SSC Junior Engineers (JE) Exam - 2016 "held on 02 March 2017" Afternoon Shift (General Engineering)

QID : 201 - For construction of structures under water, the type of lime used is _____.

Options:
1) hydraulic lime
2) fat lime
3) quick lime
4) pure lime

Correct Answer: hydraulic lime

QID : 202 - The compound of Portland cement which reacts immediately with water and also sets first is _____.

Options:
1) Tri-calcium silicate
2) Di-calcium silicate
3) Tri-calcium aluminate
4) Tetra calcium alumino ferrite

Correct Answer: Tri-calcium aluminate

QID : 203 - Rapid hardening cement attains early strength due to _____.

Options:
1) larger proportion of lime grounded finer than normal cement
2) lesser proportion of lime grounded coarser than normal cement
3) lesser proportion of lime grounded finer than normal cement
4) larger proportion of lime grounded coarser than normal cement

Correct Answer: larger proportion of lime grounded finer than normal cement

QID : 204 - The percentage of water for normal consistency is _____.

Options:
1) 5 % to 15%
2) 10% to 25%
3) 15% to 25%
4) 20% to 30%

Correct Answer: 15% to 25%

QID : 205 - Soundness test of cement determines _____.

Options:
1) quality of free lime
2) ultimate strength
3) durability
4) initial setting

Correct Answer: quality of free lime

QID : 206 - Bulking of sand is caused due to _____.

Options:
1) surface moisture
2) air voids
3) viscosity
4) clay contents

Correct Answer: surface moisture

QID : 207 - For a 50 kg cement bag, water required is _____.

Options:
1) 16.5 liters
2) 18.5 liters
3) 20.5 liters
4) 22.5 liters

Correct Answer: 22.5 liters

QID : 208 - Pick up the correct statement from the following Method of sawing timber _____.

Options:
1) tangentially to annual rings, is known as tangential method
2) in four quarters such that each board cuts annual rings at angles not less than 45°, is known as quarter sawing method
3) cut out of quarter logs, parallel to the medullary rays and perpendicular to annual rings is known as radial sawing
4) All options are correct

Correct Answer: All options are correct

QID : 209 - For the manufacture of plywood, veneers are placed so that grains of adjacent veneers are _____.

Options:
1) at right angles
2) parallel
3) inclined at 45°
4) inclined at 60°

Correct Answer: at right angles

QID : 210 - The portion of the brick without a triangular corner equal to half the width and half the length is called _____.

Options:
1) closer
2) queen closer
3) king closer
4) squint brick

Correct Answer: king closer

QID : 211 - The height of the sink of wash basin above floor level is kept _____.

Options:
1) 60 cm
2) 70 cm
3) 75 cm to 80 cm
4) 80 cm

Correct Answer: 75 cm to 80 cm

QID : 212 - Pick up the correct statement from the following.

Options:
1) In order to check up the average depth of excavation, 'Dead mans' are left at the mid-widths of borrow pits
2) The earthwork calculation in excavation is made from the difference in levels obtained with a level
3) The earthwork done in excavation is to form the road embankment includes the formation of correct profiles and depositing the soil in layers
4) All options are correct

Correct Answer: All options are correct

QID : 213 - If the formation level of a highway has a uniform gradient for a particular length and the ground is also having a longitudinal slope, the earthwork may be calculated by _____.

Options:
1) Mid-section formula
2) Trapezoidal formula
3) Prismoidal formula
4) All options are correct

Correct Answer: All options are correct

QID : 214 - The area of a sloping surface of a protective embankment of mean height d, side slopes S:1 and length L is _____.

Options:
1) d x d x s
2) √[(d2 x (ds2)]
3) L.D √(1+s2)
4) 2Ld √(1+s2)

Correct Answer: L.D √(1+s2)

QID : 215 - A cement concrete road is 1000 m long, 8 m wide and 15 cm thick over the sub-base of 10 cm thick gravel. The cubic content of concrete (1:2:4) for the road specified in is _____.
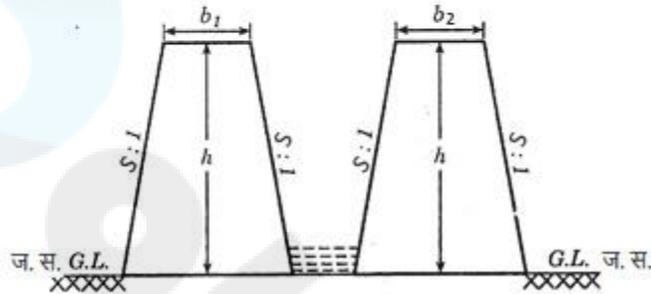
Options:
1) 300 m3
2) 600 m3
3) 900 m3
4) 1200 m3

Correct Answer: 1200 m3

QID : 216 -

The cross-sectional area of the embankment of a canal fully in em-bankment, (refer the figure given below) is:-

किसी पूर्ण रूप से तटबंधित नहर के बांध का अनुप्रस्थ परिच्छेद क्षेत्रफल _____ होगा। (नीचे दी गई आकृति का संदर्भ लें।)

Options:
1) $1/2(b1+b2)h$
2) $(b1+b2)h+ Sb2$
3) $(b1+b2)+2Sh2$
4) $2[(b1+b2)(b+Sh)]$

Correct Answer: $(b1+b2)+2Sh2$

QID : 217 - The following item of earthwork is not measured separately _____.

Options:
1) Setting out of works
2) Site clearance
3) dead men
4) All options are correct

Correct Answer: All options are correct

QID : 218 - Pick up the incorrect statement from the following _____.

Options:
1) No deduction is made for the volume occupied by reinforcement
2) No deduction is made for the openings up to 0.1 sq.m
3) No deduction is made for volumes occupied by pipes, not exceeding 100 sq. cm in cross- section
4) None of the these

Correct Answer: None of the these

QID : 219 - While estimating a reinforced cement structure the omitted cover of concrete is assumed _____.

Options:
1) at the end of reinforcing bar, not less than 25 mm or twice the diameter of the bar
2) in thin slabs, 12 mm minimum or diameter of the bar whichever is more
3) for reinforcing longitudinal bar in a beam 25 mm minimum or diameter of the largest bar which is more
4) All options are correct

Correct Answer: All options are correct

QID : 220 - For 100 sq. m cement concrete (1:2:4) 4 cm thick floor, the quantity of cement required is _____.

Options:
1) 0.90 m3
2) 0.94 m3
3) 0.98 m3
4) 1.00 m3

Correct Answer: 0.94 m3

QID : 221 - If h is the difference in height between end points of a chain of length l the required slope correction is _____.

Options:
1) h2/(2l)
2) h/(2l)
3) h2/l
4) h2/(4l)

Correct Answer: h2/(2l)

QID : 222 - Correction per chain length of 100 links along a slope of α radians is _____.

Options:
1) 100 α2
2) 100 α
3) 100 α3
4) 100 α(-1)

Correct Answer: 100 α

QID : 223 - Check lines (or proof lines) in Chain Surveying are essentially required _____.

Options:
1) to plot the chain lines
2) to plot the offsets
3) to indicate the accuracy of the survey work
4) to increase the out-turn

Correct Answer: to indicate the accuracy of the survey work

QID : 224 - For taking offsets with an optical square on the right hand side of the chain line it is held _____.
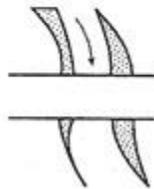
Options:
1) by right hand upside down
2) by left hand upright
3) by right hand upright
4) by left hand upside down

Correct Answer: by left hand upright

QID : 225 -

The conventional sign shown in the figure below represents a.

