## PROVISIONAL ANSWER KEY

| Question Paper Code: | $57 / 2016 / O L$ |
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| Category Code: | $178 / 2015$ |
| Exam: | Tracer-SR for ST |
| Medium of Question: | English |
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| Alphacode | A |

Question1:-The river Bhartapuzha joins with the Arabian sea at $\qquad$
A:-Malappuram
B:-Ponnani
C:-Coimbatore
D:-Kozhikode
Correct Answer:- Option-B
Question2:-Which is the first mountain railway in India?
A:-Darjeeling
B:-Himachal
C:-Shiwalik
D:-Varanasi Correct Answer:- Option-A
Question3:-The largest plateau in India is the $\qquad$
A:-Chota Nagpur Plateau
B:-Southern Plateau
C:-Malwa Plateau D:-Deccan Plateau Correct Answer:- Option-D
Question4:-Black soil is good for growing $\qquad$
A:-Sugar cane
B:-Maize
C:-Cotton
D:-Jute Correct Answer:- Option-C
Question5:-The Bakel fort, the biggest one in Kerala was built by $\qquad$ A:-Ikkeri Nayiks
B:-Portuguese
C:-Haider Ali
D:-British Correct Answer:- Option-A
Question6:-Who led the Rovolt of 1857 in Bihar ?
A:-Nana Saheb
B:-Baji Rao II
C:-Khan Bahadur
D:-Kunwar Singh Correct Answer:- Option-D
Question7:-The 'Economic History of India' was published by $\qquad$ A:-Dadabai Naoroji
B:-R.C. Dutt
C:-M.G. Ranade
D:-G.V. Joshi
Correct Answer:- Option-B
Question8:-Who suggested that the Indian National Congress was a product of Lord Dufferin's brain ?
A:-Tilak
B:-Gokhale
C:-Bipin Chandra Pal
D:-Lala Lajpat Rai Correct Answer:- Option-D
Question9:- $\qquad$ congress was significant for the famous Congress League Pact ? A:-Lahore

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B:-Lucknow
C:-Nagpur
D:-Bombay
Correct Answer:- Option-B
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Question10:-Who organized Abhinav Bharat as a secrete Society in 1904 ?
A:-Bhagat Singh
B:-Prafulla Chaki
C:-Khudiram Bose
D:-V.D. Savarkar Correct Answer:- Option-D
Question11:-The Kochi Pulaya Mahasabha was founded under the leadership of $\qquad$
A:-Ayyankali
B:-C. Krishnan
C:-K. Kelappan
D:-K.P. Karuppan
Correct Answer:- Option-D
Question12:-Who started the Sanskrit educational center called 'Tatwa Prakasika Ashram' in 1898 ?
A:-Thycaud Ayya
B:-Vagbhatananda
C:-Ayya Vaikundai
D:-V.T. Bhattatiripad Correct Answer:- Option-B
Question13:-In 1931 Vakkom Moulavi published a journal called $\qquad$
A:-The Muslim
B:-Deepika
C:-Al Islam
D:-Swadeshabhimani
Correct Answer:- Option-B
Question14:-Vedadhikara Nirupanam was written by
A:-Kumaranasan
B:-Swami Sivayogi
C:-Chattampi Swamikal
D:-Kumara Guru
Correct Answer:- Option-C
Question15:-In which year Sree Narayana Guru founded the Advaita Ashram at Aluva?
A:-1912
B:-1913
C:-1914
D:-1915
Correct Answer:- Option-B
Question16:-Who is the richest person in the world?
A:-Carlos Slim
B:-Warren Buffet
C:-Bill Gates
D:-David Koch
Correct Answer:- Option-C
Question17:-Who headed the Moon Mission ?
A:-Manmohan Singh
B:-G. Madahavan Nair
C:-APJ Abdul Kalam
D:-K.S. Jayaraman
Correct Answer:- Option-B
Question18:-The Fifa World Cup football tournament 2018 will be held in $\qquad$
A:-Russia
B:-Cuba
C:-China
D:-Pakistan
Correct Answer:- Option-A
Question19:-Who is the first Indian to win two Oscars ?

