## FINAL ANSWER KEY

| Question Paper Code: | $77 / 2017 /$ OL |
| :--- | :--- |
| Category Code: | $466 / 2016$ |
| Exam: | Junior Instructor(Architectural Assistant) (SR for |
|  | SC/ST) |
| Medium of Question: | English |
| Date of Test | $16-09-2017$ |
| Department | Industrial Training Department |
| Alphacode | A |

Question1:-When was the preamble to the constitution of India first amended?
A:-1951
B:-1971
C:-1976
D:-Never
Correct Answer:- Option-C
Question2:-The recipient of 'Jnanpith Award' in the year 2016
A:-Mahasweta Devi
B:-Shankha Ghosh
C:-Reghuveer Chaudhari
D:-Bhalchandra Nemada
Correct Answer:- Option-B
Question3:-The Portuguese established printing in Kerala in the year
A:-1577
B:-1498
C:-1502
D:-1524
Correct Answer:- Option-A
Question4:-Autobiography 'Ente Vazhithiruvu' belongs to
A:-M.C. Joseph
B:-T.R. Krishnaswami Iyer
C:-Makthi Thangal
D:-Ponkunnam Varkey
Correct Answer:- Option-D
Question5:-The idea of an elected President at the head of the Parliamentary system, India borrowed from
A:-United Status of America
B:-Ireland
C:-Australia
D:-Canada
Correct Answer:- Option-B
Question6:-The year of Paliyam Sathyagraha
A:-1946
B:-1943
C:-1948
D:-1931
Correct Answer:- Option-C
Question7:-The States Reorganisation Act created $\qquad$ states and $\qquad$ Union territories.
A:-14:6
B:-14:7
C:-13:6
D:-13:5
Correct Answer:- Option-A
Question8:-The ordinance issued by the governor are subject to approval by
A:-Parliament
B:-State legislature
C:-President
D:-None
Correct Answer:- Option-B

Question9:-Samathwa Samajam founded by
A:-Swami Vagbhatananda
B:-K.P. Vellon
C:-Brahmananda Sivayogi
D:-Vaikunta Swami
Correct Answer:- Option-D
Question10:-The modified form of 'Right To Information Act' passed on
A:-February 2000
B:-February 2011
C:-February 2012
D:-February 2013
Correct Answer:- Option-B
Question11:-How many types of emergencies has the constitution envisaged
A:-One
B:-Two
C:-Three
D:-Four
Correct Answer:- Option-C
Question12:-World Environment Day theme for 2017
A:-Connecting people to nature
B:-Only one earth
C:-One world one environment
D:-Save earth from pollution
Correct Answer:- Option-A
Question13:-The first recipient of Vayalar Sahithya Puraskaram
A:-Anna Chandi
B:-Lalithambika Antharjanam
C:-Parvathi Nenmenimangalam
D:-Akkamma Cheriyan
Correct Answer:- Option-D
Question14:-Prathyaksha Raksha. Daiva Sabha founded in the year $\qquad$ by Poikayil Youhannan. A:-1948
B:-1923
C:-1909
D:-1917
Correct Answer:- Option-C
Question15:-Herman Gundert, member of Basel-Evangelical mission started the newspaper
A:-Paschimodayam
B:-Deepika
C:-Prabhatham
D:-Vivekodayam
Correct Answer:- Option-A
Question16:-The slogan 'Travancore for Travancorean's was related to
A:-Temple Entry Proclamation
B:-Ezhave memorial
C:-Abstention movement
D:-Malayalee memorial
Correct Answer:- Option-D
Question17:-Founder editor of the newspaper 'Kerala Kaumudi'
A:-C. Kesavan
B:-C.V. Kunjaraman
C:-P. Krishna Pillai
D:-Barrister G.P. Pillai
Correct Answer:- Option-B
Question18:-Kerala Sahithya Academy President
A:-Vysakhan
B:-M. Santhosh Kumar
C:-George Onakkoor
D:-Palliyara Sreedharan