आकृति में दर्शाया गया परंपरागत चिह्न _____ को प्रदर्शित करता है।

Options:
1) road bridge
2) railway bridge
3) canal bridge
4) aquaduct

Correct Answer: road bridge

QID : 226 - In an adjusted level when the bubble is central, the axis of the bubble tube becomes parallel to _____.

Options:
1) line of sight
2) line of collimation

3) axis of the telescope
4) None of the these

Correct Answer: line of sight

QID : 227 - An internal focusing type surveying telescope may be focused by the movement of _____.

Options:
1) objective glass of the telescope
2) convex-lens in the telescope
3) concave lens in the telescope
4) plano-convex lens in the telescope

Correct Answer: concave lens in the telescope

QID : 228 - A dumpy level is set up with its eye-piece vertically over a peg A. The height from the top of peg A to the center of the eye-piece is 1.540 m and the reading on peg B is 0.705 m. The level is then setup over B. The height of the eye-piece above peg B is 1.490 m and a reading on A is 2.195 m. The difference in level between A and B is _____.

Options:
1) 2.900 m
2) 3.030 m
3) 0.770 m
4) 0.785 m

Correct Answer: 0.770 m

QID : 229 - The constant vertical distance between two adjacent contours is called _____.

Options:
1) horizontal interval
2) horizontal equivalent
3) vertical equivalent
4) contour interval

Correct Answer: contour interval

QID : 230 - The direction of steepest slope on a contour is _____.

Options:
1) along the contour
2) at an angle of 45° to the contour

3) at right angles to the contour
4) None of the these

Correct Answer: at right angles to the contour

QID : 231 - Geologic cycle for the formation of soil, is _____.

Options:
1) Upheaval → transportation → deposition → weathering
2) Weathering → upheaval → transportation → deposition
3) Transportation → upheaval → weathering → deposition
4) weathering → transportation → deposition → upheaval

Correct Answer: weathering → transportation → deposition → upheaval

QID : 232 - Water content of a soil sample is the difference of the weight of the given sample at the given temperature and the weight determined after drying it for 24 hours at temperatures ranging from _____.

Options:
1) 80° to 90° C
2) 90° to 95° C
3) 95° to 100° C
4) 105° to 110° C

Correct Answer: 105° to 110° C

QID : 233 - Fundamental relationship between dry density (γd), bulk density (γ) and water content (ω) is _____.

Options:
1) $\gamma = \gamma d/(1+\omega)$
2) $\gamma d = \gamma/(1+ \omega)$
3) $\omega = \gamma/(1+\gamma d)$
4) $\omega = \gamma/(1-\gamma d)$

Correct Answer: $\gamma d = \gamma/(1+ \omega)$

QID : 234 - Pick up the correct statement from the following _____.

Options:
1) The void ratio in soils is defined as the ratio of the volume of voids to the volume of solids
2) The porosity of a soil is defined as the ratio of the volume of voids to the gross volume of the soil

3) The bulk density of a soil is defined as the unit weight of the soil
4) All options are correct

Correct Answer: All options are correct

QID : 235 - Alcohol is used in manometer, because _____.

Options:
1) its vapor pressure is low
2) it provides suitable meniscus for the inclined tube
3) its density is less
4) it provides longer length for a given pressure difference

Correct Answer: its vapor pressure is low

QID : 236 - The property of fluid by virtue of which it offers resistance to shear is called _____.

Options:
1) surface tension
2) adhesion
3) cohesion
4) viscosity

Correct Answer: viscosity

QID : 237 - The unit of kinematic viscosity is _____.

Options:
1) m2/sec
2) kg-sec/m2
3) newton-sec/m2
4) newton-sec2/m

Correct Answer: m2/sec

QID : 238 - The total pressure on the surface of a vertical sluice gate 2m x 1m with its top 2 m surface being 0.5 m below the water level will be _____.

Options:
1) 500 kg
2) 1000 kg
3) 1500 kg
4) 2000 kg

Correct Answer: 2000 kg

QID : 239 - Metacentric height is given as the distance between _____.

Options:
1) the centre of gravity of the body and the metacentre
2) the centre of gravity of the body and the centre of buoyancy
3) the centre of gravity of the body and the centre of pressure
4) centre of buoyancy and metacentre

Correct Answer: the centre of gravity of the body and the metacentre

QID : 240 - The difference of pressure between the inside and outside of a liquid drop is _____.

Options:
1) $p = T \times r$
2) $p = T/r$
3) $p = T/2r$
4) $p = 2T/r$

Correct Answer: $p = 2T/r$

QID : 241 - The property by which a liquid opposes relative motion between its different layers is called _____.

Options:
1) surface tension
2) co-efficient of viscosity
3) viscosity
4) osmosis

Correct Answer: surface tension

QID : 242 - The atmospheric pressure with rise in altitude decreases _____.

Options:
1) linearly
2) first slowly then steeply
3) first steeply and then gradually
4) unpredictable

Correct Answer: first slowly then steeply

QID : 243 - Barometer is used to measure _____.

Options:
1) pressure in pipes, channels etc..

2) atmospheric pressure
3) very low pressure
4) difference of pressure between two points

Correct Answer: atmospheric pressure

QID : 244 - Flow meters based on obstruction principle like orifice plates can be used with Reynold's number upto approximately _____.

Options:
1) 500
2) 1000
3) 2000
4) 4000

Correct Answer: 2000

QID : 245 - The state of the soil when plants fail to extract sufficient water for their requirements is _____.

Options:
1) maximum saturated point
2) permanent wilting point
3) ultimate utilization point
4) None of these

Correct Answer: None of these

QID : 246 - The field capacity of a soil is 25%, its permanent wilting point is 15% and specific dry unit weight is 1.5. If the depth of root zone of a crop is 80 cm, the storage capacity of the soil is _____.

Options:
1) 8 cm
2) 10 cm
3) 12 cm
4) 14 cm

Correct Answer: 12 cm

QID : 247 - According to the recommendations of Nagpur Conference the width formation of an ideal National Highway in hard rock cutting is _____.

Options:
1) 8.9 m
2) 7.9 m

3) 6.9 m
4) 6.5 m

Correct Answer: 7.9 m

QID : 248 - If L is the length of a rail and R is the radius of a curve, the versine h for the curve is _____.

Options:
1) a= L/4R
2) a= L2/4R
3) h= L2/8R
4) h= L2/16R

Correct Answer: h= L2/8R

QID : 249 - Pick up the incorrect statement from the following.

Options:
1) Manholes are provided in sewer pipes at suitable intervals
2) Catch basins are generally provided in sewers for carrying drainage discharge
3) Inlets are generally provided in all sewers
4) None of the these

Correct Answer: Inlets are generally provided in all sewers

QID : 250 - If q is the average sewage flow from a city of population P, the maximum sewage flow _____.

Options:
1) Q = [(4+√P)/(18+ √P)]q
2) Q = [(18 +P)/(4+ √P)]q
3) Q = [(18+√P)/(4 + √P)]q
4) Q = [(5+√P)/(15 + √P)]q

Correct Answer: Q = [(18+√P)/(4 + √P)]q

QID : 251 - A body is said to be in equilibrium if _____.

Options:
1) it moves horizontally
2) it moves vertically
3) it rotates about its C.G.
4) None of these

Correct Answer: None of these

QID : 252 -

The forces acting normally on the cross section of a bar shown in the figure given below introduces _____.

