Question No. 141

Bitumen is generally obtained from

- (A) Organic material
- (B) Synthetic material
- (C) Petroleum product
- (D) Coal

Answer: Option C

Question No. 142

The main constituent which imparts hydraulicity to hydraulic lime is

- (A) Calcium oxide
- (B) Silica
- (C) Clay
- (D) Water

Answer: Option C

Question No. 143

Calcination of iron ores is done

- (A) To remove moisture
- (B) To remove carbonic acid
- (C) By roasting in heaps
- (D) All the above

Answer: Option D

Question No. 144

Which of the following cements is suitable for use in massive concrete structures such as large dams?

- (A) Ordinary Portland cement
- (B) Low heat cement
- (C) Rapid hardening cement
- (D) Sulphate resisting cement

Answer: Option B

Question No. 145

The commonly used thinner in oil paints, is

- (A) Naphtha
- (B) Turpentine
- (C) Both (a) and (b)
- (D) None the these

Answer: Option C

Question No. 146

Minimum thickness of wall where single Flemish bond can be used is

- (A) Half brick thick
- (B) One brick thick

- (C) One and a half bricks thick
 - (D) Two bricks thick
- Answer: Option C

Question No. 147

The pigment used in paints for corrosive resistance, is

- (A) White lead
- (B) Ferrous oxide
- (C) Zinc white
- (D) Red lead

Answer: Option D

Question No. 148

Slate is formed by metamorphic action on

- (A) Shale
- (B) Lime stone
- (C) Sand stone
- (D) Granite

Answer: Option A

Question No. 149

Sea sand used in structures causes

- (A) Dampness
- (B) Efflorescence
- (C) Disintegration
- (D) All of these

Answer: Option D

Question No. 150

The trunk of tree left after cutting all the branches is known as

- (A) Log
- (B) Batten
- (C) Plank
- (D) Balk

Answer: Option A

Question No. 151

The weight of a good quality brick when immersed in water for a period of 16 hours should not exceed the weight of dry brick

- (A) 20 %
- (B) 15 %
- (C) 10 %
- (D) None of these

Answer: Option A

Question No. 152

Pug mill is used for

- (A) Preparation of clay
- (B) Moulding of clay
- (C) Drying of bricks
- (D) Burning of bricks

Answer: Option A

Question No. 153

Pick up the synthetic resin from the following:

- (A) Urea resin
- (B) Phenolic resin
- (C) Resorcinol resin
- (D) All of these

Answer: Option D

Question No. 154

Addition of pozzolana to ordinary Portland cement increases

- (A) Bleeding
- (B) Shrinkage
- (C) Permeability
- (D) Heat of hydration

Answer: Option B

Question No. 155

Plastics are compounds of carbon with element

- (A) Hydrogen
- (B) Nitrogen
- (C) Oxygen
- (D) All of these

Answer: Option D

Question No. 156

Paints with white lead base are suitable for painting of

- (A) Wood work
- (B) Iron work
- (C) Both wood work and iron work
- (D) None of the above

Answer: Option A

Question No. 157

For a good building stone, its specific gravity should be greater than

- (A) 1.5
- (B) 1.7
- (C) 2.2

(D) 2.7

Answer: Option D

Question No. 158

Sandstone is a

- (i) Sedimentary rock**
- (ii) Aqueous rock**
- (iii) Siliceous rock**

The correct answer is

- (A) Only (i)
- (B) Both (i) and (ii)
- (C) Both (i) and (iii)
- (D) All (i), (ii) and (iii)

Answer: Option D

Question No. 159

The rocks having alumina or clay as their major constituents are known as

- (A) Siliceous rocks
- (B) Argillaceous rocks
- (C) Calcareous rocks
- (D) Sedimentary rocks

Answer: Option B

Question No. 160

The practical limit of moisture content achieved in air drying of timber is

- (A) 5 %
- (B) 15 %
- (C) 25 %
- (D) 35 %

Answer: Option B

Question No. 161

Glazing of clay products, is done

- (A) To improve their appearance
- (B) To protect them from atmospheric effect
- (C) To protect them from corrosive action
- (D) All the above

Answer: Option D

Question No. 162

Study the following statements.

- (i) Hydraulic lime is suitable for white washing,**
- (ii) Fat lime is suitable for whitewashing,**
- (iii) Hydraulic lime is suitable for making mortar,**
- (iv) Fat lime is suitable for making mortar.**

The correct answer is

- (A) (i) and (iv)
- (B) (ii) and (iii)
- (C) (i) and (ii)
- (D) (iii) and (iv)

Answer: Option B

Question No. 163

The yield strength and tensile strength of low carbon steel may be improved by the addition of

- (A) Manganese
- (B) Chromium
- (C) Nickel
- (D) Vanadium

Answer: Option D

Question No. 164

Three basic raw materials which are needed in large quantities for production of steel are

- (A) Iron ore, coal and sulphur
- (B) Iron ore, carbon and sulphur
- (C) Iron ore, coal and lime stone
- (D) Iron ore, carbon and lime stone

Answer: Option C

Question No. 165

To give a brilliant finish, the type of varnish used, is

- (A) Water varnish
- (B) Spirit varnish
- (C) Turpentine varnish
- (D) Oil varnish

Answer: Option B

Question No. 166

Which of the following should be used for hearting of thicker walls?

- (A) Headers
- (B) Stretchers
- (C) Brick bats
- (D) Queen closer

Answer: Option A

Question No. 167

Asbestos

- (A) Is an excellent insulator for heat and electricity
- (B) Is fire-proof and acid proof
- (C) Has sp. gravity equal to 3.10
- (D) All the above

Answer: Option D

Question No. 168

A heavy stone is suitable for

- (A) Arches
- (B) Rubble masonry
- (C) Roads
- (D) Retaining walls

Answer: Option D

Question No. 169

Pick up the correct statement from the following:

- (A) Blisters in the finished wrought iron, are caused due to the reaction between oxide of iron and carbon
- (B) The edges of a finished wrought iron are rough due to red shortage
- (C) Pig iron (charcoal) is manufactured from magnetic ore (Fe_3O_4)
- (D) All the above

Answer: Option D

Question No. 170

The percentage of alumina in a good brick earth lies between

- (A) 5 to 10 %
- (B) 20 to 30 %
- (C) 50 to 60 %
- (D) 70 to 80 %

Answer: Option B

Question No. 171

Pig iron made from haematite ores free from sulphur, phosphorus and copper, is known as

- (A) Bessemer pig
- (B) Grey or foundry pig
- (C) White or forge pig
- (D) Mottled pig

Answer: Option A

Question No. 172

Le-Chatelier's device is used for determining the

- (A) Setting time of cement
- (B) Soundness of cement
- (C) Tensile strength of cement
- (D) Compressive strength of cement

Answer: Option B

Question No. 173

Red short iron cracks when bent due to the presence of

- (A) Sulphur
- (B) Carbon
- (C) Phosphorus
- (D) Silicon

Answer: Option A

Question No. 174

Percentage of carbon content in mild steel is

- (A) Less than 0.25
- (B) Between 0.25 and 0.7
- (C) Between 0.7 and 1.5
- (D) Greater than 1.5

Answer: Option A

Question No. 175

The method of addition polymerization is used for obtaining:

- (A) Polystyrene
- (B) Polypropylene
- (C) Polyvinylchloride
- (D) All of these

Answer: Option D

Question No. 176

Which of the following metamorphic rocks has the most weather resisting characteristics?