Correct Answer:- Option-A
Question19:-The organisation 'Sugunavardhini' was formed by
A:-Thycaud Ayya Vaikundar
B:-Pandit K.P. Karuppan
C:-Dr. Ayyathan Gopalan
D:-Moorkoth Kumaran
Correct Answer:- Option-C
Question20:-Vayanadinam or Day of reading is observed on
A:-January 19
B:-July 19
C:-July 29
D:-June 19
Correct Answer:- Option-D
Question21:-The compass observes the angle made by the survey line
A:-True meridian
B:-Magnetic meridian
C:-Arbitrary meridian
D:-Grid meridian
Correct Answer:- Option-B
Question22:-V-shaped contours cross a
A:-Ridge line
B:-Valley line
C:-Saddle
D:-Pond
Correct Answer:- Option-B
Question23:-The length of Gunter's chain is
A:-100 ft
B:-50 ft
C: -66 ft
D:-76 ft
Correct Answer:- Option-C
Question24:-The maximum tolerance in a 20 m chain is
A: $- \pm 2 \mathrm{~mm}$
B:- $\pm 3 \mathrm{~mm}$
C: $- \pm 5 \mathrm{~mm}$
D:- $\pm 8 \mathrm{~mm}$
Correct Answer:- Option-C
Question25:-Correction due to refraction is given by
A:-0.0112 `D^(2) B:-0.0785 `D^(2)
C:-0.0673 ` \(\mathrm{D}^{\wedge}(2)^{`}\)
$D:-0.0012$ ` \(D^{\wedge}(2)^{`}\)
Correct Answer:- Option-A
Question26:-The chain man who drags the chain is called
A:-Captain
B:-Leader
C:-Follower
D:-Labour
Correct Answer:- Option-B
Question27:-The smallest length that can be drawn on a map is
A: $=0.2 \mathrm{~mm}$
B: -0.5 mm
C: -10 mm
D:-15 mm
Correct Answer:- Option-A
Question28:-Wing nuts are provided on
A:-Bubble tubes
B:-Diaphragm
C:-Standard

D:-Tripord
Correct Answer:- Option-D
Question29:-The lines joining points of equal dip are called
A:-Aclinic lines
B:-Isogonic lines
C:-Agonic lines
D:-Isoclinic lines
Correct Answer:- Option-D
Question30:-The object of surveying is to produce a
A:-Drawing
B:-Cross-section
C:-Sketch
D:-Map
Correct Answer:- Option-D
Question31:-A level surface is
A:-a parabolic surface
B:-an elliptical surface
C:-a spherical surface
D:-a plane surface
Correct Answer:- Option-C
Question32:-For mountainous region, a suitable contour interval may be
A:-0.2 m
B:-2 m
C:-20 m
D:-200 m
Correct Answer:- Option-B
Question33:-Angle between true north and magnetic north is
A:-Dip
B:-Declination
C:-Departure
D:-Deviation
Correct Answer:- Option-B
Question34:-Tellurometer is an instrument used for
A:-GPS
B:-EMR
C:-GTS
D:-EDM
Correct Answer:- Option-D
Question35:-Three point problem in plane table is a method of
A:-Resection
B:-Radiation
C:-Resolution
D:-Intersection
Correct Answer:- Option-A
Question36:-The head room in a stair case should not be less than
A: -3.5 m
B:-3 m
C:-2.10 m
D:-2 m
Correct Answer:- Option-C
Question37:-The rocks formed due to solidification of molten mass are called
A:-Aqueous rocks
B:-Sedimentary rocks
C:-Metamorphic rocks
D:-Igneous rocks
Correct Answer:- Option-D
Question38:-Most economical method of sawing wood is
A:-Ordinary sawing
B:-Quarter sawing

C:-Tangential sawing
D:-Radial sawing
Correct Answer:- Option-A
Question39:-Water absorption of vitrified tiles is not more than
A:-0.5\%
B:-1.0\%
C:-2.0\%
D:-5.0\%
Correct Answer:- Option-A
Question40:-Purest form of iron is
A:-Pig iron
B:-Cast iron
C:-Wrought iron
D:-Steel
Correct Answer:- Option-C
Question41:-Which one of the following does not belong to exogenous tree?
A:-Deodar
B:-Pine
C:-Mahogany
D:-Bamboo
Correct Answer:- Option-C
Question42:-Alumina is brick earth gives the bricks
A:-Resistance to shrinkage
B:-Plasticity
C:-Colour
D:-Strength
Correct Answer:- Option-B
Question43:-The major constituent of cement is
A:-Lime
B:-Silica
C:-Alumina
D:-Iron oxide
Correct Answer:- Option-A
Question44:-Concrete should not be placed by dropping at a height more than
A:- -400 mm
B:-600 mm
C:-800 mm
D:-1000 mm
Correct Answer:- Option-C
Question45:-Coefficient of thermal expansion is highest in
A:-Basalt
B:-Granite
C:-Sandstone
D:-Quartzite
Correct Answer:- Option-D
Question46:-Which of the following metal is poisonous?
A:-Copper
B:-Lead
C:-Tin
D:-Aluminium
Correct Answer:- Option-B
Question47:-Portion of the brick cut across full width is known as
A:-Queen closer
B:-King closer
C:-Mitred closer
D:-Bat
Correct Answer:- Option-D
Question48:-Vertical faces of walls meant for fixing door, window or ventilator are known as A:-Jambs