दर्शाई गई आकृति के अनुसार छड़ के अनुप्रस्थ खंड के लम्बवत कार्य कर रहे बल _____ का आरंभ करेंगे।

Options:
1) compressive stress
2) tensile stress
3) shear stress
4) None of these

Correct Answer: compressive stress

QID : 253 - At yield point of a test piece, the material _____.

Options:
1) obeys Hooke's law
2) behaves in an elastic manner
3) regains its original shape on removal of the load
4) undergoes plastic deformation

Correct Answer: undergoes plastic deformation

QID : 254 - If a concrete column 200 x 200 mm in cross-section is reinforced with four steel bars of 1200 mm2 total cross-sectional area. What is the safe load for the column if permissible stress in concrete is 5 N/mm2 and Es =15 Ec?

Options:
1) 264 MN
2) 274 MN

3) 284 MN
4) 294 MN

Correct Answer: 284 MN

QID : 255 - A steel rod of sectional area 25 sq. mm connects two parallel walls 5 m apart. The nuts at the ends were tightened when the rod was heated at 100° C. If αsteel = 0.000012/C°, Esteel = 0.2 MN/mm2, the tensile force developed at a temperature of 50° C is _____.

Options:
1) 80 N/mm2
2) 100 N/mm2
3) 120 N/mm2
4) 150 N/mm2

Correct Answer: 120 N/mm2

QID : 256 - The ratio of tangential and normal components of a stress on an inclined plane through θ° to the direction of the force is _____.

Options:
1) sin θ
2) cos θ
3) tan θ
4) cos θ

Correct Answer: tan θ

QID : 257 - Pick up the correct statement from the following.

Options:
1) For a uniformly distributed load, the shear force varies linearly
2) For a uniformly distributed load, bulk modular curve is a parabola
3) For a load varying linearly, the shear force curve is a parabola
4) All options are correct

Correct Answer: All options are correct

QID : 258 - At any point of a beam, the section modulus may be obtained by dividing the moment of inertia of the section by _____.

Options:
1) depth of the section
2) depth of the neutral axis

3) maximum tensile stress at the section
4) maximum compressive stress at the section

Correct Answer: depth of the neutral axis

QID : 259 - The moment of inertia of a circular section about any diameter D, is _____.

Options:
1) $(\pi D^2)/64$
2) $(\pi D^4)/32$
3) $(\pi D^3)/64$
4) $(\pi D^4)/64$

Correct Answer: $(\pi D^4)/64$

QID : 260 - In case of principal axes of a section _____.

Options:
1) sum of moment of inertia is zero
2) difference of moment of inertia is zero
3) product of moment of inertia is zero
4) None of these

Correct Answer: product of moment of inertia is zero

QID : 261 - The locus of the moment of inertia about inclined axis to the principal axis is _____.

Options:
1) straight line
2) parabola
3) circle
4) ellipse

Correct Answer: ellipse

QID : 262 - The ratio of moments of inertia of a triangular section about its base and about a centroidal axis parallel to its base is _____.

Options:
1) 1
2) 1.5
3) 2
4) 3

Correct Answer: 3

QID : 263 - If aggregates completely pass through a sieve of size 75 mm and are retained on a sieve of size 60 mm, the particular aggregate will be flaky if its minimum dimension is less than _____.

Options:
1) 20.5 mm
2) 30.5 mm
3) 40.5 mm
4) 50.5 mm

Correct Answer: 40.5 mm

QID : 264 - For the construction of thin R.C.C. structures the type of cement to be avoided is _____.

Options:
1) ordinary Portland cement
2) rapid hardening cement
3) low heat cement
4) blast furnace slag cement

Correct Answer: blast furnace slag cement

QID : 265 - Percentage of pozzolanic material containing clay upto 80% used for the manufacture of pozzolana cement is _____.

Options:
1) 30%
2) 40%
3) 50%
4) 60%

Correct Answer: 30%

QID : 266 - Pick up the incorrect statement applicable to the field test of good cement.

Options:
1) When one thrusts one's hand into a bag of cement, one should feel warm
2) The color of the cement is bluish
3) A handful of cement thrown into a bucket of water should sink immediately
4) All options are correct

Correct Answer: All options are correct

QID : 267 - Pick up the correct statement from the following.

Options:
1) The maximum size of a coarse aggregate is 75 mm and minimum is 4.75 mm
2) The maximum size of the fine aggregate is 4.75 mm and minimum 0.75 mm
3) The material having particles of size varying from 0.06 mm to 0.002 mm is known as silt
4) All options are correct

Correct Answer: All options are correct

QID : 268 - Sand generally contains salt if it is obtained from _____.

Options:
1) nala beds
2) river beds
3) sea beds
4) All options are correct

Correct Answer: sea beds

QID : 269 - Pick up the correct statement from the following.

Options:
1) Bulking of sand is caused due to formation of a thin film of surface moisture
2) Fine sand bulks more than coarse sand
3) With 10% moisture content by weight the bulking of sand is increased by 50%
4) All options are correct

Correct Answer: All options are correct

QID : 270 - If fineness modulus of sand is 2.5 it is graded as _____.

Options:
1) very fine sand
2) fine sand
3) medium sand
4) coarse sand

Correct Answer: fine sand

QID : 271 - An ordinary Portland cement when tested for its fineness, should not leave any residue on I.S. Sieve No.9, more than _____.

Options:
1) 5%
2) 10%

3) 15%
4) 20%

Correct Answer: 10%

QID : 272 - Pick up the correct statement from the following.

Options:
1) Insufficient quantity of water makes the concrete mix harsh
2) Insufficient quantity of water makes the concrete unworkable
3) Excess quantity of water makes the concrete segregated
4) All options are correct

Correct Answer: All options are correct

QID : 273 - Pick up the incorrect statement from the following.

Options:
1) A rich mix of concrete possesses higher strength than that a lean mix of desired workability with excessive quantity of water
2) The strength of concrete decreases as the water cement ratio increases
3) If the water cement ratio is less than 0.45, the concrete is not workable and causes honey-combed structure
4) Good compaction by mechanical vibrations, increases the strength of concrete

Correct Answer: A rich mix of concrete possesses higher strength than that a lean mix of desired workability with excessive quantity of water

QID : 274 - Pick up the correct statement from the following.

Options:
1) The concrete gains strength due to hydration of cement
2) The concrete cured at a temperature below 23° C, gains strength up to 28 days
3) The concrete does not set at freezing point
4) All options are correct

Correct Answer: All options are correct

QID : 275 - Hardening of cement occurs at _____.

Options:
1) rapid rate during the first few days and afterwards it continues to increase at a decreased rate
2) slow rate during the first few days and afterwards it continues to increase at a rapid rate

3) uniform rate throughout its age
4) None of these

Correct Answer: None of these

QID : 276 - Pick up the correct statement from the following.

Options:
1) Higher workability indicates unexpected increase in the moisture content
2) Higher workability indicates deficiency of sand
3) If the concrete mix is dry, the slump is zero
4) All options are correct

Correct Answer: All options are correct

QID : 277 - The top diameter, bottom diameter and the height of a slump mould are
_____.

Options:
1) 10 cm, 20 cm, 30 cm
2) 10 cm, 30 cm, 20 cm
3) 20 cm, 10 cm, 30 cm
4) 20 cm, 30 cm, 10 cm

Correct Answer: 10 cm, 20 cm, 30 cm

QID : 278 - Pick up the correct statement from the following.