## A:-Ilaiyaraja

B:-A.R. Rahman
C:-S.P. Balasubramanayam
D:-Rasool Pookutty
Correct Answer:- Option-B
Question20:-Who is the first Indian woman to reach the summit of Mount Everest ?
A:-Arunima Sinha
B:-Kalpana Chaula
C:-Bachandri Pal
D:-Samina Baig
Correct Answer:- Option-C
Question21:-The rocks which are formed from molten magma are called
A:-Aqueous rocks
B:-Igneous rocks
C:-Metamorphic rocks
D:-Sedimentary rocks
Correct Answer:- Option-B
Question22:-According to ISI the strength of concrete is achieved after
A:-7 days
B:-10 days
C:-21 days
D:-28 days
Correct Answer:- Option-D
Question23:-The standard size of masonry brick is
A: $-20 \mathrm{~cm} \times 10 \mathrm{~cm} \times 10 \mathrm{~cm}$
B: $-21 \mathrm{~cm} \times 11 \mathrm{~cm} \times 11 \mathrm{~cm}$
C: $-19 \mathrm{~cm} \times 9 \mathrm{~cm} \times 9 \mathrm{~cm}$
D:- $22.5 \mathrm{~cm} \times 10 \mathrm{~cm} \times 8.5 \mathrm{~cm}$
Correct Answer:- Option-C
Question24:-Ornamental moulded course placed on the top of the wall is
A:-Cornice
B:-Corbel
C:-Coping
D:-Lintel
Correct Answer:- Option-A
Question25:-Lime mortar is made by
A:-Quick lime
B:-Fat lime
C:-Hydraulic lime
D:-White lime
Correct Answer:- Option-C
Question26:-The common admixture used to accelerate the initial set of concrete is
A:-Gypsum
B:-Calcium chloride
C:-Mixture of bitumen and inert material
D:-By-product of bitumen
Correct Answer:- Option-B
Question27:-The percentage of Alumina in a good brick earth lies between
A:-5-10 \%
B:-50-60 \%
C:-20-30 \%
D:-70-80 \%
Correct Answer:- Option-C
Question28:-The maximum particle size of fine aggregate is
A:-5.25 mm
B: -4.75 mm
C: -4.25 mm
D:-3.75 mm
Correct Answer:- Option-B

Question29:-When a brick cut off lengthwise the cut out bricks are called
A:-King closer
B:-Queen closer
C:-Brickbat
D:-Corbel
Correct Answer:- Option-B
Question30:-Frogs made in the bricks are
A :-To reduce the weight of the brick
B:-To indicate year and name of manufacture
C:-To form a key for holding the mortar
D:-To indicate the top of the brick
Correct Answer:- Option-C
Question31:-The type of bond in which every course contains both headers and stretchers is called
A:-Flemish bond
B:-Double Flemish bond
C:-English bond
D:-Dutch bond
Correct Answer:- Option-B
Question32:-The Angular or radiating steps which are provided for changing the direction of a stair, are called
A:-Winders
B:-Scotia
C:-Baluster
D:-Soffit
Correct Answer:- Option-A
Question33:-In a single day the maximum height of masonry to be raised should not be more than
A:-0.5 m
B:-1 m
C:-1.5 m
D:-2 m
Correct Answer:- Option-C
Question34:-The type of masonry in which the stones are fine, chisel, dressed and the thickness of joint, does not exceed 3
mm is called
A:-Random rubble masonry
B:-Ashlar masonry
C:-First class rubble masonry
D:-Ashlar fine masonry
Correct Answer:- Option-D
Question35:-In the manufacture of brick pug mill is used for
A:-Burning
B:-Moulding
C:-Drying
D:-Kneading
Correct Answer:- Option-D
Question36:-A badly mixed cement concrete results in
A:-Segregation
B:-Bleeding
C:-Honey combing
D:-None of these
Correct Answer:- Option-C
Question37:-A pointed arch which forms isosceles or equilateral triangle is generally known as
A:-Three centered arch
B:-Two centered arch
C:-Lancet arch
D:-Bull's eye arch
Correct Answer:- Option-B
Question38:-The member which is placed horizontally to support common rafter of a sloping roof, its
A:-Purlin
B:-Cleat
C:-Batten