B:-Sills
C:-Corbels
D:-Coping
Correct Answer:- Option-A
Question49:-Steps provided from ground to main entrance in external wall is called
A:-Threshold
B:-Stairs
C:-Pedestal
D:-Any of the above Correct Answer:- Option-A
Question50:-Reinforced brick construction is commonly used for A:-Walls
B:-Partition walls
C:-Compound walls
D:-Lintels
Correct Answer:- Option-D
Question51:-The horizontal members of panelled doors are known as
A:-Styles
B:-Rails
C:-Ledges
D:-Bracings Correct Answer:- Option-B
Question52:-The fixture provided on external door for locking is known as
A:-Tower bolt
B:-Barred bolt
C:-Flush bolt
D:-Aldrop bolt
Correct Answer:- Option-D
Question53:-Maximum size of coarse aggregate used as a base course in ground floor is A:-12 mm
B: -20 mm
C: -40 mm
D:-50 mm
Correct Answer:- Option-C
Question54:-Development of fine hair cracks in plastered surface is known as

## A:-Cracking

B:-Crazing
C:-Blistering
D:-Flaking
Correct Answer:- Option-B
Question55:-If sheets or mastic asphalt are used for damp proofing, the lap should not be less than A:-100 mm
B: -125 mm
C: -150 mm
D:-200 mm
Correct Answer:- Option-A
Question56:-Which one of the following is a fundamental law of forces?
A:-Triangle law
B:-Polygonal law
C:-Parallelogram law
D:-Lami's theorem
Correct Answer:- Option-C
Question57:-If a material has identical properties in all directions, it is said to be
A:-Homogeneous
B:-Elastic
C:-Orthotropic
D:-Isotropic
Correct Answer:- Option-D
Question58:-Maximum shear stress in a beam of rectangular cross section is $\qquad$ times the average shear stress

A:-1.25
B:-1.5
C:-2.0
D:-4.0
Correct Answer:- Option-B
Question59:-Kern of a rectangular column is having $\qquad$ shape.
A:-Rectangular
B:-Square
C:-Diamond
D:-Triangular
Correct Answer:- Option-C
Question60:-Section modulus of a triangular cross-section of width $b$ and height $h$ is
A:- ${ }^{`}\left(b h^{\wedge}(2)\right) /(24)^{`}$
B:- ${ }^{`}\left(b h^{\wedge}(3)\right) /(24)^{`}$
C:-- (bh^(3))/(36)
D:-- (bh^(2))/(18)
Correct Answer:- Option-A
Question61:-Minimum number of bars to be provided in a circular column is
A:-4
B:-6
C:-8
D:-12
Correct Answer:- Option-B
Question62:-Which one of the following is not the diameter of market form of reinforcing bar?
A:-16 mm
B:-18 mm
C: -20 mm
D:-22 mm
Correct Answer:- Option-B
Question63:-In the working stress method of R.C.C. design factor of safety used for concrete and steel are respectively A:-3 and 1.85
B:-4 and 1.85
C:-4 and 2
D:-3 and 1.5
Correct Answer:- Option-A
Question64:-A column is considered long, if the effective length to least lateral dimension is more than
A:-10
B:-12
C:-15
D:-18
Correct Answer:- Option-B
Question65:-Which of the following has high tensile strength?
A:-Mild steel
B:-Plain hot rolled wires
C:-Cold drawn wires
D:-Thermo mechanically treated bars
Correct Answer:- Option-C
Question66:-Water tanks should be designed by
A:-Working stress method
B:-Ultimate load method
C:-Limit state method
D:-Any of the above
Correct Answer:- Option-A
Question67:-Weldability of steel is enhanced by allowing it with
A:-Carbon
B:-Sulphur
C:-Chrome
D:-Nickel
Correct Answer:- Option-B

Question68:-The most economical section for a compression member is
A:-Rectangular
B:-I-shaped
C:-Circular
D:-Hollow circular
Correct Answer:- Option-D
Question69:-In a residential building, while designing stairs, live load to be taken is
A:- ${ }^{`}(3 \mathrm{kN}) /\left(\mathrm{m}^{\wedge}(2)\right)^{`}$
B:-`(4kN)/(m^(2)) C:-`(4.5 kN)/(m^(2))` D:-`(5kN)/(m^(2))`Correct Answer:- Option-A Question70:-The angle of contact between mercury and solid surface is A: \(-0^{\circ}\) B:-45 \({ }^{\circ}\) C: \(-90^{\circ}\) D:-more than \(90^{\circ}\) Correct Answer:- Option-D Question71:-The unit of measurement for concrete work in R.C.C. is in A:-Sq m B:-Cu m C:-10 sq m D:-10 Cu m Correct Answer:- Option-B Question72:-A column that fails due to direct stress, is called A:-Short column B:-Long column C:-Weak column D:-Medium column Correct Answer:- Option-A Question73:-For D.P.C at plinth level, the commonly adopted material is A:-Bitumen sheeting B:-Plastic sheeting C:-Cement concrete D:-Mastic asphalt Correct Answer:- Option-C Question74:-The construction of a temporary structure required to support an unsafe structure, is called A:-Underpinning B:-Scaffolding C:-Shoring D:-Jacking Correct Answer:- Option-C Question75:-Trimmed size of` $A_{-}(2)$ ' drawing sheet
A:- $-494 \times 521$
B:- $594 \times 841$
C: $-520 \times 594$
D: $-420 \times 594$
Correct Answer:- Option-D
Question76:-Which conic is known as "central conic"?
A:-Ellipse
B:-Circle
C:-Parabola
D:-Hyperbola
Correct Answer:- Option-D
Question77:-Which one is not a conic section?
A:-Ellipse
B:-Parabola
C:-Hyperbola
D:-Circle

