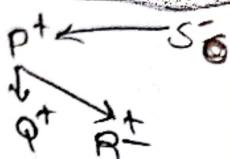


- 1 Shift of a curve having radius 'R' and length 'L' is _____
 (A) $L^2/24R$
 (B) $L/24R$
 (C) $L/6R$
 (D) $L^2/6R^2$
- 2 The number of vehicles using the road per hour during peak periods and the average of several peak day is called _____.
 (A) Traffic density
 (B) Traffic rate
 (C) Traffic volume
 (D) Traffic concentration
- 3 या नुसौथी वधु उत्पादन करनार देश क्यों हे ?
 (A) भारत (B) चीन
 (C) फ्रांस (D) ब्राज़िल
- 4 वाक्य-रचना (सिन्टेक्स) ना नियमो प्रमाणे, HTML मां टेगने क्या सिम्बोल्सनी वच्चे दर्शाववामां आवे हे ?
 (A) {} (B) <>
 (C) () (D) []
- 5 Which of the following is natural construction material?
 (A) Tiles
 (B) Lime
 (C) Bricks
 (D) Admixtures
- 6 A 100m tape is held 1m out of line. The true length is _____.
 (A) 100.0050m
 (B) 99.9950m
 (C) 100.0100m
 (D) 99.9800m
- 7 The internal angle of regular pentagon is _____ degree.
 (A) 72
 (B) 108
 (C) 120
 (D) 150
- 8 Choose the correct antonym for "generous"?
 (A) Kind (B) Stingy
 (C) Charitable (D) Benevolent
- 9 संयुक्त राज्य (United Nations) महासभा (General Assembly) मां भरताना सौ प्रथम घुटावेला महिला प्रमुख झोणा हता ?
 (A) इन्हीं राज्यांची (B) विजया लक्ष्मी पंडित
 (C) सरोजनी नायडु (D) राजकुमारी अमित कौर



- 20 P એ Q ના પિતા છે અને Q એ R નો ભાઈ છે. S એ P ની માતા હોય તો S એ R ના _____ છે.
 (A) બહેન
 (B) દાદી
 (C) માતા
 (D) પૌત્ર

21 Inclined letters are written at an angle of _____ the base line.
 (A) 60°
 (B) 30°
 (C) 75°
 (D) 120°

22 નીચેનામાંથી કઈ સેકન્ડરી સ્ટોરેજ ડિવાઇસ, તેના પર માહિતીનો સંગ્રહ કરવા માટે સિલીન્ડર,
 વર્ટુયાકાર ડ્રેક્સ, અને સેક્ટરની વિભાવનાનો ઉપયોગ કરે છે?
 (A) CD-ROM
 (B) CD-RW
 (C) DVD
 (D) Hard Disk

23 Pick out the incorrect statement.
 (A) Portland blast slag cement results in a higher creep.
 (B) Creep decreases with increase in the size of the specimen.
 (C) Creep increases with increase in water / cement ratio
 (D) Light weight aggregate undergoes lower creep.

24 Based on heat released upon hydration, arrange the following four compounds of the cement
 in descending order.
 1. C_3A 2. C_3S 3. C_4AF 4. C_2S
 (A) 3, 1, 4, 2
 (B) 1, 2, 3, 4
 (C) 3, 4, 1, 2
 (D) 3, 4, 2, 1

25 Which type of odour characteristic is NOT used for classifying odour of a given water sample
 as per IS 3025 (Part-5) 1983 ?
 (A) Degree of turbidity
 (B) Degree of sweetness
 (C) Degree of pungency
 (D) Degree of smokiness

26 જાવા (JAVA) પ્રોગ્રામને કમ્પાઇલ કરવાથી સર્જયેલી ફાઈલનું એકસ્ટેન્સન _____ હોય છે.
 (A) java
 (B) .abc
 (C) .class
 (D) .exe

27 ભારતનું કયું રાજ્ય ક્ષેત્રફળ આધારે સૌથી વધુ જંગલ વિસ્તાર ધરાવે છે ?
 (A) મધ્યપ્રદેશ
 (B) છત્તીસગઢ
 (C) મેઘાલય
 (D) મણિપુર

28 Ozone layer is situated in which layer of atmosphere?
 (A) Stratosphere
 (B) Mesosphere
 (C) Thermosphere
 (D) Troposphere