- (A) Marble
- (B) Quartzite
- (C) Slate
- (D) Lime stone

Answer: Option B

Question No. 177

To retard the initial setting time of cement, the compound responsible, is

- (A) Tri-calcium silicate
- (B) Gypsum
- (C) Di-calcium silicate
- (D) Tri-calcium aluminate

Answer: Option B

Question No. 178

Seasoning of timber is done for

- (A) Increasing moisture content
- (B) Decreasing moisture content
- (C) Increasing strength of timber
- (D) None to these

Answer: Option B

Question No. 179

The steel used for the manufacture of rails, is

- (A) Bessemer steel
- (B) Mild steel
- (C) Cast steel
- (D) Stainless steel

Answer: Option A

Question No. 180

Durability of building stone is affected by its

- (A) Chemical composition
- (B) Texture
- (C) Resistance to atmosphere
- (D) All the above

Answer: Option D

Question No. 181

Pick up the most favourable condition for the rapid growth of fungus for dry rot from the following:

- (A) Absence of sun light
- (B) Dampness
- (C) Presence of sap
- (D) All the above

Answer: Option D

Question No. 182

Crushing strength of a first class brick should not be less than

- (A) 3.5 N/mm²
- (B) 7.0 N/mm²
- (C) 10.5 N/mm²
- (D) 14.0 N/mm²

Answer: Option C

Question No. 183

Pick up the correct statement from the following:

- (A) Rust is due to formation of oxides
- (B) Cast iron oxidises less
- (C) Steel oxidises most
- (D) All the above

Answer: Option D

Question No. 184

The main constituent of cement which is responsible for initial setting of cement is

- (A) Di-calcium silicate
- (B) Tri-calcium silicate

- (C) Tri-calcium aluminate
- (D) All of the above

Answer: Option C

Question No. 185

Pick up the correct statement from the following:

- (A) The low voltage porcelain is prepared by wet process
- (B) The high voltage porcelain is prepared by dry process
- (C) The low voltage porcelain is prepared by dry process
- (D) None of the above

Answer: Option C

Question No. 186

In brick masonry the bond produced by laying alternate headers and stretchers in each course is known as

- (A) English bond
- (B) Double Flemish bond
- (C) Zigzag bond
- (D) Single Flemish bond

Answer: Option B

Question No. 187

In stone masonry, if stones are so placed that their layers are parallel to the direction of load, they

- (A) Split easily
- (B) Are affected by moisture
- (C) Both (A) and (B)
- (D) None of these

Answer: Option C

Question No. 188

Granite is not suitable for ordinary building purpose because

- (A) It cannot be polished
- (B) It is not a fire proof material
- (C) It is costly
- (D) It has less crushing strength

Answer: Option C

Question No. 189

Lacquer paints

- (A) Are generally applied on structural steel
- (B) Are less durable as compared to enamel paints
- (C) Consist of resin and nitro-cellulose
- (D) All the above

Answer: Option D

Question No. 190

Glazing is used to make earthenware

- (A) Hard
- (B) Soft
- (C) Porous
- (D) Impervious

Answer: Option D

Question No. 191

In the cement the compound quickest to react with water, is

- (A) Tri-calcium aluminate
- (B) Tetra-calcium alumino-ferrite
- (C) Tri-calcium silicate
- (D) Di-calcium silicate

Answer: Option A

Question No. 192

Which of the following gradients exerts maximum influence on properties of steel?

- (A) Iron
- (B) Carbon
- (C) Manganese
- (D) Sulphur

Answer: Option B

Question No. 193

Stainless steel contains

- (A) 18% of chromium and 8% nickel
- (B) 8% of chromium and 18% of nickel
- (C) 12% of chromium and 36% of nickel
- (D) 36% of chromium and 12% of nickel

Answer: Option A

Question No. 194

Excess of silica in brick earth results in

- (A) Cracking and warping of bricks
- (B) Loss of cohesion
- (C) Enhancing the impermeability of bricks
- (D) None of the above

Answer: Option B

Question No. 195

Which one of the following is acid resistant asbestos?

- (A) Actinolite asbestos
- (B) Amosite asbestos
- (C) Anthophyllite asbestos

(D) All the above

Answer: Option D

Question No. 196

The slump recommended for mass concrete is about

- (A) 25 mm to 50 mm
- (B) 50 mm to 100 mm
- (C) 100 mm to 125 mm
- (D) 125 mm to 150 mm

Answer: Option A

Question No. 197

For preparing porcelains, the clay should be

- (A) Sufficiently pure
- (B) Of high degree of tenacity
- (C) Of good plasticity
- (D) All the above

Answer: Option D

Question No. 198

For melting one tonne of cast iron

- (A) 700 m³ air is required
- (B) 20 kg limestone is required
- (C) One quintal coke is required
- (D) All the above

Answer: Option D

Question No. 199

Pick up the correct statement regarding low heat cement from the following:

- (A) It possesses less compressive strength
- (B) Its initial setting time is about one hour
- (C) Its final setting time is about 10 hours
- (D) All the above

Answer: Option D

Question No. 200

Quick lime (or caustic lime)

- (A) Is obtained by the calcination of pure lime stone
- (B) Has great affinity to moisture
- (C) Is amorphous
- (D) All the above

Answer: Option D

Question No. 201

The commonly used lime in white washing, is

- (A) White lime
- (B) Fat lime
- (C) Hydraulic lime
- (D) Quick lime

Answer: Option B

Question No. 202

For slaking of 10 kg of CaO, the theoretical amount of water is

- (A) 2.2 kg
- (B) 1.5 kg
- (C) 3.2 kg
- (D) None of these

Answer: Option C

Question No. 203

Plywood is made from

- (A) Common timber
- (B) Bamboo fibre
- (C) Teak wood only
- (D) Asbestos sheets

Answer: Option C

Question No. 204

A 1st class brick immersed in water for 24 hours, should not absorb water (by weight) more than

- (A) 10 %
- (B) 15 %
- (C) 20 %
- (D) 25 %

Answer: Option C

Question No. 205

The preparation of surface of stone to obtain plain edges or to obtain stones of required size and shape is known as

- (A) Quarrying of stones
- (B) Blasting of stones
- (C) Seasoning of stones
- (D) Dressing of stones

Answer: Option D

Question No. 206

The hardest rock is

- (A) Marble
- (B) Diamond
- (C) Talc
- (D) Quartz

Answer: Option B

Question No. 207

Wrought iron is used for

- (A) Structural works in beams
- (B) Small sized water pipes
- (C) Columns and struts
- (D) None to these

Answer: Option B

Question No. 208

Pick up the correct statement from the following:

- (A) Corrugated sheet iron is made by passing plain sheets between grooved rollers
- (B) Strength and stiffness of corrugated sheets are considerably increased
- (C) Corrugated sheets are generally used on slanting roofs
- (D) All the above

Answer: Option D

Question No. 209

The process of mixing clay, water and other ingredients to make brick is known as

- (A) Kneading
- (B) Moulding
- (C) Pugging
- (D) Drying

Answer: Option A

Question No. 210

The type of steel used for precision levelling staff, is

- (A) Titanium steel
- (B) Carbon steel
- (C) Invar
- (D) Stainless steel

Answer: Option C

Question No. 211

Formula for quick lime, is

- (A) CaCO_3
- (B) Ca(OH)_2
- (C) CO_3CO_2
- (D) None to these

Answer: Option A

Question No. 212

The process of decarbonising the pig iron completely and then adding proper percentage of carbon for manufacturing steel, is called

- (A) Cementation process
- (B) Crucible process
- (C) Bessemer process
- (D) Open hearth process

Answer: Option A

Question No. 213

The maximum quantity of calcium chloride used as an accelerator in cement in percentage by weight of cement is

- (A) 1
- (B) 2
- (C) 3
- (D) 4

Answer: Option B

Question No. 214

Which one of the following polymers is obtained from condensation polymerization?

- (A) Phenol formaldehyde
- (B) Carbamide
- (C) Melamine-formaldehyde
- (D) All of these

Answer: Option D

Question No. 215

The portion of a brick cut to form angles other than right angles in plan, is known as

- (A) Queen closer
- (B) King closer
- (C) Closer
- (D) Squint brick

Answer: Option D

Question No. 216

The moisture content in a well seasoned timber is

- (A) 4 % to 6 %
- (B) 10 % to 12 %
- (C) 15 % to 20 %
- (D) 100 %

Answer: Option B

Question No. 217

The cement becomes unsound by the presence of excess

- (A) Sulphur
- (B) Magnesia
- (C) Lime
- (D) All of these

Answer: Option D

Question No. 218

For one cubic metre of brick masonry, number of bricks required, is

- (A) 400
- (B) 425
- (C) 450
- (D) 500

Answer: Option D

Question No. 219

Rapid hardening cement contains

- (A) Tri-calcium silicate
- (B) Tri-calcium aluminate
- (C) Tetra-calcium alumino-ferrite
- (D) Di-calcium silicate

Answer: Option A

Question No. 220

In order of increasing percentage of silica, the correct sequence is

- (A) Sandy clay, calcareous clay, pure clay
- (B) Calcareous clay, pure clay, sandy clay
- (C) Pure clay, sandy clay, calcareous clay
- (D) None of these

Answer: Option B

Question No. 221

Which of the following timbers is suitable for making sports goods?