D:-Strut
Correct Answer:- Option-A
Question39:-The window which projects outside a room of a building for admitting more light and air is known as
A:-Bay window
B:-Casement window
C:-Lantern window
D:-Dormer window
Correct Answer:- Option-A
Question40:-The arrangement made to support an unsafe structure temporarily is known as
A:-Shoring
B:-Scaffolding
C:-Jacking
D:-Underpinning
Correct Answer:- Option-A
Question41:-For 1cu.m of finished concrete, the quantity of dry material required in their proportion is
A:-1.00 ` \(\mathrm{m}^{\wedge}(3)^{`}\)
B:-1.40 ` \(\mathrm{m}^{\wedge}(3)^{\text {` }}\)
C:-1.10 ` \(\mathrm{m}^{\wedge}(3)^{`}\)
$\mathrm{D}:-1.54{ }^{\prime} \mathrm{m}^{\wedge}(3)^{\prime}$
Correct Answer:- Option-D
Question42:-Contractors profit is usually
A:-5 \%
B:-10 \%
C:-15 \%
D:-20 \%
Correct Answer:- Option-B
Question43:-One cubic m cement $=$ $\qquad$ bags.
A:-10 bags
B:-20 bags
C:-30 bags
D:-40 bags
Correct Answer:- Option-C
Question44:-A carriageway in which cement concrete wearing surface is provided for the wheel tracks only
A:-Pavement
B:-Sub crust
C:-Crete way
D:-Carpet
Correct Answer:- Option-C
Question45:-The finished top width of earth work in fill or cut for receiving the road structure is
A:-Formation width
B:-Cutback
C:-Drive way
D:-Truck way
Correct Answer:- Option-A
Question46:-A fund which is accumulated gradually by deposits for replacement of any construction at the end of its useful life is known as

A:-Sinking fund
B:-Annuity
C:-Capital cost
D:-Salvage value
Correct Answer:- Option-A
Question47:-Regular polygon having 10 equal sides is called
A:-Pentagon
B:-Hexagon
C:-Octagon
D:-Decagon
Correct Answer:- Option-D
Question48:-The type of pile which is driven at an inclination to resist inclined force is known as
A:-Friction pile

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        B:-Sheet pile
        C:-Batter pile
        D:-Anchor pile
        Correct Answer:- Option-C
    Question49:-In chain surveying perpendicular to chain lines are set out by
        A:-Theodolite
        B:-A prismatic compass
        C:-A dumpy level
        D:-An optical square
        Correct Answer:- Option-D
Question50:-The international nautical mile is same as
        A:-18.52 km/h
        B:-1.609 km/h
        C:-1.852 km/h
        D:-16.09 km/h
        Correct Answer:- Option-C
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    Question51:-The measuring or recording wheel of a Planimeter is divided into
    $\qquad$ parts.
A:-10
B:-100
C:-1000
D:-50
Correct Answer:- Option-B
Question52:-The smallest division of metric leveling staff is
A:-0.5 m
B:-1.0 m
C: -0.05 m
D:-0.005 m
Correct Answer:- Option-D
Question53:-The head quarter of Indian road congress is at
A:-Mumbai
B:-Kolkata
C:-Madras
D:-New Delhi
Correct Answer:- Option-D
Question54:-A relatively fixed point of known elevation is called
A:-Bench mark
B:-Datum point
C:-Reduced level
D:-Reference point
Correct Answer:- Option-A
Question55:-The portion of road way designed and constructed for vehicular traffic
A:-Right-of-way
B:-Road way
C:-Carriage way
D:-High way
Correct Answer:- Option-C
Question56:-The initial lead for earthwork is
A:-50 m
B:-10 m
C:-15 m
D:-100 m
Correct Answer:- Option-A
Question57:-In prismatic compass the magnetic needle used is
A:-Edge bar needle
B:-Broad form
C:-Prismatic needle
D:-Straight needle
Correct Answer:- Option-B
Question58:-When a canal and river happen to meet at the same level then