- 29 The volume of 1 bag of cement is _____.
 (A) 0.025m^3
 (B) 0.035m^3
 (C) 0.045m^3
 (D) 0.055m^3
- 30 The growth of population can be represented by _____.
 (A) Semi-log curve
 (B) Logarithmic curve
 (C) Logistic curve
 (D) Straight line curve
- 31 UTP નું પૂર્ણ-સ્વરૂપ _____ છે.
 (A) અનશિલેડ ટવીસ્કેડ પેર
 (C) અનકવર્ડ ટવીસ્કેડ પાર્ટ્સ
- Uniform terms for Preciser
 (B) યુનિફોર્મ ટ્રાન્સફર પ્રોસીજર
 (D) અનયુઝડ ટવીસ્કેડ પેર
- 32 What will be the Sludge Volume Index (SVI) (ml/gram) if 100ml of Sludge collected in 30 mins on drying weighs 800 mg?
 (A) 125
 (B) 8
 (C) 0.008
 (D) 0.125
- 33 The direction of closing error is given by _____.
 (A) $\tan \theta = \Sigma D / \Sigma L$
 (B) $\tan \theta = \Sigma L / \Sigma D$
 (C) $\tan \theta = \Sigma D \times \Sigma L$
 (D) $\sin \theta = \Sigma D / \Sigma L$
- 34 2022માં વિશ્વમાં સૌથી વધુ ખાદ્ય પદાર્થો (માઇલીને બાદ કરતા) સૌથી વધુ નિકાસ કરનાર દેશ કયો છે?
 (A) ભારત (B) ચીન
 (C) બ્રાઝિલ (D) અમેરિકા (USA)
- 35 છ વર્ષ પહેલાં મનોજ અને હિતેશની ઉમરનો ગુણોત્તર 6:5 હતો. ચાર વર્ષ પછી તેમની ઉમરનો ગુણોત્તર 11:10 થશે. મનોજની અત્યારની ઉમર કેટલી હશે?
 (A) 16 (B) 12
 (C) 10 (D) 18
- 36 Which of the following instruments is used for measurement of angle?
 (A) Geodimeter
 (B) Tellurometer
 (C) Sextant
 (D) Telescope

- 45 Design period of water supply projects _____.
 (A) 10 years
 (B) 30 years
 (C) 40 years
 (D) 50 years
- 46 Sinking fund is _____.
 (A) The fund for rebuilding a structure when its economic life is over
 (B) Raised to meet maintenance cost
 (C) The total sum to be paid to the municipal authorities
 (D) A part of money kept in reserve for providing additional structures and modifications
- 47 In the CBR test, for 5.0 mm penetration standard load is _____.
 (A) 20.16 kN
 (B) 7.5 kN
 (C) 10.08 kN
 (D) 13.44 kN
- 48 As per IRC, Super elevation (e) should not exceed _____.
 (A) 6.7 %
 (B) 5.7 %
 (C) 4.7 %
 (D) 7.0 %
- 49 0.3m head of oil (Sp.gr. 0.8) is equal to _____.
 (A) 0.3m head of water
 (B) 0.24m head of water
 (C) 1.3m head of water
 (D) 10.34m head of water
- 50 A test used to measure the strength of waste water called _____.
 (A) pH
 (B) BOD
 (C) Surface setting rate
 (D) Detention period
- 51 Site order book is used for recording _____.
 (A) Issue of store equipment
 (B) Instructions by executive engineers
 (C) Construction measurements
 (D) Names of casual labour
- 52 In Autocade, scrolling of mouse can perform which of the following action?
 (A) zoom in/zoom out
 (B) pan & scan
 (C) extents/all
 (D) scale
- 53 PERT technique of network analysis is mainly useful for _____.
 (A) Small projects
 (B) Research and development projects
 (C) Large and complex projects
 (D) Deterministic activities