- (A) Mulberry
- (B) Mahogany
- (C) Sal
- (D) Deodar

Answer: Option A

Question No. 222

The stones obtained by blasting are used as

- (A) Ballast in railways
- (B) Aggregates for concrete
- (C) Road metal
- (D) All the above

Answer: Option D

Question No. 223

Pick up the correct statement from the following:

- (A) Acid test is done to find out the weathering quality of stones

- (B) Attrition test is done to find out the rate of wear of stones which are used in road construction
- (C) Crushing test is done to find out the compressive strength of the stone
- (D) All the above

Answer: Option D

Question No. 224

Mastic asphalt is

- (A) Water proof
- (B) Fire proof
- (C) Elastic
- (D) All the above

Answer: Option D

Question No. 225

Pick up the correct statement from the following:

- (A) Lime is available in Free State
- (B) Lime is available by dissolving calcium carbonate in water
- (C) Lime is available by calcining calcium carbonate at 900°C
- (D) Lime is nothing but calcium chloride

Answer: Option C

Question No. 226

The frog of the brick in a brick masonry is generally kept on

- (A) Bottom face
- (B) Top face
- (C) Shorter side
- (D) Longer side

Answer: Option B

Question No. 227

Pick up the correct statement from the following:

- (A) Roasting is not necessary if iron ore is an oxide
- (B) Impurities float on the molten iron as slag
- (C) The slag contains lime about 45%
- (D) All the above

Answer: Option D

Question No. 228

For obtaining vinyl chloride acetate, the method used, is

- (A) Addition polymerization
- (B) Condensation polymerization
- (C) Co-polymerization
- (D) None of these

Answer: Option C

Question No. 229

Whitworth compressed steel is obtained when molten steel is subjected to a pressure of

- (A) 5 kg/mm²
- (B) 9 kg/mm²
- (C) 13 kg/mm²
- (D) 15 kg/mm²

Answer: Option B

Question No. 230

The normal consistency of ordinary Portland cement is about

- (A) 10 %
- (B) 20 %
- (C) 30 %
- (D) 40 %

Answer: Option C

Question No. 231

Lacquer is

- (A) Oil paint
- (B) Distemper
- (C) Spirit varnish
- (D) None to these

Answer: Option C

Question No. 232

Plaster of Paris is obtained by calcining

- (A) Bauxite
- (B) Gypsum
- (C) Lime stone
- (D) None of these

Answer: Option B

Question No. 233

Pick up the correct statement from the following:

- (A) The lime in excess makes the cement unsound and causes the cement to expand and disintegrate
- (B) The silica in excess makes the cement stronger but its setting time also increases
- (C) The excess amount of alumina weakens the cement
- (D) All the above

Answer: Option D

Question No. 234

Priming consists of

- (A) One part of white lead, 8 parts of chalk and four parts of twice boiled linseed oil
- (B) 8 parts of white lead, one part of chalk and four parts of twice boiled linseed oil

- (C) One part of white lead, 8 parts of chalk and one part of linseed oil
 - (D) None to these
- Answer: Option A

Question No. 235

The coefficient of hardness of stones used in road work should be greater than

- (A) 10
- (B) 12
- (C) 15
- (D) 17

Answer: Option D

Question No. 236

Manganese steels

- (A) Are non-magnetic
- (B) Possess high electrical resistance
- (C) Possess low coefficient of expansion
- (D) All the above

Answer: Option D

Question No. 237

The most commonly used base for timber painting, is

- (A) Red lead
- (B) Zinc white
- (C) White lead
- (D) Titanium white

Answer: Option C

Question No. 238

Pick up the correct statement from the following:

- (A) Adding 5% to 6% of moisture content by weight, increases the volume of dry sand from 18% to 38%
- (B) The bulking of fine sand is more than that of coarse sand
- (C) If the percentage content of moisture exceeds 10%, increase in bulk of sand starts increasing
- (D) All the above

Answer: Option D

Question No. 239

Pick up the correct statement from the following:

- (A) For thin structures subjected to wetting and drying, the water cement ratio should be 0.45
- (B) For mass concrete structures subjected to wetting and drying, the water ratio should be 0.55
- (C) For thin structures which remain continuously under water, the water-cement ratio by weight should be 0.55
- (D) All the above

Answer: Option D

Question No. 240

Quartzite is a

- (A) Metamorphic rock
- (B) Argillaceous rock
- (C) Calcareous rock
- (D) Siliceous rock

Answer: Option D

Question No. 241

The plastics made from cellulose resin

- (A) Are as clear as glass
- (B) Are tough and strong
- (C) Possess excellent electrical properties
- (D) All the above

Answer: Option D

Question No. 242

Polymerization helps to improve the property of

- (A) Strength
- (B) Rigidity
- (C) Elasticity
- (D) All of these

Answer: Option D

Question No. 243

For filling cracks in masonry structures, the type of bitumen used, is

- (A) Cut-back bitumen
- (B) Bitumen-emulsion
- (C) Blown bitumen
- (D) Plastic bitumen

Answer: Option D

Question No. 244

Expanded metal is

- (A) Manufactured from steel sheets
- (B) Used for reinforced concrete in road pavements
- (C) Measured in term of SWM (short way mesh) and LWM (long way mesh)
- (D) All the above

Answer: Option D

Question No. 245

Pick up the plutonic rock from the following:

- (A) Granite
- (B) Dolerite
- (C) Basalt

(D) All the above

Answer: Option A

Question No. 246

The portion of the brick without a triangular corner equal to half the width and half the length, is called

(A) Closer

(B) Queen closer

(C) King closer

(D) Squint brick

Answer: Option C

Question No. 247

Cement is said to be of good quality if

(A) Its colour is not greenish grey

(B) One feels cool by thrusting one's hand in the cement bag

(C) A handful of cement thrown into a bucket of water does not float

(D) None of these

Answer: Option D

Question No. 248

The silica is used for preparing

(A) Silica bricks

(B) Coke oven

(C) Lining for glass furnaces

(D) All of these

Answer: Option D

Question No. 249

The timber having maximum resistance against white ants, is obtained from

(A) Chir

(B) Shishum

(C) Sal

(D) Teak

Answer: Option B

Question No. 250

Duco is one of the patent forms of

(A) Emulsion paints

(B) Plastic paints

(C) Bituminous paints

(D) Cellulose paints

Answer: Option D

Question No. 251

Quartzite, a metamorphic stone is

- (A) Hard
- (B) Brittle
- (C) Crystalline
- (D) All the above

Answer: Option D

Question No. 252

If water required for 1 bag of cement is 30 litres, the water cement ratio is:

- (A) 0.40
- (B) 0.50
- (C) 0.60
- (D) None of these

Answer: Option C

Question No. 253

A piece of timber whose thickness and width are respectively 5 cm and 10 cm is called

- (A) Slate
- (B) Plank
- (C) Board
- (D) Strip

Answer: Option D

Question No. 254

The percentage of water for normal consistency, is

- (A) 5% to 15%
- (B) 10% to 25%
- (C) 15% to 25%
- (D) 20% to 30%

Answer: Option C

Question No. 255

Pick up the correct statement from the following:

- (A) The baked earth is called terra-cotta
- (B) The articles prepared from clay which is burnt at low temperature and cooled down slowly, are called earthen-ware
- (C) The articles prepared from refractory clays which as mixed with stone and crushed pottery, are called stone ware
- (D) All the above

Answer: Option D

Question No. 256

In a rock calcium carbonate predominates. State whether it is:

- (A) Siliceous rock

- (B) Argillaceous rock
- (C) Calcareous rock
- (D) None of these

Answer: Option C

Question No. 257

The cracks which extend from bark towards the sap wood in the cross section of a tree, are called

- (A) Radial shakes
- (B) Star shakes
- (C) Heart shakes
- (D) Cup shakes

Answer: Option B

Question No. 258

The steel used for rails under heavy traffic and on sharp curves, is

- (A) Nickel steel
- (B) Chrome steel
- (C) Manganese steel
- (D) Vanadium steel

Answer: Option C

Question No. 259

The steel used in R.C.C. work is

- (A) Stainless steel
- (B) Mild steel
- (C) High carbon steel
- (D) Wrought iron

Answer: Option B

Question No. 260

Pick up the rock which is not a sedimentary rock from the following:

- (A) Gravel
- (B) Sand stone
- (C) Gypsum
- (D) Dolerite

Answer: Option D

Question No. 261

Acrylic is the name of

- (A) Cellulose resin
- (B) Alkyd resin
- (C) Methyl methacrylate
- (D) Cumarone-indene

Answer: Option C

Question No. 262

The PVC doors and windows are preferred as they are

- (A) Rust proof
- (B) Rot proof
- (C) Water proof
- (D) All of these

Answer: Option D

Question No. 263

The sequence of refractory materials according to increasing melting points is:

- (A) Dolomite, Magnesite, Bauxite, Chromites
- (B) Bauxite, Chromites, Dolomite, Magnesite
- (C) Magnesite, Bauxite, Dolomite, Chromites
- (D) None of these