Options:
1) Segregation is necessary for a workable concrete
2) Consistency does not affect the workability of concrete
3) If the slump increases, workability decreases
4) None of these

Correct Answer: None of these

QID : 279 - The grade of concrete M 150 means that compressive strength of a 15 cm
cube after 28 days, is _____.

Options:
1) 100 kg/cm2
2) 150 kg/cm2
3) 200 kg/cm2
4) 250 kg/cm2

Correct Answer: 150 kg/cm2

QID : 280 - The preliminary test is repeated if the difference compressive strength of three test specimens, exceeds _____.

Options:
1) 5 kg/cm2
2) 8 kg/cm2
3) 10 kg/cm2
4) 15 kg/cm2

Correct Answer: 15 kg/cm2

QID : 281 - According to load factor method, the permissible load W on a short column reinforced with longitudinal bars and lateral stirrups is _____.

Options:
1) Stress in concrete x area of concrete
2) Stress in steel x area of steel
3) Stress in concrete x area of concrete + stress in steel x area of steel
4) None of these

Correct Answer: Stress in concrete x area of concrete + stress in steel x area of steel

QID : 282 - The length of the lap in a compression member is kept greater than [bar diameter x (Permissible stress in bar)/(Five times the bond stress)] or is _____.

Options:
1) 12 bar diameters
2) 18 bar diameters
3) 24 bar diameters
4) 30 bar diameters

Correct Answer: 24 bar diameters

QID : 283 - A short column 20 cm x 20 cm in section is reinforced with 4 bars whose area of cross section is 20 sq.cm. If permissible compressive stresses in concrete and steel are 40 kg/cm2 and 300 kg/cm2, the safe load on the column should not exceed _____.

Options:
1) 412 kg
2) 4120 kg
3) 412000 kg
4) None of these

Correct Answer: None of these

QID : 284 - A column is regarded as long column if the ratio of its effective length and lateral dimension exceeds _____.

Options:
1) 10
2) 15
3) 20
4) None of these

Correct Answer: None of these

QID : 285 - If the size of a column is reduced above the floor, the main bars of the columns _____.

Options:
1) continues up
2) bend inwards at the floor level
3) stops just below the floor level and separates lap bars provided
4) All options are correct

Correct Answer: All options are correct

QID : 286 - The pitch of the main bars in a simply supported slab should not exceed its effective depth by _____.

Options:
1) three times
2) four times
3) five times
4) six times

Correct Answer: six times

QID : 287 - Distribution reinforcement in a simply supported slab is provided to distribute _____.

Options:
1) load
2) temperature stress
3) shrinkage stress
4) All options are correct

Correct Answer: All options are correct

QID : 288 - In a simply supported slab the minimum spacing of distribution reinforcement should be four times the effective thickness of the slab or _____.

Options:
1) 20 cm
2) 30 cm
3) 40 cm
4) None of these

Correct Answer: None of these

QID : 289 - The modular ratio 'm' of a concrete whose permissible compressive stress is 'C' may be obtained from the equation _____.

Options:
1) m = 700/3C
2) m = 1400/3C
3) m = 2800/3C
4) m = 3500/3C

Correct Answer: m = 2800/3C

QID : 290 - For M 150 grade concrete (1 : 2 : 4) the moment of resistance factor is _____.

Options:
1) 0.87
2) 8.5
3) 7.5
4) 5.8

Correct Answer: 8.5

QID : 291 - If the thickness of a structural member is small as compared to its length and width, it is classified as _____.

Options:
1) one dimensional
2) two dimensional
3) three dimensional
4) None of these

Correct Answer: two dimensional

QID : 292 - Design of a riveted joint assumes that _____.

Options:
1) the bending stress in rivets is accounted for

2) the riveted hole is to be filled by the rivet
3) the stress in the plate is not uniform
4) the friction between plates is considered

Correct Answer: the riveted hole is to be filled by the rivet

QID : 293 - Rolled steel T-sections are used _____.

Options:
1) as columns
2) with flat strips to connect plates in steel rectangular tanks
3) as built up sections to resist axial tension
4) None of these

Correct Answer: with flat strips to connect plates in steel rectangular tanks

QID : 294 - With a percentage increase of carbon in steel, decreases its _____.

Options:
1) strength
2) hardness
3) brittleness
4) ductility

Correct Answer: ductility

QID : 295 - If P is the wind pressure in kg/cm2, v is the velocity in km/hour and K is constant of proportionality then _____.

Options:
1) P=K/v2
2) v=K/P2
3) P=Kv2
4) P=Kv

Correct Answer: P=Kv2

QID : 296 - Factor of safety is the ratio of _____.

Options:
1) yield stress to working stress
2) tensile stress to working stress
3) compressive stress to working stress
4) bearing stress to working stress

Correct Answer: yield stress to working stress

QID : 297 - The ratio of shearing stress to shearing strain within elastic limit, is known as
_____.

Options:
1) modulus of elasticity
2) shear modulus of elasticity
3) bulk modulus of elasticity
4) tangent modulus of elasticity

Correct Answer: shear modulus of elasticity

QID : 298 - The rivets which are heated and then driven in the field are known _____.

Options:
1) power driven shop rivets
2) power driven field rivets
3) hand driven rivets
4) cold driven rivets\

Correct Answer: power driven field rivets

QID : 299 - The gross diameter of a rivet is the diameter of _____.

Options:
1) cold rivet before driving
2) rivet after driving
3) rivet hole
4) None of these

Correct Answer: rivet after driving

QID : 300 - Working shear stress on the gross area of a rivet as recommended by Indian
Standards is _____.

Options:
1) 785 kg/cm2
2) 1025 kg/cm2
3) 2360 kg/cm2
4) None of the these

Correct Answer: 1025 kg/cm2

(General Intelligence & Reasoning)

QID : 301 - Select the related word/letters/number from the given alternatives.

Red : Colour :: French : ?

Options:
1) foreign
2) language
3) European
4) Country

Correct Answer: language

QID : 302 - Select the related word/letters/number from the given alternatives.

Chips : Potatoes :: Soda : ?

Options:
1) Fizz
2) Bottle
3) Lemon
4) Water

Correct Answer: Water

QID : 303 - Select the related word/letters/number from the given alternatives.

Quadrilateral : Four :: ?

Options:
1) Cylinder : Circle
2) Cube : Square
3) Triangle : 180
4) Hexagon : Six

Correct Answer: Hexagon : Six

QID : 304 - Select the related word/letters/number from the given alternatives.

FGI : HIK :: STV : ?

Options:
1) UVW
2) VWY
3) XYZ
4) UVX

Correct Answer: UVX

QID : 305 - Select the related word/letters/number from the given alternatives.

Dream : Area :: Frame : ?

Options:
1) Farmer
2) Ear
3) Fare
4) Freer

Correct Answer: Fare

QID : 306 - Select the related word/letters/number from the given alternatives.

Brine : Inert :: Beware : ?

Options:
1) Arenas
2) Declare
3) Spare
4) Area

Correct Answer: Arenas

QID : 307 - Select the related word/letters/number from the given alternatives.

169 : 13 :: 225 : ?

Options:
1) 22
2) 25
3) 20
4) 15

Correct Answer: 15

QID : 308 - Select the related word/letters/number from the given alternatives.

159 : 840 :: 345 : ?

Options:
1) 654
2) 765
3) 876
4) 987

Correct Answer: 654

QID : 309 - Select the related word/letters/number from the given alternatives.

761 : 928 :: 651 : ?