- 54 By means of oxidation pond reduces B.O.D. ____ % and coliform ____ %.
- (A) 80, 90
 (B) 90, 99
 (C) 95, 99
 (D) 90, 100
- 55 Windows मાં, Control Panel માં આવેલા _____ વિકલ્પ વડે આપણે કોઈ પ્રોગ્રામને આપણા કોમ્પ્યુટરમાંથી Uninstall કરી શકીએ છીએ.
 (A) Device Manager
 (B) Programs and Features
 (C) System and Security
 (D) Default Programs
- 56 Windows માં ફામ કરતી વખતે, જો કોમ્પ્યુટર ને restart કરવું હોય, તો ક્યા key કોમ્પ્યુનેશનનો ઉપયોગ કરવો જોઈએ ?
 (A) Esc + Ctrl
 (B) Del + Ctrl
 (C) Alt + Del
 (D) Ctrl + Alt + Del
- 57 Crushing strength of good building stone should not be less than _____.
 (A) 100 MPa
 (B) 120 MPa
 (C) 150 MPa
 (D) 50 MPa
- 58 C પ્રોગ્રામિંગની તમામ ઓપ્લીકેશનો, _____ ફંક્શનને કોલ કરીને execution ચાલુ કરે છી.
 (A) start ()
 (B) main ()
 (C) begin ()
 (D) trigger ()
- 59 શ્રેણી પૂર્ણ કરો.
 1 2 6 5 7

 A:
 B:
 C:
 D:
- 60 Expansion joints are generally provided in concrete road at _____.
 (A) 25m
 (B) 5 m
 (C) 50m
 (D) None
- 61 Choose the correct degree of comparison for the sentence: Out of all students, Lisa is the
 (A) Brighter
 (B) More bright
 (C) Brightest
 (D) As bright as
- 62 Which of following sentences is in the past tense?
 (A) She writes a letter.
 (B) She wrote a letter.
 (C) She will write a letter.
 (D) She is writing a letter.

- 63 નવી માર્ટેલ મૂવી ડેડપ્લુલ અને વોલ્વરાઇનમાં વોલ્વરાઇનનું પાત્ર કોણ ભજવે છે ?
 (A) હક જેકમેન
 (B) રથાન રેનોલ્ડ્સ
 (C) રેબર્ડ ડાઓની જુનિયર
 (D) નિકોલસ કેજ
- 64 What is synonym for brave?
 (A) Cowardly
 (B) Fearful
 (C) Courageous
 (D) Shy
- 65 What is the quantity of cement (in kg) and of dry sand (in cubic meter) respectively required for preparing 1 cubic meter of wet cement mortar of 1:5 proportion?
 (A) 270 and 1.00
 (B) 290 and 1.04
 (C) 290 and 1.00
 (D) 312 and 1.04
- 66 As compared to fresh river water, sea water contains _____ oxygen.
 (A) 10 % less
 (B) 10 % more
 (C) 20 % less
 (D) 20 % more
- 67 What is the lowest waste water flow in hospitals?
 (A) 40 lpcd
 (B) 900 lpcd
 (C) 700 lpcd
 (D) 50 gpcd
- 68 The most fire resistance paints are _____.
 (A) Asbestos Paints
 (B) Aluminium Paints
 (C) Cement Paints
 (D) Enamel Paints
- 69 The Stretcher bond is generally used for _____.
 (A) Simple Brick work
 (B) Half Brick work
 (C) Arches
 (D) One and half Brick Wall
- 70 B.O.D. Testing takes time for _____.
 (A) 3 hours
 (B) 5 hours
 (C) 3 days
 (D) 5 days
- 71 1 m³ of mild steel weighs about _____.
 (A) 3800 kg
 (B) 1000 kg
 (C) 7850 kg
 (D) 12560 kg

72

- Ductility of bitumen is expressed in _____.
- (A) $^{\circ}\text{C}$
 - (B) kg / $^{\circ}\text{C}$
 - (C) mm
 - (D) kg

73

- The input devices in CAD can be divided into _____.
- (A) 3 categories
 - (B) 2 categories
 - (C) 5 categories
 - (D) 4 categories

74

- Which characteristics of water is not suitable for appearance?
- (A) Alkalinity
 - (B) Sulphate
 - (C) Turbidity
 - (D) Hardness

75

- For a given activity, the optimistic time, pessimistic time and the most probable time estimates are 6, 18, 9 days respectively. The expected time is _____.
- (A) 8 days
 - (B) 9 days
 - (C) 10 days
 - (D) 15 days