A:-A level crossing is used
B :-A super passage is used
C:-An aqueduct is used
D:-A regulator is used
Correct Answer:- Option-A
Question59:-Projectors are $\qquad$ to each other in orthographic projection.
A:-Parallel
B:-Perpendicular
C:-Inclined
D:-Conical to each other
Correct Answer:- Option-A
Question60:-The development of surface of a cube consist of $\qquad$ equal squares.
A:-4
B:-6
C:-8
D:-12
Correct Answer:- Option-B
Question61:-The development of a curved surface of a cone is a $\qquad$ of a circle.
A:-Diameter
B:-Sector
C:-Circumference
D:-Chord
Correct Answer:- Option-C
Question62:-The solid which has 4 equal faces each an equilateral triangle is
A:-Hexahedron
B:-Tetrahedron
C:-Octahedron
D:-Decahedron
Correct Answer:- Option-B
Question63:-Right solid is a solid whose axis is $\qquad$ to its base.
A:-Horizontal
B:-Parallel
C:-Inclined
D:-Perpendicular
Correct Answer:- Option-D
Question64:-The concrete slump recommended for beams and slab is
A:-75 to 125 mm
B:-50 to 100 mm
C:-30 to 125 mm
D:-25 to 50 mm
Correct Answer:- Option-C
Question65:-The horizontal angle between the meridian and the survey line measured in clockwise direction is called
A:-Latitude
B:-Bearing
C:-Departure
D:-Dip
Correct Answer:- Option-B
Question66:-The whole circle bearing of a line is ` \(230^{\wedge}\) (@)`, its quadrental bearing is
A:-`S50^(@)w`
B:- ${ }^{-}$w $40^{\wedge}(@) s^{`}$
C:- ${ }^{`} 530^{\wedge}(@) w$
D:-`S40^(@)w
Correct Answer:- Option-A
Question67:-While constructing scales, the length of scale required is
A:-R.F $\times$ Distance on drawing
B:-R.F $\times$ Length to be measured
C:-R.F $\times$ Distance on object
D:-R.F $\times$ Distance on diagonal scale
Correct Answer:- Option-B

Question68:-The height of telescopic metric staff
A:-3 m
B:-4 m
C:-5 m
D:-3.5 m
Correct Answer:- Option-B
Question69:-The reading first entered in the field book of levelling
A:-Back sight
B:-Fore sight
C:-Intermediate size
D:-Change point
Correct Answer:- Option-A
Question70:-The main principle of surveying
A:-Part to the whole
B:-Lower surface to the higher surface
C:-Whole to the part
D:-Traversing
Correct Answer:- Option-C
Question71:-If ' $h$ ' is the difference in height between and point of chain length 'I' the required slope correction is A:-h/l
B:-h/2|
C:- $h^{\wedge}(2)^{`} / I$
D:-`h^(2)`/2l
Correct Answer:- Option-D
Question72:-The size of field book is
A:-20 $\times 20 \mathrm{~cm}$
B: $-40 \times 20 \mathrm{~cm}$
C: $-20 \times 12 \mathrm{~cm}$
D: $-40 \times 12 \mathrm{~cm}$
Correct Answer:- Option-C
Question73:-1 hector is equal to how many acres ?
A:-24.70
B:-2.47
C:-0.247
D:-247
Correct Answer:- Option-B
Question74:-The part of a circle bounded by an arc and its chord is known as
A:-Semi circle
B:-Chord
C:-Segment
D:-Sector
Correct Answer:- Option-C
Question75:-The slope of the road pavement in the longitudinal direction is called
A:-Alignment
B:-Length of summit
C:-Super elevation
D:-Gradient
Correct Answer:- Option-D
Question76:-The surface area of ` $A_{-}(0)$ ) size drawing sheet is
A:-2Sq.m
B:-1Sq.m
C:-1.5Sq.m
D:-3Sq.m
Correct Answer:- Option-B
Question77:-Which of the following one is best suitable for accurate measurement of distance ?
A:-Steel tape
B:-Steel band
C:-Invar tape
D:-Metallic tape