Options:
1) 765
2) 753
3) 807
4) 951

Correct Answer: 807

QID : 310 - Select the odd word/letters/number/word pair/number pair from the given alternatives.

Options:
1) kilometres
2) feet
3) grams
4) micrometers

Correct Answer: grams

QID : 311 - Select the odd word/letters/number/word pair/number pair from the given alternatives.

Options:
1) pros and cons
2) dead or alive
3) null and void
4) sooner or later

Correct Answer: null and void

QID : 312 - Select the odd word/letters/number/word pair/number pair from the given alternatives.

Options:
1) Crayon and Marker
2) Pen and Eraser
3) Book and Diary
4) Pen and Marker

Correct Answer: Book and Diary

QID : 313 - Select the odd word/letters/number/word pair/number pair from the given alternatives.

Options:
1) OU
2) YC
3) IA
4) EO

Correct Answer: YC

QID : 314 - Select the odd word/letters/number/word pair/number pair from the given alternatives.

Options:
1) Cuisine
2) Business
3) Disinterested
4) Noisiness

Correct Answer: Business

QID : 315 - Select the odd word/letters/number/word pair/number pair from the given alternatives.

Options:
1) DRGK
2) WMUI
3) OHAU
4) XHTV

Correct Answer: DRGK

QID : 316 - Select the odd word/letters/number/word pair/number pair from the given alternatives.

Options:
1) 7531
2) 2468
3) 9753
4) 8642

Correct Answer: 2468

QID : 317 - Select the odd word/letters/number/word pair/number pair from the given alternatives.

Options:
1) 15
2) 25
3) 53
4) 45

Correct Answer: 53

QID : 318 - Select the odd word/letters/number/word pair/number pair from the given alternatives.

Options:
1) 108, 132
2) 114, 156
3) 136, 152
4) 120, 138

Correct Answer: 136, 152

QID : 319 - In the given series one word/one term/one number is missing. Select the correct alternative from the given ones that will complete the series.

Cremation, Accolade, Maestro, Chrome, ?

Options:
1) Very
2) Zebra
3) Virtual
4) Time

Correct Answer: Zebra

QID : 320 - In the given series one word/one term/one number is missing. Select the correct alternative from the given ones that will complete the series.

Toxic, Icon, Onto, Tomorrow,?

Options:
1) Owl
2) Wet
3) Rat
4) Borrow

Correct Answer: Owl

QID : 321 - In the given series one word/one term/one number is missing. Select the correct alternative from the given ones that will complete the series.

age, dire, genre, stumpy, ?

Options:
1) splayed
2) secretes
3) preacher
4) shooed

Correct Answer: splayed

QID : 322 - In the given series one word/one term/one number is missing. Select the correct alternative from the given ones that will complete the series.

L, J, H, F, ?

Options:
1) E
2) G
3) D
4) I

Correct Answer: D

QID : 323 - In the given series one word/one term/one number is missing. Select the correct alternative from the given ones that will complete the series.

eca, fdb, gec, hfd, ?

Options:
1) ige
2) ieg
3) gei
4) egi

Correct Answer: ige

QID : 324 - In the given series one word/one term/one number is missing. Select the correct alternative from the given ones that will complete the series.

XXXXOXO, XXXXOOX, XXXXOOX, XXXOXOX, ?

Options:
1) XOXXOXX

2) XXXXOXO
3) XXXXOOX
4) XXOXXOX

Correct Answer: XXOXXOX

QID : 325 - In the given series one word/one term/one number is missing. Select the correct alternative from the given ones that will complete the series.

-2, 1, 5, ?, 16

Options:
1) 9
2) 10
3) 11
4) 13

Correct Answer: 10

QID : 326 - In the given series one word/one term/one number is missing. Select the correct alternative from the given ones that will complete the series.

-10/3, ?, -2/3, 2/3, 2

Options:
1) -2
2) 2
3) -1/3
4) 1/3

Correct Answer: -2

QID : 327 - In the given series one word/one term/one number is missing. Select the correct alternative from the given ones that will complete the series.
23, 29, ?, 37, 41

Options:
1) 30
2) 33
3) 31
4) 35

Correct Answer: 31

QID : 328 - If a < b, d > c and a < d, which of the following is true?

I. b < c
II. c > a

Options:
1) Only I
2) Neither I nor II
3) Only II
4) Both I and II

Correct Answer: Neither I nor II

QID : 329 - The weights of five boxes are 10, 30, 40, 70 & 70 kilograms. Which of the following cannot be the total weight (in kilograms) of any combination of these boxes?

Options:
1) 190
2) 180
3) 210
4) 200

Correct Answer: 200

QID : 330 - If the letters Q, B, T, A, U, E & N are numbered 1, 2, 3, 4, 5, 6 & 7 respectively. Select that combination of numbers so that letters arranged accordingly, form a meaningful word.

Options:
1) 5617312
2) 5447134
3) 2471563
4) 3242637

Correct Answer: 2471563

QID : 331 - If PROXIMAL is coded as KILCRNZO, then how will WHY be coded as?

Options:
1) DSB
2) EDC
3) CDE
4) BNM

Correct Answer: DSB

QID : 332 - In a certain code language, 531 means 'boy is shy', 346 means 'girl is bold', 256 means 'shy or bold'. Find the code for 'or'.

Options:
1) 1
2) 2
3) 3
4) 5

Correct Answer: 2

QID : 333 - In a certain code language, '+' represents 'x', '-' represents '+', 'x' represents '÷' and '÷' represents '-'. Find out the answer to the following question.

0.1 + 500 - 240 x 6 = ?

Options:
1) 90
2) 10
3) 1.25
4) 108

Correct Answer: 90

QID : 334 - If A @ B means A is father of B, A # B means A is sister of B and A ! B means A is son of B, then what does E @ F ! G # H mean, if H is a male?

Options:
1) H is brother of E
2) H is father of E
3) H is son of E
4) H is E's wife's brother

Correct Answer: H is E's wife's brother

QID : 335 - If 45@23 = 14, 76@22 = 17, then find the value of 55@10 = ?

Options:
1) 8
2) 11
3) 15
4) 5

Correct Answer: 11

QID : 336 - Which of the following words follow the trend of the given list?

Zonal, Tzars, Wizen, Seize, Waltz, ?

Options:
1) Unitize
2) Ablaze
3) Azure
4) Sanza

Correct Answer: Unitize

QID : 337 - Which of the following terms follows the trend of the given list?

ABC, BCAB, CABCA, _____.

Options:
1) BCABCA
2) CABCAB
3) ABCCBA
4) ABCABC

Correct Answer: ABCABC

QID : 338 - A girl walks 3 km East starting from her home. She then turns South and walks 2 km, then she turns West and walks 7 km, then she turns to her right and walks 2 km. Where is she now from her starting position?

Options:
1) 10 km to the West from her home.
2) 4 km to the East from her home.
3) 10 km to the East from her home.
4) 4 km to the West from her home.

Correct Answer: 4 km to the West from her home.

QID : 339 - A is standing 6 m to the East of B. A walks 9 m South, then turns to his right and walks 7 m. At the same time, B has walked 3 m West, then he turned South and walked 9 m, then he turned to his left and walked 5 m. Where is B now with respect to the position of A?

Options:
1) B is 12 m to the East of A
2) B is 3 m to the West of A
3) B is 3 m to the East of A
4) B is 12 m to the West of A

Correct Answer: B is 3 m to the East of A

QID : 340 - In the question two statements are given, followed by two conclusions, I and II. You have to consider the statements to be true even if it seems to be at variance from commonly known facts. You have to decide which of the given conclusions, if any, follows from the mentioned statements.