76

- According to Pascal's law, pressure at any point in a liquid is _____.
- (A) Same in vertical direction
 - (B) Same in horizontal direction
 - (C) Same in all direction
 - (D) Different in different direction

77

- The use of dividers in compass boxes is to _____.
- (A) Draw a circle
 - (B) Draw a straight line
 - (C) Draw an arc
 - (D) Delineate a line and move a measurement

78

- The length of a wall in the long and short wall method of estimation is centre to centre distance between the walls and _____.
- (A) Half of its width on each side
 - (B) One-fourth width of wall on each side
 - (C) One-third width of wall on each side
 - (D) Width of the wall

79

- નીચેના માંથી અજ્ગાતો (બંધ-બેસતો ન હોય તેવો) શરૂ અથવા શરૂદસમુહ ઓળખો.
- (A) IIS
 - (B) Apache Tomcat
 - (C) Netbeans
 - (D) Caddy

80

- The choice of mix proportions of a concrete is independent of _____.
- (A) Maximum size of aggregate
 - (B) batching, mixing, placing, compaction techniques
 - (C) Minimum W/C ratio
 - (D) Grade designation

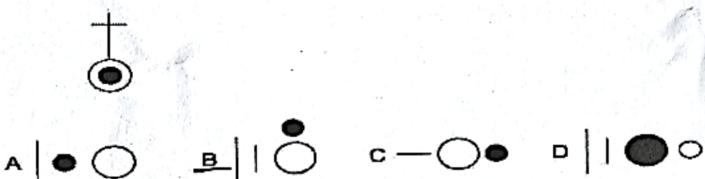
- 90 For circular curve of radius 190m, the coefficient of lateral friction is 0.15 and the design speed is 40 kmph. The equilibrium superelevation would be _____.
 [The pressure is equal on inner and outer wheel]

(A) 6.6
 (B) 6.3
 (C) 7
 (D) 21.3

- 91 In conventional activated sludge process, MLSS is generally kept in which range?
(A) ≤ 100 mg/l
(B) 1500 - 3000 mg/l
(C) 1000 - 2000 mg/l
(D) 3000 - 5000 mg/l

- 92 ભારતના ક્યા લુનાર પ્રોબ દ્વારા ચંદ્ર પર પાણી શોધવામાં આવ્યું ?
 (A) ચંદ્રયાન - ૨ (B) મંગલયાન
 (C) ચંદ્રયાન - ૧ (D) કાર્ટોસેટ-૩

- 93 ક્યા ટકડાઓથી આપેલ આકૃતિ બનાવી શકાય ?



- 94 નીચેનામાંથી સાચું યુગ્મ કયું છે ?

(A) ગુણવાચક વિશેષણ - હોશિયાર, દોહું, બમણું

(B) સંખ્યાવાચક વિશેષણ - પણેલું, એકવડું, થોડું

(C) દર્શકવાચક વિશેષણ - પેલું, આ, તે

(D) પ્રભ્રવાચક વિશેષણ - કેવો, કયો, શું

- 95 In specification of earthwork in foundation lift and lead specified are, respectively _____.
(A) 1m, 20m
(B) 1.5m, 20m
(C) 1.5m, 30m
(D) 1m, 25m

- 96 નીચેનામાંથી ખોડું વિધાન જણાવો.

(A) લિંગ દ્વારા પરિમાળનો અર્થ પણ સૂચવાય છે.

(B) વિકારી કિયાપદ કર્તા-કર્મ મુજબ લિંગવચન લે છે.

(C) ગુજરાતીમાં ત્રણ લિંગ છે.

(D) ઘઉં સંજ્ઞા એકવચનમાં છે.

- 97 For railway ballast, the stone should be _____
(A) Hard, dense, durable, tough and easily workable
(B) Hard, heavy, strong and durable
(C) Soft with uniform texture
(D) Hard, tough and resistant to abrasion

- 98 IS code for mode of measurement is _____.
(A) IS: 456-1978
 (B) IS: 1200-1974
(C) IS: 875
(D) IS: 269-1976
- 99 Which of the below joints is used for masonry in arches?
(A) Table
 (B) Rebated
(C) Dowel
(D) Butt
- 100 If the slump of concrete mix is 60 mm, its workability is _____.
 (A) Low
(B) Very low
(C) High
(D) Medium