Answer: Option B

Question No. 264

Upto a maximum of 72% of iron, is available in

- (A) Magnetite
- (B) Limonite
- (C) Siderite
- (D) Iron pyrites

Answer: Option A

Question No. 265

The melting point of silica is:

- (A) 1570°C
- (B) 1630°C
- (C) 1730°C
- (D) 1850°C

Answer: Option C

Question No. 266

Lime stones are generally known as

- (A) Aqueous rocks
- (B) Sedimentary rocks
- (C) Stratified rocks
- (D) All the above

Answer: Option D

Question No. 267

Stones used for rubble masonry must be

- (A) Soft
- (B) Hard
- (C) Light

(D) Heavy

Answer: Option B

Question No. 268

The property by virtue of which lime sets under water, is known as

(A) Slacking

(B) Setting

(C) Hydraulicity

(D) Calcining

Answer: Option C

Question No. 269

Porcelain is used as:

(A) Sanitary wares

(B) Electric insulators

(C) Storage vessels

(D) Reactor chambers

Answer: Option D

Question No. 270

The lime which contains high percentage of calcium oxide, is generally called

(A) Fat lime

(B) Rich lime

(C) White lime

(D) None of these

Answer: Option D

Question No. 271

Second class bricks

(A) Are of dark brown colour

(B) Produce a metallic sound when struck

(C) Are well burnt

(D) Are under burnt

Answer: Option B

Question No. 272

Wrought iron contains carbon upto

(A) 0.25 %

(B) 1.0 %

(C) 1.5 %

(D) 2 %

Answer: Option A

Question No. 273

The variety of pig iron used for manufacture of wrought iron, is

- (A) Bessemer pig
- (B) Grey or foundry pig
- (C) White forge pig
- (D) Mottled pig

Answer: Option C

Question No. 274

Kaolin is chemically classified as

- (A) Metamorphic rock
- (B) Argillaceous rock
- (C) Calcareous rock
- (D) Siliceous rock

Answer: Option B

Question No. 275

Sewer pipes are made of

- (A) Earthen ware
- (B) Stone ware
- (C) Refractory clay
- (D) All the above

Answer: Option B

Question No. 276

The process of manufacturing steel by heating short lengths of wrought iron bars mixed with charcoal in fire clay crucibles and collecting the molten iron into moulds, is known as

- (A) Cementation process
- (B) Crucible process
- (C) Bessemer process
- (D) Open hearth process

Answer: Option B

Question No. 277

The rock generally used for roofing, is

- (A) Granite
- (B) Basalt
- (C) Slate
- (D) Pumice

Answer: Option C

Question No. 278

The lime which contains mainly calcium oxide and slacks with water, is

- (A) Fat lime
- (B) Quick lime
- (C) Hydraulic lime
- (D) Poor lime

Answer: Option B

Question No. 279

The standard size of masonry bricks, is

- (A) 18 cm × 8 cm × 8 cm
- (B) 19 cm × 9 cm × 9 cm
- (C) 20 cm × 10 cm × 10 cm
- (D) 21 cm × 11 cm × 11 cm

Answer: Option B

Question No. 280

The proportions of charcoal, saltpetre and sulphur in gun powder by weight, are respectively:

- (A) 15, 75, 10
- (B) 75, 10, 15
- (C) 10, 15, 75
- (D) 10, 75, 15

Answer: Option A

Question No. 281

Knots in timber are

- (A) Defects caused by crushing fibres
- (B) Splits radiating from the centre
- (C) Speckled strains
- (D) Signs of branches cut off

Answer: Option D

Question No. 282

Pick up correct statement from the following:

- (A) Fibre boards are used for thermal and acoustic control
- (B) Fibre boards are used for light weight standing members
- (C) Fibre boards are obtained by impregnating a resin product on fibres
- (D) All the above

Answer: Option D

Question No. 283

Portland cement manufactured from pure white chalk and clay but free from iron-oxide, is known as

- (A) Quick setting cement
- (B) Rapid hardening cement
- (C) White cement
- (D) Low heat Portland cement

Answer: Option C

Question No. 284

Pick up the correct statement from the following:

- (A) Slaked lime contains calcium hydroxide
- (B) Quick lime contains calcium oxide
- (C) Slaked lime may be obtained from quick lime
- (D) All the above

Answer: Option D

Question No. 285

The minimum compressive strength of 1st class bricks should be

- (A) 75 kg/cm²
- (B) 90 kg/cm²
- (C) 100 kg/cm²
- (D) 120 kg/cm²

Answer: Option C

Question No. 286

The cast iron when heated to red heat with powdered red haematite in an oven for increasing its toughness, is converted to

- (A) Grey cast iron
- (B) White cast iron
- (C) Mottled cast iron
- (D) Toughed cast iron

Answer: Option C

Question No. 287

A well seasoned timber may contain moisture up to

- (A) 4 to 6 %
- (B) 6 to 8 %
- (C) 8 to 10 %
- (D) 10 to 12 %

Answer: Option D

Question No. 288

The usual percentages of clay and metal in cermet are:

- (A) 50%, 50%
- (B) 60%, 40%
- (C) 70%, 30%
- (D) 80%, 20%

Answer: Option D

Question No. 289

Pick up the correct statement from the following:

- (A) The plastic bottles are made by the process of blowing
- (B) The application of thermo-setting resins on sheets of paper, is called laminating process
- (C) The plastic articles made by placing raw material in the desired moulds, is known as moulding process

(D) All the above

Answer: Option D

Question No. 290

The specific gravity of marble, is

(A) 2.50

(B) 2.60

(C) 2.66

(D) 2.72

Answer: Option D

Question No. 291

Plastic asphalt is

(A) Used as a water proofing layer over roof

(B) A mixture of cement and asphalt

(C) A natural asphalt

(D) A refinery product

Answer: Option B

Question No. 292

Pick up the correct statement from the following:

(A) Rusting is caused due to combined action of air, moisture and carbon dioxide

(B) During rusting, first ferrous bicarbonates are formed

(C) On further oxidation ferrous bicarbonates get converted to ferric bicarbonates

(D) All the above

Answer: Option D

Question No. 293

The commonly used base for iron and steel work, is

(A) Red lead

(B) Zinc white

(C) White lead

(D) Titanium white

Answer: Option A

Question No. 294

For high grade instruments the steel preferred to, is

(A) Cast steel

(B) Bessemer steel

(C) Mild steel

(D) Whitworth compressed steel

Answer: Option A

Question No. 295

Bitumen felt is used for

- (A) Water proofing
- (B) Damp proofing
- (C) Both (A) and (B)
- (D) Neither (A) nor (B)

Answer: Option C

Question No. 296

The most important constituent of an oil paint, is

- (A) Thinner
- (B) Vehicle
- (C) Pigment
- (D) All the above

Answer: Option D

Question No. 297

Acrylic sheets

- (A) Possess 10 to 17 times greater breakage resistance than that of glass of equivalent thickness
- (B) Are generally unaffected by most household detergents
- (C) Possess the light transmission rate of 93%
- (D) All the above

Answer: Option D

Question No. 298

Brass is an alloy of

- (A) Copper and zinc
- (B) Zinc and lead
- (C) Tin and silver
- (D) Zinc and nickel

Answer: Option A

Question No. 299

Pick up the polymineralic rock from the following:

- (A) Quartz sand
- (B) Pure gypsum
- (C) Magnesite
- (D) Granite

Answer: Option D

Question No. 300

Pick up the hypabyssal rock from the following:

- (A) Granite
- (B) Dolerite
- (C) Basalt
- (D) All the above

Answer: Option B

Question No. 301

The rocks formed by gradual deposition, are called

- (A) Sedimentary rocks
- (B) Igneous rocks
- (C) Metamorphic rocks
- (D) None of these

Answer: Option A

Question No. 302

Plastic

- (A) Is an organic substance
- (B) Consists of natural or synthetic binders
- (C) Finished products are rigid and stable at normal temperature
- (D) All the above

Answer: Option D

Question No. 303

A piece of sawn timber whose cross-sectional dimensions exceed 5 cm, in one direction and 20 cm in the other direction, is called a

- (A) Cant
- (B) Deal
- (C) Baulk
- (D) Strip

Answer: Option C

Question No. 304

Rocks formed due to alteration of original structure due to heat and excessive pressure are called

- (A) Sedimentary rocks
- (B) Igneous rocks
- (C) Metamorphic rocks
- (D) None of these