Statement 1: All huts are made of mud.
Statement 2: Things made of mud are not b.

Conclusion I: All huts are b.
Conclusion II: Mud huts are not b.

Options:
1) Only conclusion I follows
2) Either I or II follows
3) Neither I nor II follows
4) Only conclusion II follows

Correct Answer: Only conclusion II follows

QID : 341 - In the question a statement is given, followed by two arguments, I and II. You have to consider the statement to be true even if it seems to be at variance from commonly known facts. You have to decide which of the given arguments, if any, is a b argument.

Statement : Should teachers be permitted to cane unruly children?

Argument I : No, this will teach them that physical violence is an acceptable means of social behaviour.
Argument II : Yes, children taught in a strict atmosphere are more successful.

Options:
1) only argument II is b
2) neither argument I nor II is b
3) both argument I and II are b
4) only argument I is b

Correct Answer: only argument I is b

QID : 342 -

Which of the following cube in the answer figure cannot be made based on the unfolded cube in the question figure?

निम्नलिखित उत्तर आकृति में से कौन सा घन दिए गए प्रश्न आकृति में से खुले घन से बनाया नहीं जा सकता?

Options:

1)

2)

3)

4)
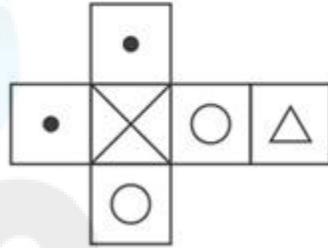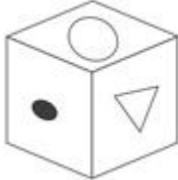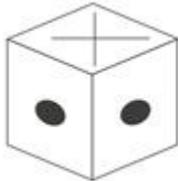
Correct Answer:
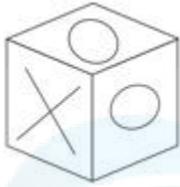
QID : 343 -

Which of the following answer figure patterns can be combined to make the question figure?

निम्नलिखित उत्तर आकृति में से कौन से प्रतिरूपों को जोड़कर दिए गए प्रश्न आकृति को बनाया जा सकता है?

Options:
1)

2)

3)

4)
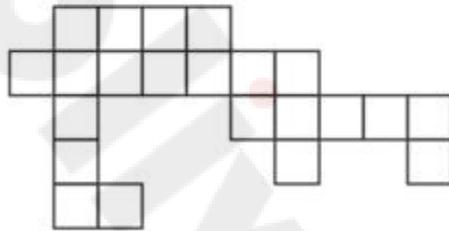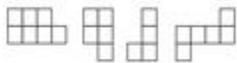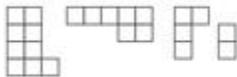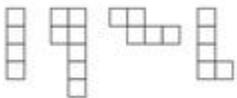
Correct Answer:

QID : 344 - Which of the following diagrams represent the relationship between Engineers, Software Engineers and Chemical Engineers?

Options:

1)

2)

3)

4)
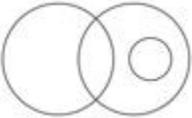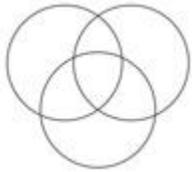
Correct Answer:

QID : 345 -

In the following figure, square represents engineers, triangle represents environmentalists, circle represents lawyers and rectangle represents government officers. Which set of letters represents lawyers who are not environmentalists and government officers who are engineers?

निम्नलिखित आकृत में वर्ग इंजीनियरों को दर्शाता है, त्रिभुज पर्यावरणविदों को दर्शाता है, वृत्त वकीलों को दर्शाता है और आयत सरकारी अधिकारियों को दर्शाता है| वर्णों का कौन सा समूह वकीलों को दर्शाता हैजो पर्यावरणविद नहीं हैं और सरकारी अधिकारी जो इंजीनियर हैं?
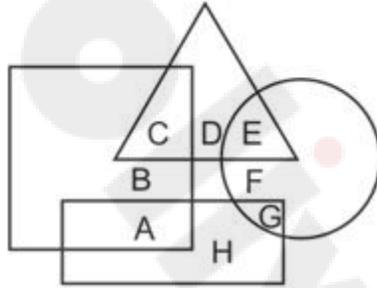
Options:
1) E, F and B
2) A, E and F
3) B, A and E
4) G, F and A

Correct Answer: G, F and A

QID : 346 -

Which answer figure will complete the pattern in the question figure?

निम्नलिखित में से कौन-सी उत्तर आकृति प्रश्न आकृतिके प्रतिरूप को पूरा करेगी?

Options:
1)
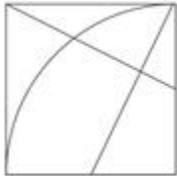
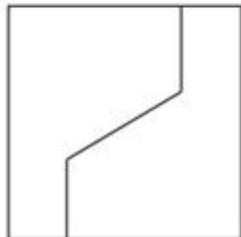**2)**

3)

4)
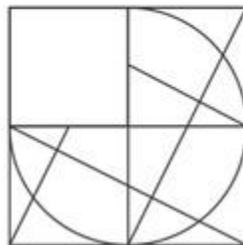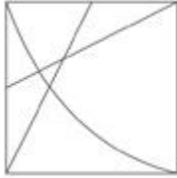
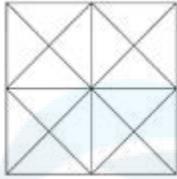**Correct Answer:**

QID : 347 -

From the given answer figures, select the one in which the question figure is hidden/embedded.

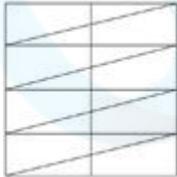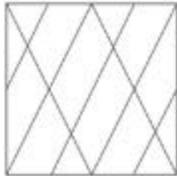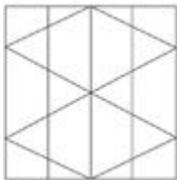दी गई उत्तर आकृतियों में से उस आकृति को चुनिए जिसमें प्रश्न आकृति निहित है।
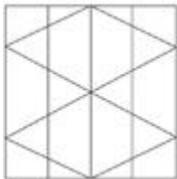
Options:

1)

2)

3)

4)

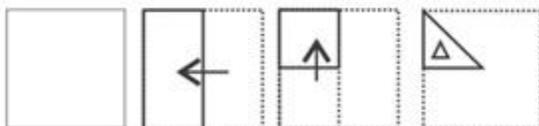

Correct Answer:

QID : 348 -

A piece of paper is folded and punched as shown below in the question figures. From the given answer figures, indicate how it will appear when opened.

प्रश्न आकृतियों में दिखाए अनुसार कागज को मोड़कर उसमें छेद करने तथा खोलने के बाद वह किस उत्तर आकृति जैसा दिखाई देगा?

Options:

1)

2)

3)

4)
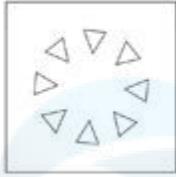
Correct Answer:

QID : 349 -

If a mirror is placed on the line MN, then which of the answer figures is the right image of the given figure?

यदि एक दर्पण को MN रेखा पर रखा जाए तो दी गई उत्तर आकृतियों में से कौन-सी आकृति प्रश्न आकृति का सही प्रतिबिम्ब होगी?