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    Correct Answer:- Option-C
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Question78:-At magnetic pole, the amount of dip is
A:- ${ }^{-60 \wedge}(@)$
B:- ${ }^{-90^{\wedge}(@)}{ }^{`}$
C:- $\mathbf{- 4 5}^{\wedge}(@)^{\wedge}$
D:-`0^(@) Correct Answer:- Option-B Question79:-In steep and broken ground, the most suitable method of contouring is A:-By cross-section B:-By squares C:-By spot leveling D:-By tachometer Correct Answer:- Option-D Question80:- \(\qquad\) method is used for plotting the distance and inaccessible objects. A:-Radiation B:-Resection C:-Two point problem D:-Intersection Correct Answer:- Option-D Question81:-The overlapping distance recommended for asbestos cement sheet roofing, along the length of the sheet is A:- 15 cm B: -30 cm C:-50 cm D: -40 cm Correct Answer:- Option-A Question82:-Area of circle whose radius is ' \(r\) ' is given by \(\mathrm{A}:-4 / 3{ }^{`} \mathrm{pir}^{\wedge}(3)^{`}\) \(\mathrm{B}:-3 / 4{ }^{\prime} \mathrm{pir}^{\wedge}(3)^{`}\)
C:-2 `Pir D:-`Pir^(2)`Correct Answer:- Option-D Question83:-Sin`90^(@)` = \(\qquad\) A:-0 B:-1 C: \(-\sqrt{3} / 2\) D:- \(1 / 2\) Correct Answer:- Option-B Question84:-Area is expressed in \(\qquad\) units. A:-Square units B:-Cubic units C:-Litres D:-Gallon Correct Answer:- Option-A Question85:-Volume of bucket is given by A:-4/3` $\operatorname{Pir}^{\wedge}(3)^{\wedge}$
B:-‘Pir^(2)h` C:-`pih` \(\left(R^{\wedge}(2)-r^{\wedge}(2)\right)^{`}\)
D:-None of these
Correct Answer:- Option-C
Question86:-Area of equilateral triangle is
A:- $\sqrt{3} / 4^{`} \mathrm{~S}^{\wedge}(2)^{`}$
B: $-\mathrm{b} / 4 \sqrt{ }{ }^{`} 4 a^{\wedge}(2)^{`}-{ }^{-} b^{\wedge}(2)^{`}$
C: $-1 / 2(a+b)$
D:-h/2 `(b_(1) + b_(2))
Correct Answer:- Option-A
Question87:-A channel which is designed to irrigate all the year round is called
A:-Non perennial canal
B:-Ghat-fed canal
C:-Perennial canal

## D:-Inundation canal

## Correct Answer:- Option-C

Question88:-The rocks which are deposited in layers and can be easily split along such layers is knwon as
A:-Aqueous rocks
B:-Basalt
C:-Metamorphic rocks
D:-Sedimentary rocks
Correct Answer:- Option-D
Question89:-The specific gravity of water is taken as
A:-0.001
B:-0.01
C:-0.1
D:-1
Correct Answer:- Option-D
Question90:-A manometer is used to measure
A:-Atmospheric pressure
B:-Pressure in pipes and channels
C:-Pressure in venturimeter
D:-Difference of pressures between two points in a pipe
Correct Answer:- Option-B
Question91:-The product of mass and acceleration of flowing liquid is called
A:-Inertia force
B:-Viscous force
C:-Gravity force
D:-Pressure force
Correct Answer:- Option-A
Question92:-The relation between duty ( $D$ ) in hectares/cumec delta ( $\Delta$ ) in meters and base period (B) in days is
A:- $\Delta=8.64 \mathrm{~B} / \mathrm{D}$
B: $-\Delta=86.4 \mathrm{~B} / \mathrm{D}$
C:-864 B/D
D: $-\Delta=8640 \mathrm{~B} / \mathrm{D}$
Correct Answer:- Option-B
Question93:-When the drain is over the canal, the structure provided is known as
A:-Aqueduct
B:-Syphon aqueduct
C:-Canal syphon
D:-Super passage
Correct Answer:- Option-D
Question94:-The fall of moisture from the atmosphere to the earth surface in any form is called
A:-Evaporation
B:-Transpiration
C:-Precipitation
D:-None of these
Correct Answer:- Option-C
Question95:-The Indian Road Congress (I.R.C.) was set up in
A:-1930
B:-1934
C:-1948
D:-1956
Correct Answer:- Option-B
Question96:-The top of the ground on which the foundation of road rests, is called
A:-Sub-grade
$\mathrm{B}:-$-Soling
C:-Base
D:-Wearing layer
Correct Answer:- Option-A
Question97:-In a flat arch, the skew back is made to rest in an inclined position so as to make an angle of $\qquad$ with springing line.

A:- ${ }^{`} 30^{\wedge}(@)$

B:-‘40^(@)
C:-‘50^(@)
D:-‘60^(@)
Correct Answer:- Option-D
Question98:-The lowest part of a structure which transmits the load to the soil is known as
A:-Super structure
B:-Plinth
C:-Foundation
D:-Basement
Correct Answer:- Option-C
Question99:-The most important tool used for brick masonry is
A:-Brick hammer
B:-Trowel
C:-Spirit level
D:-Line and pin
Correct Answer:- Option-B
Question100:-The under surface of an arch is called
A:-Soffit
B:-Back
C:-Haunch
D:-Intrados
Correct Answer:- Option-D