Answer: Option C

Question No. 305

Geologically, marble is known as

- (A) Sedimentary rock
- (B) Igneous rock
- (C) Metamorphic rock
- (D) Stratified rock

Answer: Option C

Question No. 306

Iron ore may contain

- (A) Carbon
- (B) Silicon

- (C) Phosphorus and manganese
- (D) All the above

Answer: Option D

Question No. 307

Pick up the incorrect statement from the following:

- (A) Plastics are chemical resistant
- (B) Plastics are durable
- (C) Plastics are ductile
- (D) Plastics are excellent electric insulators

Answer: Option C

Question No. 308

The cracks caused by shrinkage of the exterior surface of the wood exposed to atmosphere, are called:

- (A) Radial shakes
- (B) Heart shakes
- (C) Wind cracks
- (D) Twisted fibres

Answer: Option C

Question No. 309

Pig iron is manufactured from the ores by

- (A) Dressing
- (B) Calcination and roasting
- (C) Smelting
- (D) All the above

Answer: Option D

Question No. 310

Pick up the correct statement from the following:

- (A) The plywoods do not split or crack due to changes in atmosphere
- (B) The commercial plywoods are available upto 150 cm wide and upto 300 cm long
- (C) The plywoods possess uniform tensile strength in all directions
- (D) All the above

Answer: Option D

Question No. 311

Jhumb bricks are

- (A) Under burnt
- (B) Over burnt
- (C) Kutcha
- (D) None of these

Answer: Option B

Question No. 312

Pick up the correct statement from the following:

- (A) Steel produced by open hearth process is milder than that obtained by the Bessemer process
- (B) Engineers prefer open hearth steel for structural purpose as it is more homogenous
- (C) Basic Bessemer process is suitable for converting poor ore containing a large proportion of sulphur and phosphorus into steel
- (D) All the above

Answer: Option D

Question No. 313

Refractory bricks resist

- (A) High temperature
- (B) Chemical action
- (C) Dampness
- (D) All the above

Answer: Option A

Question No. 314

The thermosetting plastic

- (A) Becomes rigid when moulded at suitable pressure and temperature
- (B) At 127°C to 177°C permanently set and further application of heat does not soften it
- (C) Chars at 343°C
- (D) All the above

Answer: Option D

Question No. 315

Commonly used thinner in

- (A) Lacquer paints, is alcohol
- (B) Cellulose paints is ethyl acetate
- (C) Oil paints, is naphtha
- (D) All the above

Answer: Option D

Question No. 316

The curved swellings from the growth of layers or wounds left after branches are cut off in an irregular manner are known as

- (A) Knots
- (B) Rindgalls
- (C) Burls
- (D) None of these

Answer: Option B

Question No. 317

Bitumen completely dissolves in

- (A) Carbon bisulphide
- (B) Chloroform
- (C) Coal tar
- (D) All of these

Answer: Option D

Question No. 318

A stone is rejected if it absorbs water more than

- (A) 5 %
- (B) 10 %
- (C) 15 %
- (D) 20 %

Answer: Option B

Question No. 319

The most commonly used synthetic abrasive is

- (A) Aluminium carbide
- (B) Boric acid
- (C) Silicon
- (D) All of these

Answer: Option D

Question No. 320

During smelting process, the combination of fuel in the furnace

- (A) Forms carbon dioxide
- (B) Carbon dioxide with carbon forms carbon mono-oxide
- (C) Carbon mono-oxide reacts with Fe_2O_3 to form iron and liberates CO_2
- (D) All the above

Answer: Option D

Question No. 321

According to ISI, bitumen is classified into

- (A) 2 grades
- (B) 4 grades
- (C) 8 grades
- (D) 10 grades

Answer: Option D

Question No. 322

Basalt is

- (A) Sedimentary rock
- (B) Metamorphic rock
- (C) Extrusive igneous rock
- (D) Intrusive igneous rock

Answer: Option C

Question No. 323

The size of mould for bricks, is generally kept

- (A) A little large to specified size
- (B) A little small to specified size
- (C) Equal to specified size
- (D) 10% larger than specified size

Answer: Option A

Question No. 324

For construction of structures under water, the type of lime used, is

- (A) Hydraulic lime
- (B) Fat lime
- (C) Quick lime
- (D) Pure lime

Answer: Option A

Question No. 325

French polish is

- (A) Oil paint
- (B) Distemper
- (C) Spirit varnish
- (D) None to these

Answer: Option C

Question No. 326

Ultimate strength to cement is provided by

- (A) Tri-calcium silicate
- (B) Di-calcium silicate
- (C) Tri-calcium aluminate
- (D) Tetra calcium alumino ferrite

Answer: Option B

Question No. 327

Wrought iron contains carbon about

- (A) 1.5% to 5.5%
- (B) 0.5% to 1.75%
- (C) 0.1% to 0.25%
- (D) None to these

Answer: Option C

Question No. 328

Galvanising means covering iron with a thin coat of

- (A) Tin
- (B) Zinc
- (C) Glaze

(D) Coal tar

Answer: Option B

Question No. 329

The rocks in which argil (or clay) predominates, are called

(A) Siliceous rocks

(B) Argillaceous rocks

(C) Calcareous rocks

(D) Igneous rocks

Answer: Option B

Question No. 330

Name the type of cement from the following for canal linings:

(A) Sulphate resisting cement

(B) Rapid hardening cement

(C) Quick setting cement

(D) Pozzolana cement

Answer: Option A

Question No. 331

Seasoning is

(A) A process of removing sap

(B) Creosoting

(C) Painting with sodium silicate

(D) Coating with tar

Answer: Option A

Question No. 332

Soundness test of cement determines

(A) Quality of free lime

(B) Ultimate strength

(C) Durability

(D) Initial setting

Answer: Option A

Question No. 333

Turpentine oil is used in paints as

(A) Thinner

(B) Vehicle

(C) Base

(D) Drier

Answer: Option A

Question No. 334

Stucco paints are suitable for

- (A) Stone masonry
- (B) Brick walls
- (C) Both (A) and (B)
- (D) Neither (A) nor (B)

Answer: Option C

Question No. 335

Stones used for ornamental work must be

- (A) Soft
- (B) Hard
- (C) Light
- (D) Heavy

Answer: Option A

Question No. 336

Lime stone is not a

- (A) Sedimentary rock
- (B) Stratified rock
- (C) Aqueous rock
- (D) Metamorphic rock

Answer: Option D

Question No. 337

Pick up the correct statement from the following:

- (A) The heating of a material to redness in contact with air, is known as calcination
- (B) The property of lime by which it sets or hardens in damp places having no free circulation of air is called setting
- (C) The product that remains after calcination of limestone, is called lime
- (D) All the above

Answer: Option D

Question No. 338

Pick up the correct statement from the following:

- (A) The average crushing strength of hand moulded bricks is 6000 t/m^2
- (B) The average tensile strength of hand moulded brick is 200 t/m^2
- (C) The average shearing strength of hand moulded brick is 600 t/m^2
- (D) All the above

Answer: Option D

Question No. 339

Snowcrete is one of the patent forms of

- (A) Distempers
- (B) Water proof cement paints
- (C) Enamel paints
- (D) Cellulose paints

Answer: Option B

Question No. 340

Cast iron is used for

- (A) Structural works in beams
- (B) Small sized water pipes
- (C) Columns and struts
- (D) None to these

Answer: Option C

Question No. 341

Pick up the correct statement from the following:

- (A) The percentage of absorption for firebricks varies from 5 to 10
- (B) The percentage of silica in silica bricks is to the extent of about 95 to 97 percent
- (C) Roughly 1 to 2 percent of lime in silica bricks is added to act as binding material
- (D) All the above

Answer: Option D

Question No. 342

Good quality cement contains higher percentage of

- (A) Tri-calcium silicate
- (B) Di-calcium silicate
- (C) Tri-calcium aluminate
- (D) Tetra calcium alumino ferrite

Answer: Option A

Question No. 343

Laterite is a/an

- (A) Volcanic rock
- (B) Argillaceous rock
- (C) Calcareous rock
- (D) Siliceous rock

Answer: Option B

Question No. 344

Seasoning of timber is essential to remove

- (A) Knots from timber
- (B) Sap from timber
- (C) Twisted fibre from timber
- (D) Roughness of timber

Answer: Option B

Question No. 345

The term frog means

- (A) An apparatus to lift the stone

- (B) A depression on a face of brick
- (C) Vertical joint in a brick work
- (D) Soaking brick in water

Answer: Option B

Question No. 346

The presence of sand in brick earth prevents:

- (A) Cracking of bricks
- (B) Shrinkage of bricks
- (C) Warping of bricks
- (D) None of these