Options:
1)

2)

3)

4)

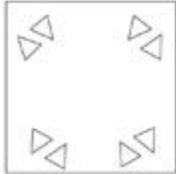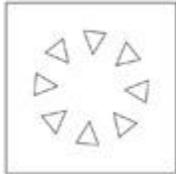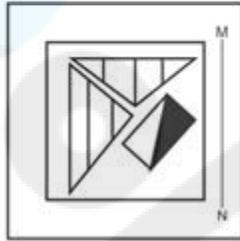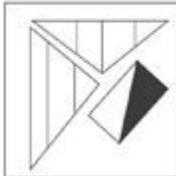**Correct Answer:**

QID : 350 -

A word is represented by only one set of numbers as given in any one of the alternatives. The sets of numbers given in the alternatives are represented by two classes of alphabets as shown in the given two matrices. The columns and rows of Matrix-I are numbered from 0 to 4 and that of Matrix-II are numbered from 5 to 9. A letter from these matrices can be represented first by its row and next by its column, for example 'N' can be represented by 00, 12 etc and 'C' can be represented by 95, 76 etc. Similarly, you have to identify the set for the word 'TYRES'.

एक शब्द केवल एक संख्या-समूह द्वारा दर्शाया गया है, जैसा कि विकल्पों में से किसी एक में दिया गया है। विकल्पों में दिए गए संख्या-समूह अक्षरों के दो वर्गों द्वारा दर्शाए गए हैं, जैसा कि दिए गए दो आव्यूहों में है। आव्यूह-I के स्तम्भ और पंक्ति की संख्या 0 से 4 और आव्यूह-II की 5 से 9 है। इन आव्यूहों से एक अक्षर को पहले उसकी पंक्ति और बाद में स्तम्भ संख्या द्वारा दर्शाया जा सकता है। उदाहरण के लिए 'N' को 00, 12 आदि द्वारा दर्शाया जा सकता है तथा 'C' को 95, 76 आदि द्वारा दर्शाया जा सकता है। इसी तरह से आपको प्रश्न में दिए शब्द 'TYRES' के लिए समूह को पहचानना है।

MATRIX – I आव्यूह - I					
	0	1	2	3	4
0	N	V	P	R	W
1	X	T	N	Y	V
2	Z	P	S	X	Q
3	U	Z	X	W	U
4	Y	Y	R	N	R

MATRIX - II आव्यूह - II					
	5	6	7	8	9
5	J	I	C	E	J
6	G	G	A	L	I
7	F	C	J	K	D
8	E	M	K	J	H
9	C	L	E	A	E

Options:
1) 21,40,04,69,01
2) 12,13,41,55,69
3) 11,41,44,85,22
4) 31,01,65,58,41

Correct Answer: 11,41,44,85,22

(General Awareness)

QID : 351 - Which of the following is not a part of the human stomach?

Options:
1) cardiac
2) caecum

3) fundic
4) pyloric

Correct Answer: caecum

QID : 352 - Which of the following white blood cells is a type of agranulocytes?

Options:
1) neutrophils
2) eosinophils
3) lymphocytes
4) basophils

Correct Answer: lymphocytes

QID : 353 - Which of the following is an insectivorous plant?

Options:
1) Pitcher
2) Alstonia
3) Calotropis
4) Eichhornia

Correct Answer: Pitcher

QID : 354 - Which of the following represents the correct pathway of water movement in the root?

Options:
1) Epidermis > Endodermis > Cortex > Pericycle > Xylem
2) Epidermis > Pericycle > Endodermis > Cortex > Xylem
3) Epidermis > Cortex > Endodermis > Pericycle > Xylem
4) Epidermis > Pericycle > Cortex > Endodermis > Xylem

Correct Answer: Epidermis > Cortex > Endodermis > Pericycle > Xylem

QID : 355 - Consider the following pairs.

Name : Formula
1] 2-Bromopropane : $(CH3)2C=CHCOCH3$
2] Propan-1-amine : $CH3–CH2–CH2–NH2$
3] Dichloromethane : $CH2Cl2$
4] 4-Methylpent-3-en-2-one : $CH3-CHBr-CH3$

Which of the above pairs are correctly matched?

Options:
1) 1 and 4 only
2) 3 and 4 only
3) 2 and 3 only
4) 2 , 3 and 4 only

Correct Answer: 2 and 3 only

QID : 356 - What is the IUPAC name of Allyl bromide?

Options:
1) Dichloromethane
2) Tetrachloromethane
3) 2-Chlorobutane
4) 3-Bromopropene

Correct Answer: 3-Bromopropene

QID : 357 - Formula for Hexamethylene diamine is _____.

Options:
1) NH2(CH2)4NH2
2) NH2(CH2)6NH2
3) NH2(CH2)3NH2
4) NH2(CH2)2NH2

Correct Answer: NH2(CH2)6NH2

QID : 358 - Which of the following elements is the most electronegative?

Options:
1) Aluminium
2) Boron
3) Gallium
4) Thallium

Correct Answer: Boron

QID : 359 - Which HTML tag is used to make a text bold?

Options:
1) <body>
2) <b>
3)
4) None of these

Correct Answer: <b>

QID : 360 - To easily access commonly used commands and tools in a word processor use the _____ bar.

Options:
1) Home
2) Title
3) Menu
4) Tool

Correct Answer: Tool

QID : 361 - Hareli is the harvest festival of which state?

Options:
1) Assam
2) Andhra Pradesh
3) Himachal Pradesh
4) Chhattisgarh

Correct Answer: Chhattisgarh

QID : 362 - In October 2016, who was sacked as the Chairman of the Tata Sons?

Options:
1) Ratan Tata
2) Narayan Murthy
3) Cyrus Mistry
4) Vishal Sikka

Correct Answer: Cyrus Mistry

QID : 363 - Which of the following scientists demonstrated that fermentation is caused by the growth of micro-organisms?

Options:
1) Edmund Becquerel
2) Dmitri Mendeleev
3) Louis Pasteur
4) Joseph Priestley

Correct Answer: Louis Pasteur

QID : 364 - The line consisting of all the bundles which cost exactly equal to the consumer's income is called the _____ line.

Options:
1) demand
2) utility
3) budget
4) indifference

Correct Answer: budget

QID : 365 - The area under the short run _____ cost curve up to any level of output gives us the total variable cost up to that level.

Options:
1) average
2) marginal
3) total
4) variable

Correct Answer: marginal

QID : 366 - If price of an article decreases from Rs 60 to Rs 50, when quantity demanded increases from 1,000 units to 1,200 units. Find point elasticity of demand.

Options:
1) 1
2) -1.2
3) -1
4) 1.2

Correct Answer: -1

QID : 367 - Which ratio is the proportion of the total deposits commercial banks keep as reserves?

Options:
1) Cash Reserve
2) currency deposit
3) Reserve deposit
4) Statutory Liquidity

Correct Answer: Reserve deposit

QID : 368 - Gross Domestic Product + Net factor income from abroad =

Options:
1) Personal income
2) Personal Disposable Income

3) Gross National Product
4) Net National Product at factor cost

Correct Answer: Gross National Product

QID : 369 - Which of the following metals is not used as a catalyst in catalytic converts fitted in automobiles?

Options:
1) Platinum
2) Polonium
3) Rhodium
4) Palladium

Correct Answer: Polonium

QID : 370 - Bio-magnification is well established for which of the following pollutants?

Options:
1) zinc
2) mercury
3) copper
4) nickel

Correct Answer: mercury

QID : 371 - All changes in climate and weather take place in which layer of the atmosphere?