Answer: Option C

Question No. 347

Refractory bricks are

- (A) Neutral refractory bricks
- (B) Acid refractory bricks
- (C) Basic refractory bricks
- (D) All the above

Answer: Option D

Question No. 348

A prime coat is given to steel work with

- (A) An oxide of iron paint
- (B) A mixture of white lead and lead paint
- (C) A special paint
- (D) Cement paint

Answer: Option B

Question No. 349

Teak wood is suitable for

- (A) Sports articles
- (B) Furnitures
- (C) Railway sleepers
- (D) All the above

Answer: Option B

Question No. 350

Elastomers can extend upto

- (A) Five times their original dimensions
- (B) Seven times their original dimensions
- (C) Ten times their original dimensions
- (D) Three times their original dimensions

Answer: Option C

Question No. 351

Bitumen in

- (A) Solid state, is called asphalt
- (B) Semi fluid state, is called mineral tar
- (C) Fluid state, is called petroleum
- (D) All the above

Answer: Option D

Question No. 352

Varnish is a transparent or semi-transparent solution of resinous substances in

- (A) Alcohol
- (B) Linseed
- (C) Turpentine
- (D) All the above

Answer: Option D

Question No. 353

Refractory bricks are used for

- (A) Retaining walls
- (B) Columns
- (C) Piers
- (D) Combustion chambers

Answer: Option D

Question No. 354

Minimum required water cement ratio for a workable concrete, is

- (A) 0.30
- (B) 0.40
- (C) 0.50
- (D) 0.60

Answer: Option B

Question No. 355

Minimum of 40% of iron, is available in

- (A) Magnetite
- (B) Red haematite
- (C) Limonite
- (D) Black band

Answer: Option D

Question No. 356

Portland pozzolana cement possesses

- (A) Higher resistance to chemical attack
- (B) Lower heat of hydration
- (C) Lower shrinkage on drying

(D) All the above

Answer: Option D

Question No. 357

Dextrin is

- (A) Animal glue
- (B) Starch glue
- (C) Albumin glue
- (D) Rubber based adhesive

Answer: Option D

Question No. 358

Mastic asphalt is normally used for

- (A) Sound insulation
- (B) Water proofing
- (C) Fire proofing
- (D) None to these

Answer: Option B

Question No. 359

The steel which contains fissures and cavities, is manufactured by

- (A) Cementation process
- (B) Crucible process
- (C) Bessemer process
- (D) Open hearth process

Answer: Option A

Question No. 360

Based on flow quality, the sequence of pipes is

- (A) A.C. pipes, G.I. pipes, C.I. pipes, PVC pipes
- (B) C.I. pipes, G.I. pipes, A.C. pipes, PVC pipes
- (C) C.I. pipes, G.I. pipes, PVC pipes, A.C. pipes
- (D) None of these

Answer: Option B

Question No. 361

Pick up the correct statement from the following:

- (A) Hornblende mineral is brittle
- (B) Muscovite is also known as white mica and potash mica
- (C) Biotite is also known as black-mica
- (D) All the above

Answer: Option D

Question No. 362

Good quality sand is never obtained from

- (A) River
- (B) Lake
- (C) Sea
- (D) Gravel powder

Answer: Option C

Question No. 363

Lime mortar is generally made with

- (A) Quick lime
- (B) Fat lime
- (C) Hydraulic lime
- (D) Plain lime

Answer: Option C

Question No. 364

Pick up the compound responsible for early strength of cement from the following:

- (A) Tetra-calcium alumino-ferrite
- (B) Tri-calcium silicate
- (C) Tri-calcium aluminate
- (D) Di-calcium silicate

Answer: Option B

Question No. 365

Linseed oil is used in paints as

- (A) Thinner
- (B) Vehicle
- (C) Base
- (D) Drier

Answer: Option D

Question No. 366

Asphalt is obtained from

- (A) Petroleum distillation
- (B) Bitumen distillation
- (C) Plastic distillation
- (D) None of these

Answer: Option A

Question No. 367

Percentage content of silica in window glass, is

- (A) 40 to 45
- (B) 50 to 55
- (C) 60 to 65
- (D) 70 to 75

Answer: Option D

Question No. 368

Most commonly used solvent in oil paints, is

- (A) Petroleum
- (B) Spirit
- (C) Coal tar
- (D) Turpentine

Answer: Option A

Question No. 369

The harmonious mixing of the clay ingredients, is known as

- (A) Weathering
- (B) Blending
- (C) Tempering
- (D) None of these

Answer: Option B

Question No. 370

Bitumen felt

- (A) Is used as water proofing material
- (B) Is used as damp proofing material
- (C) Is made from bitumen and hessian fibres
- (D) All the above

Answer: Option D

Question No. 371

The initial setting time of lime-pozzolana, is

- (A) 30 minutes
- (B) 60 minutes
- (C) 90 minutes
- (D) 120 minutes

Answer: Option D

Question No. 372

The clay to be used for manufacturing bricks for a large project, is dugout and allowed to weather throughout

- (A) The monsoon
- (B) The winter
- (C) The summer
- (D) None of these

Answer: Option A

Question No. 373

If the furnace is provided with insufficient fuel at low temperatures, the type of pig iron produced, is called

- (A) Bessemer pig

- (B) Grey or foundry pig
- (C) White or forge pig
- (D) Mottled pig

Answer: Option C

Question No. 374

Depending on the chemical composition and mechanical properties, iron may be classified as

- (A) Cast iron
- (B) Wrought iron
- (C) Steel
- (D) All the above

Answer: Option D

Question No. 375

The main constituent of fly-ash, is

- (A) Aluminium oxide
- (B) Silica
- (C) Ferrous oxide
- (D) All of these

Answer: Option D

Question No. 376

Brittleness of cold is due to an excess of

- (A) Sulphur
- (B) Carbon
- (C) Phosphorus
- (D) Silicon

Answer: Option C

Question No. 377

Asbestos cement

- (A) Is brittle
- (B) Warps due to changes in humidity
- (C) Strength is lowered when saturated by water
- (D) All of the above

Answer: Option D

Question No. 378

Gneiss is obtained from

- (A) Igneous rocks
- (B) Metamorphic rocks
- (C) Sedimentary rocks
- (D) Sedimentary metamorphic rocks

Answer: Option D

Question No. 379

Fibre glass

- (A) Retains heat-longer
- (B) Has a higher strength to weight ratio
- (C) Is shock proof and fire retardant
- (D) All the above

Answer: Option D

Question No. 380

Pick up the correct statement from the following:

- (A) The theory of formation of concrete is based on the phenomena of formation of voids
- (B) The bulking of sand is taken into account while volumetric proportioning of the aggregates
- (C) The dry sand and the sand completely flooded with water, have practically the same volume
- (D) All the above

Answer: Option D

Question No. 381

The commonly used colour pigment in paints, is

- (A) Ambers
- (B) Carbon black
- (C) Iron oxide
- (D) All the above

Answer: Option D

Question No. 382

The variety of pig iron used for the manufacture of steel by Bessemer process, is

- (A) Bessemer pig
- (B) Grey pig
- (C) White forge pig
- (D) Mottled pig

Answer: Option A

Question No. 383

Vanadium steel is generally used for

- (A) Railway switches and crossing
- (B) Bearing balls
- (C) Magnets
- (D) Axles and springs

Answer: Option D

Question No. 384

A badly mixed cement concrete results in

- (A) Segregation
- (B) Bleeding
- (C) Honey combing

(D) None of these

Answer: Option C

Question No. 385

Chemically, marble is known as

(A) Metamorphic rock

(B) Argillaceous rock

(C) Calcareous rock

(D) Siliceous rock

Answer: Option C

Question No. 386

The filler used in plastic bitumen, is

(A) Shale powder

(B) Talc powder

(C) Asbestos powder

(D) Plastic powder

Answer: Option C

Question No. 387

Mastic asphalt is generally used for

(A) Damp proof course

(B) Water proof layer

(C) Partition walls

(D) Both (A) and (B)

Answer: Option D

Question No. 388

The most fire resistant paints are:

(A) Enamel paints

(B) Aluminium paints

(C) Asbestos paints

(D) Cement paints

Answer: Option C

Question No. 389

A pug mill is used for

(A) Softening brick earth

(B) Moulding brick earth

(C) Tempering brick earth

(D) Providing brick earth

Answer: Option C

Question No. 390

A good brick earth should contain:

- (A) About 20% to 30% of alumina
- (B) About 50% to 60% of silica
- (C) Not more than 5% of lime
- (D) All the above

Answer: Option D

Question No. 391

The compound of Portland cement which contributes to the strength after two to three years is

- (A) Tri-calcium silicate
- (B) Di-calcium silicate
- (C) Tri-calcium aluminate
- (D) Tetra-calcium alumino ferrite

Answer: Option B

Question No. 392

Bessemer process is used for the manufacture of

- (A) Pig iron
- (B) Cast iron
- (C) Wrought iron
- (D) Steel

Answer: Option D

Question No. 393

Which one of the following is an air binding material?