Options:
1) Stratosphere
2) Mesosphere
3) Thermosphere
4) Troposphere

Correct Answer: Troposphere

QID : 372 - Which type of electromagnetic radiation converts oxygen into ozone?

Options:
1) Gamma rays
2) Cosmic rays
3) Infra-red rays
4) Ultra-violet rays

Correct Answer: Ultra-violet rays

QID : 373 - Jan Koum is the cofounder of which startup?

Options:
1) Microsoft
2) Google
3) Facebook
4) WhatsApp

Correct Answer: WhatsApp

QID : 374 - With reference to the interior of the earth consider the following statements.

1] Body waves are generated due to the release of energy at the focus.
2] The denser the material, the lower is the velocity of the Earthquake waves.
3] There are two types of body waves. They are called P and S-waves.

Which of the statements given above is / are correct?

Options:
1) 1 and 2 only
2) 2 and 3 only
3) 3 only
4) 1 and 3 only

Correct Answer: 1 and 3 only

QID : 375 - Which of the following is a major tectonic plate?

Options:
1) Cocos plate
2) Arabian plate
3) Pacific plate
4) Nazca plate

Correct Answer: Pacific plate

QID : 376 - The mean distance between the Sun and the Earth is approximately _____.

Options:
1) 99.6 Million Km
2) 49.6 Million Km
3) 149.6 Million Km
4) 199.6 Million K

Correct Answer: 149.6 Million Km

QID : 377 - The process by which soil deposits through compaction turn into rocks is called _____.

Options:
1) lithification
2) Metamorphication
3) Slatification
4) Petrification

Correct Answer: lithification

QID : 378 - The Rabi cropping season is from _____.

Options:
1) April – June
2) June - September
3) May - August
4) October – March

Correct Answer: October – March

QID : 379 - With reference to India's freedom struggle consider the following statements.

1] Gandhiji's first major public appearance was at the opening of the Banaras Hindu University (BHU) in February 1916.
2] During the Great War of 1914-18, the French had instituted censorship of the press and permitted detention without trial.
3] Jallianwala Bagh massacre took place in Amritsar in April 1919.

Which of the statements given above is / are correct?

Options:
1) 1 and 2 only
2) 2 and 3 only
3) 3 only
4) 1 and 3 only

Correct Answer: 1 and 3 only

QID : 380 - By the sixth century BC, _____ had established control over major parts of the Assyrian empire.

Options:
1) Iranians
2) Greeks

3) Romans
4) Mongols

Correct Answer: Iranians

QID : 381 - Asoka, arguably the most famous ruler of early India, conquered _____, present-day coastal Orissa.

Options:
1) Pataliputra
2) Prayaga
3) Taxila
4) Kalinga

Correct Answer: Kalinga

QID : 382 - Ibn Battuta was a _____ who wrote about his travels to India in the fourteenth century.

Options:
1) Persian
2) Egyptian
3) Turk
4) Moroccan

Correct Answer: Moroccan

QID : 383 - One of the earliest Bhakti movements were led by the Nayanars, who were devotees of _____.

Options:
1) Shiva
2) Vishnu
3) Surya
4) Brahma

Correct Answer: Shiva

QID : 384 - Phonograph was invented by which scientist?

Options:
1) Alexander Graham Bell
2) Thomas Edison
3) Jagadish Chandra Bose
4) George Eastman

Correct Answer: Thomas Edison

QID : 385 - Consider the following pairs.

Event : Time interval (in Seconds)
1] Period of atomic vibrations : 10^{-15}
2] Period of radio wave : 10^{-6}
3] Travel time for light from Sun to Earth : 10^6
4] Revolution period of the moon : 10^{10}

Which of the above pairs are correctly matched?

Options:
1) 1 and 4 only
2) 1 and 2 only
3) 2 and 3 only
4) 2 , 3 and 4 only

Correct Answer: 1 and 2 only

QID : 386 - The correct expression for the time period (T) of a particle of mass (m) performing Simple Harmonic Motion, where k is a constant, is _____.

Options:
1) $T = 2\pi\sqrt{(k/m)}$
2) $T = 2\pi(m/k)^2$
3) $T = 2\pi(k/m)^2$
4) $T = 2\pi\sqrt{(m/k)}$

Correct Answer: $T = 2\pi\sqrt{(m/k)}$

QID : 387 - Who has a wavelength range of 700 nm to 400 nm?

Options:
1) X-Rays
2) Visible light
3) Microwaves
4) Radio waves

Correct Answer: Visible light

QID : 388 - How far should the object be placed from a concave mirror of focal length 4.8 cm, when the image is to be obtained at a distance of 12 cm from the mirror?

Options:
1) 8 cm

2) 10 cm
3) 12 cm
4) 15 cm

Correct Answer: 8 cm

QID : 389 - The Institution of the Speaker and his role of the Indian Constitution are borrowed from the _____ constitution.

Options:
1) British
2) French
3) Irish
4) Canadian

Correct Answer: British

QID : 390 - Which of the following is a characteristic of a Proportional Representation system?

Options:
1) The country is divided into small geographical units called constituencies or districts
2) Candidate who wins the election may not get majority (50%+1) votes
3) A party may get more seats than votes in the legislature
4) Every party gets seats in the legislature in proportion to the percentage of votes that it gets

Correct Answer: Every party gets seats in the legislature in proportion to the percentage of votes that it gets

QID : 391 - Which of the following is false with reference to Presidential type of executive?

Options:
1) President is the head of the Government
2) President is head of the state
3) The President is usually directly elected by the people
4) President is accountable to the Legislature

Correct Answer: President is accountable to the Legislature

QID : 392 - Which of the following subjects is included in the Concurrent List?

Options:
1) Banking
2) Trade Unions

3) Agriculture
4) Police

Correct Answer: Trade Unions

QID : 393 - Independence of Judiciary means all of the following, except _____.

Options:
1) Executive must not restrain the functioning of the judiciary
2) Legislature should not interfere with the decision of the judiciary.
3) Absence of accountability
4) Judges must be able to perform their functions without fear

Correct Answer: Absence of accountability

QID : 394 - Jwala Gutta is associated with which sport?

Options:
1) Wrestling
2) Boxing
3) Badminton
4) Weight Lifting

Correct Answer: Badminton

QID : 395 - Who wrote the novel "Angels & Demons"?

Options:
1) Dan Brown
2) Jonathan Swift
3) Daniel Defoe
4) William Shakespeare

Correct Answer: Dan Brown

QID : 396 - Over two-thirds of all named species on earth are _____.

Options:
1) Porifera
2) Arthopods
3) Aschelminthes
4) Ctenophora

Correct Answer: Arthopods

QID : 397 - Which type of epithelium is made of a single thin layer of flattened cells with irregular boundaries?

Options:
1) cuboidal
2) columnar
3) ciliated
4) squamous

Correct Answer: squamous

QID : 398 - Which is the longest river bridge in India?

Options:
1) Bandra-Worli Sea Link
2) Mahatma Gandhi Setu
3) Vikramshila Setu
4) Vembanad Rail Bridge

Correct Answer: Mahatma Gandhi Setu

QID : 399 - Which of the following is a famous Classical Indian dancer?

Options:
1) Amrita Sher Gil
2) Satish Gujral
3) Sonal Mansingh
4) Bhimsen Joshi

Correct Answer: Sonal Mansingh

QID : 400 - Which of the following is a recipient of the "Ashoka Chakra" award?

Options:
1) Abhijeet Gupta
2) Hangpan Dada
3) Akhil Kumar
4) Sunil Chhetri

Correct Answer: Hangpan Dada