- (A) Gypsum
- (B) Acid-resistant cement
- (C) Quick lime
- (D) All of these

Answer: Option D

Question No. 394

A good quality stone absorbs water less than

- (A) 5 %
- (B) 10 %
- (C) 15 %
- (D) 25 %

Answer: Option A

Question No. 395

The slag which floats on the surface of the molten iron generally contains

- (A) Lime (CaO) 45%
- (B) Silica (SiO₂) 35%
- (C) Alumina (Al₂O₃) 12% and MgO, CaSO₄, KMnO₂ and FeO 8%
- (D) All the above

Answer: Option D

Question No. 396

For the manufacture of plywood, veneers are placed so that grains of adjacent veneers

- (A) Run at right angles
- (B) Parallel
- (C) Inclined at 45°
- (D) Inclined at 60°

Answer: Option A

Question No. 397

The commonly used drying oil for oil paints, is

- (A) Olive oil
- (B) Linseed oil
- (C) Kerosene oil
- (D) Acetate of lead

Answer: Option D

Question No. 398

Initial setting of cement is caused due to

- (A) Tri-calcium silicate
- (B) Di-calcium silicate
- (C) Tri-calcium aluminate
- (D) Tetra calcium alumino ferrite

Answer: Option C

Question No. 399

Wrought iron is manufactured from pig iron by

- (A) Refining
- (B) Pudding
- (C) Shingling
- (D) All the above

Answer: Option D

Question No. 400

Fibre boards can be

- (A) Distempered
- (B) Painted
- (C) Painted and distempered
- (D) Used for furniture

Answer: Option D

Question No. 401

Lime concrete is generally used for

- (A) Wall foundations
- (B) Flooring at ground level
- (C) Both (A) and (B)

(D) Neither (A) nor (B)

Answer: Option B

Question No. 402

Bituminous felts are used for

- (A) Covering A.C. sheets
- (B) Covering sloping roofs
- (C) D.P.C.
- (D) None to these

Answer: Option A

Question No. 403

Quick setting cement is produced by adding

- (A) Less amount of gypsum in very fine powdered form
- (B) More amount of gypsum in very fine powdered form
- (C) Aluminium sulphate in very fine powdered form
- (D) Pozzolana in very fine powdered form

Answer: Option C

Question No. 404

Pick up the correct statement from the following:

- (A) The substance which consists of one primary chemical, is known as monomer
- (B) The polymer consists of thousands of monomers joined together
- (C) The polymer molecule is called macro-molecule
- (D) All the above

Answer: Option D

Question No. 405

The normal curing period for lime mortar, is:

- (A) 1 day
- (B) 3 days
- (C) 7 days
- (D) 10 days

Answer: Option C

Question No. 406

German silver is an alloy of

- (A) Zinc, lead and nickel
- (B) Silver, gold and lead
- (C) Copper, nickel and zinc
- (D) Copper, brass and zinc

Answer: Option C

Question No. 407

For the manufacture of stainless steel, steel is mixed with

- (A) Chromium
- (B) Nickel
- (C) Tungsten
- (D) None of these

Answer: Option A

Question No. 408

The presence of original rounded surface on the manufactured piece of timber, is called

- (A) Wane
- (B) Torn grain
- (C) Diagonal grain
- (D) Chipmark

Answer: Option A

Question No. 409

In paints, the pigment is responsible for

- (A) Durability
- (B) Colour
- (C) Smoothness
- (D) Glassy face

Answer: Option B

Question No. 410

The operation of removal of impurities or clay adhering to iron ores, is known as

- (A) Dressing
- (B) Calcination
- (C) Roasting
- (D) Smelting

Answer: Option A

Question No. 411

Dry rot

- (A) Cracks the timber
- (B) Reduces the strength of timber
- (C) Reduces the timber to powder
- (D) Spoils the appearance of timber

Answer: Option C

Question No. 412

Pozzolana (or surkhi) is used in lime

- (A) To impart hydraulicity
- (B) To prevent shrinkage
- (C) To decrease the cost of construction
- (D) To decrease the setting time

Answer: Option A

Question No. 413

The size of modular bricks, is

- (A) $10 \times 10 \times 9$ cm
- (B) $19 \times 9 \times 9$ cm
- (C) $22.5 \times 10 \times 8.5$ cm
- (D) $22.5 \times 8.0 \times 9$ cm

Answer: Option B

Question No. 414

Plywood is obtained by gluing wooden sheets at

- (A) 100 to 150 N/cm²
- (B) 100 to 130°C
- (C) Both (A) and (B)
- (D) Neither (A) nor (B)

Answer: Option C

Question No. 415

The low voltage porcelain is mainly used for

- (A) Switch block
- (B) Insulating tubes
- (C) Lamp sockets
- (D) All of these

Answer: Option D

Question No. 416

The initial setting time of hydraulic lime, is

- (A) 30 minutes
- (B) 60 minutes
- (C) 90 minutes
- (D) 120 minutes

Answer: Option D

Question No. 417

PVC stands for

- (A) Plastic very compact
- (B) Polythene vinyl chloride
- (C) Polythene vinyl carbon
- (D) Polythene vanadium carbide

Answer: Option B

Question No. 418

Cement paints usually

- (A) Contain hydrated lime
- (B) Contain 5% to 10% colour pigments
- (C) Contain 5% sodium chloride

(D) All the above

Answer: Option D

Question No. 419

The kiln which may work throughout the year, is

(A) Clamp

(B) Bull's kiln

(C) Hoffman's kiln

(D) None of these

Answer: Option C

Question No. 420

The main ingredient of a good quality brick earth, is

(A) Magnesia

(B) Lime

(C) Silica

(D) Alumina

Answer: Option D

Question No. 421

In stone masonry, stones (stratified rocks) are so placed that the direction of pressure to the plane of bedding is

(A) Right angles

(B) 45°

(C) 60°

(D) Parallel

Answer: Option A

Question No. 422

The most durable varnish is

(A) Water varnish

(B) Spirit varnish

(C) Turpentine varnish

(D) Oil varnish

Answer: Option D

Question No. 423

Softer variety of steel may be obtained by

(A) Cementation process

(B) Crucible process

(C) Bessemer process

(D) Open hearth process

Answer: Option C

Question No. 424

Bitumen emulsion is

- (A) A liquid containing bitumen in suspension
- (B) A paint
- (C) Used as anti-corrosive paint
- (D) All the above

Answer: Option D

Question No. 425

Plastic bitumen is generally used for

- (A) Road pavements
- (B) Expansion joints
- (C) Crack fillings
- (D) None to these

Answer: Option C

Question No. 426

Asbestos is

- (A) Corrugated sheet used for roofing
- (B) An incombustible fire proof material
- (C) An organic substance
- (D) All the above

Answer: Option D

Question No. 427

The rocks which are formed due to pouring of magma at the earth's surface are called

- (A) Plutonic rocks
- (B) Hypabyssal rocks
- (C) Volcanic rocks
- (D) Igneous rocks

Answer: Option C

Question No. 428

Invar contains

- (A) 12% of nickel
- (B) 24% of nickel
- (C) 30% to nickel
- (D) 36% of nickel

Answer: Option D

Question No. 429

Distemper is

- (A) A paint consisting of powdered chalk, pigments and water
- (B) A water proofing agent
- (C) A paint consisting of coloured cement and water

(D) A drying agent

Answer: Option A

Question No. 430

The compound of Portland cement which reacts immediately with water and also sets first is

- (A) Tri-calcium silicate
- (B) Di-calcium silicate
- (C) Tri-calcium aluminate
- (D) Tetra calcium alumino ferrite

Answer: Option C

Question No. 431

In arches, stratified stones are placed so that their planes are

- (A) Parallel
- (B) Perpendicular
- (C) Radial
- (D) None of these

Answer: Option C

Question No. 432

The fire clay contains pure

- (A) Lime
- (B) Oxide of iron
- (C) Hydrated aluminium silicate
- (D) Magnesium

Answer: Option C

Question No. 433

Pick up the correct characteristic of Pyroxene from the following:

- (A) It forms octagonal crystals
- (B) It converts to chlorine by hydration
- (C) Its density is 2.3 to 3.6 g/cm²
- (D) All the above

Answer: Option D

Question No. 434

The base material for distemper, is

- (A) Chalk
- (B) Lime
- (C) Lime putty
- (D) Cement wash

Answer: Option A

Question No. 435

Slacking of lime is affected by

- (A) Keeping it exposed to air
- (B) Immersing the lime in water
- (C) Crushing the lime lumps
- (D) None of these

Answer: Option B

Question No. 436

Stones used for the construction of retaining walls must be

- (A) Soft
- (B) Hard
- (C) Light
- (D) Heavy

Answer: Option D

Question No. 437

Permanent magnets are made of high carbon steel and

- (A) 15% of cobalt
- (B) 20% of cobalt
- (C) 35% of cobalt
- (D) 45% of cobalt

Answer: Option D

Question No. 438

Stainless steel resists corrosion due to

- (A) Carbon
- (B) Sulphur
- (C) Vanadium
- (D) Chromium

Answer: Option D

Question No. 439

The most important constituent of varnish, is

- (A) Drier
- (B) Solvent
- (C) Resin
- (D) All the above

Answer: Option D

Question No. 440

A ferrous metal is

- (A) Cast iron
- (B) Wrought iron
- (C) Steel
- (D) All the above

Answer: Option D

Question No. 441

For making fly-ash building bricks, the following mix of fly-ash, sand and lime, is

- (A) 80 : 13 : 7
- (B) 70 : 20 : 10
- (C) 60 : 35 : 5
- (D) None of these

Answer: Option A

Question No. 442

Water paint is a

- (A) White wash
- (B) Colour wash
- (C) Whiting
- (D) All the above

Answer: Option D

Question No. 443

Spirit varnish generally consists of

- (A) Oil, wax and resin
- (B) Alcohol, wax and turpentine
- (C) Pigment and synthetic resin
- (D) Spirit and shellac

Answer: Option D

Question No. 444

Duco paints are

- (A) Plastic paints
- (B) Cellulose paints
- (C) Emulsion paints
- (D) Oil paints

Answer: Option D

Question No. 445

Pick up the correct statement from the following:

- (A) Melamine is obtained from calcium carbide
- (B) Formaldehyde is prepared synthetically from methane
- (C) The melamine when reacted with formaldehyde forms the melamine-formaldehyde resin
- (D) All the above

Answer: Option D

Question No. 446

Steel contains carbon approximately

- (A) 1.50% to 5.6%
- (B) 0.05% to 1.75%
- (C) 0.25 %

(D) None to these

Answer: Option B

Question No. 447

Based on its dry weight, a freshly felled tree may contain water

(A) 25 %

(B) 50 %

(C) 75 %

(D) 100 %

Answer: Option D

Question No. 448

Forge pig may be converted to wrought iron by

(A) Rolling

(B) Pudding

(C) Shingling

(D) Refining

Answer: Option B

Question No. 449

Pick up the correct statement from the following:

(A) Bull's trench kiln a trench excavated in ground

(B) Hoffman's kiln is constructed over ground

(C) Tunnel Kiln is constructed as a tunnel

(D) All the above

Answer: Option D

Question No. 450

The softest rock is

(A) Marble

(B) Diamond

(C) Talc

(D) Quartz

Answer: Option C

Question No. 451

Mild steel is used for

(A) Structural works in beams, joints and girders

(B) Small sized water pipes

(C) Columns and struts

(D) None of these

Answer: Option A

Question No. 452

The most valuable timber may be obtained from

- (A) Chir
- (B) Shishum
- (C) Sal
- (D) Teak

Answer: Option D

Question No. 453

Mastic asphalt is

- (A) Acid resisting material
- (B) Non-corrosive material
- (C) Corrosive material
- (D) Heating-resisting material

Answer: Option B

Question No. 454

For lime concrete,

- (A) Slump is 50 to 75 mm
- (B) Flexural strength at 90 days is 0.2 N/mm^2
- (C) Compressive strength at 90 days is 1.5 N/mm^2
- (D) All the above

Answer: Option D

Question No. 455

The material generally not used as extender in paints, is

- (A) Powdered silica
- (B) Gypsum
- (C) Talc
- (D) Zinc white

Answer: Option D

Question No. 456

Pick up the non-inflammable plastic from the following:

- (A) Cellulose acetate plastics
- (B) Polyvinyl chloride plastics
- (C) Phenol formaldehyde plastic
- (D) Urea formaldehyde plastic

Answer: Option B

Question No. 457

For light and ornamental casting, the most unsuitable pig iron, is

- (A) Bessemer pig
- (B) Grey or foundry pig
- (C) White or forge pig
- (D) Mottled pig

Answer: Option D

Question No. 458

If the ore impurities is

- (A) Clay, lime stone is used as flux
- (B) Lime stone, clay is used as flux
- (C) Quartz, lime stone and argillaceous iron ores are used as flux
- (D) All the above

Answer: Option D

Question No. 459

The plastics prepared from Vinyl resin are

- (A) Odourless
- (B) Non-toxic
- (C) Transparent
- (D) All of these

Answer: Option D

Question No. 460

A rock contains only one mineral. It is called

- (A) Homogeneous
- (B) Non-homogeneous
- (C) Monomineralic
- (D) Polymineralic

Answer: Option C

Question No. 461

Pegmatite is a/an

- (A) Intrusive igneous rock
- (B) Extrusive igneous rock
- (C) Sedimentary rock
- (D) Metamorphic rock

Answer: Option A

Question No. 462

Dorry's testing machine is used for

- (A) Crushing test of stone
- (B) Hardness test of stone
- (C) Impact test of stone
- (D) Water absorption test

Answer: Option B

Question No. 463

Dolomite is a lime stone which contains carbonate of magnesia upto

- (A) 15 %
- (B) 20 %
- (C) 25 %

(D) 45 %

Answer: Option D

Question No. 464

The portion of the brick cut across its width and having its length equal to that of a full brick, is known as

(A) Closer

(B) Queen closer

(C) King closer

(D) Prince closer

Answer: Option B

Question No. 465

The minimum percentage of silica, alumina and ferric oxide in lime for white washing, is

(A) 20

(B) 15

(C) 5

(D) 0

Answer: Option D

Question No. 466

For a 50 kg cement bag water required, is

(A) 16.5 litres

(B) 18.5 litres

(C) 20.5 litres

(D) 22.5 litres

Answer: Option D

Question No. 467

Slump test for concrete is carried out, to determine

(A) Strength

(B) Durability

(C) Workability

(D) Water content

Answer: Option C

Question No. 468

The frog of a brick is normally made on its

(A) Top face

(B) Bottom face

(C) Longer face

(D) Shorter side

Answer: Option A

Question No. 469

Granite mainly composed of quartz and feldspar particles, is obtained from

- (A) Sedimentary rocks
- (B) Metamorphic rocks
- (C) Igneous rocks
- (D) All the above

Answer: Option C

Question No. 470

Pig iron obtained from the furnace which is properly provided with fuel at a very high temperature, is called

- (A) Bessemer pig
- (B) Grey or foundry pig
- (C) White or forge pig
- (D) Mottled pig

Answer: Option B

Question No. 471

Pick up the metal refractory from the following:

- (A) Molybdenum
- (B) Tungsten
- (C) Zirconium
- (D) All of these

Answer: Option D

Question No. 472

With storage, strength of cement

- (A) Increases
- (B) Decreases
- (C) Remains the same
- (D) None to these

Answer: Option B

Question No. 473

The commonly used raw material in the manufacture of cement, is

- (A) Slate
- (B) Sand stone
- (C) Lime stone
- (D) Basalt

Answer: Option C

Question No. 474

The rocks formed from molten magma, are called

- (A) Sedimentary rocks
- (B) Igneous rocks

- (C) Metamorphic rocks
 - (D) None of these
- Answer: Option B

Question No. 475

Bitumen paints offer

- (A) Pleasing surface
- (B) Hard surface
- (C) Smooth surface
- (D) Protective surface

Answer: Option D

Question No. 476

Ground glass

- (A) Is made by grinding its one side
- (B) Is made by melting powdered glass paints surface
- (C) Is used for getting light without transparency
- (D) All the above

Answer: Option D

Question No. 477

The wedging is adopted for quarrying costly stratified rock such as

- (A) Laterite
- (B) Marble
- (C) Limestone
- (D) All the above

Answer: Option D

Question No. 478

The colour of statuary marble used for sculptor's work, is

- (A) Red
- (B) Blue
- (C) White
- (D) Green

Answer: Option C