Correct Answer:- Option-D
Question78:-T-square is used for drawing
A:-Inclined lines
B:-Curved lines
C:-Horizontal lines
D:-Vertical lines
Correct Answer:- Option-C
Question79:-Visual ray method is used for drawing $\qquad$ projection.
A:-Perspective
B:-Isometric
C:-Oblique
D:-Orthographic
Correct Answer:- Option-A
Question80:-The angle of a miter line is $\qquad$ degrees.
A:-75
B:-60
C:-45
D:-30
Correct Answer:- Option-C
Question81:-A byte consists of $\qquad$ bits.
A:-64
B:-32
C:-16
D:-8
Correct Answer:- Option-D
Question82:-The file extension of a drawing template is
A:-.dwg
B:-.dxf
C:-.dws
D:-.dwt
Correct Answer:- Option-D
Question83:-F9 is the short key of $\qquad$ .
A:-ORTHO
B:-SNAP
C:-OSNAP
D:-POLAR
Correct Answer:- Option-B
Question84:- $\qquad$ is the command used in convert polyline to line.
A:-Explode
B:-Join
C:-Extent
D:-Extrim
Correct Answer:- Option-A
Question85:-'XL' is the short cut key of
A:-Erace
B:-Hatch
C:-Construction line
D:-Scale
Correct Answer:- Option-C
Question86:-The behaviour of concrete under instantaneous loads is
A:-Elastic
B:-Plastic
C:-Anelastic
D:-Visco-elastic
Correct Answer:- Option-A
Question87:-Separation of ingredients from concrete during transportation is known as
A:-Bleeding
B:-Creep
C:-Segregation

## D:-Shrinkage

Correct Answer:- Option-C
Question88:-Durability of cement concrete generally improves by
A:-Addition of sand
B:-Addition of cement
C:-Vibrations
D:-Additions of coarse aggregate
Correct Answer:- Option-B
Question89:-The ratio of Young's modulus of elasticity for steel to that for concrete is known as
A:-Specific ratio
B:-Modular ratio
C:-Poisson's ratio
D:-Elasticity ratio
Correct Answer:- Option-B
Question90:-The fineness modulus of fine aggregate is in the range of
A:-7.0 to 10.0
B:-5.0 to 7.0
C:-3.5 to 5.0
D:-2.0 to 3.5
Correct Answer:- Option-D
Question91:-Shrinkage in concrete increases its
A:-Tensile strength
B:-Flexural strength
C:-Bond strength
D:-Shear strength
Correct Answer:- Option-C
Question92:-The deflection at any section of a beam is $\qquad$ of the corresponding section of the conjugate beam.
A:-Shear force
B:-Bending moment
C:-Deflection
D:-Slope
Correct Answer:- Option-B
Question93:-The rate of change of bending moment is equal to
A:-Shear force
B:-Deflection
C:-Slope
D:-Poisson's ratio $x$ deflection
Correct Answer:- Option-A
Question94:-The density of cement is generally
A:- ${ }^{`}(1500 \mathrm{~kg}) /\left(\mathrm{m}^{\wedge}(3)\right)^{`}$
B:- ${ }^{`}(1750 \mathrm{~kg}) /\left(\mathrm{m}^{\wedge}(3)\right)^{\wedge}$
C:- ${ }^{`}(1250 \mathrm{~kg}) /\left(\mathrm{m}^{\wedge}(3)\right)^{\prime}$
D:- ${ }^{`}(2000 \mathrm{~kg}) /\left(\mathrm{m}^{\wedge}(3)\right)^{`}$
Correct Answer:- Option-A
Question95:-A member subjected to tensile stresses is known as
A:-Principal rafter
B:-Purlin
C:-Strut
D:-Tie
Correct Answer:- Option-D
Question96:-The ratio of moment of inertia of a rectangle about its centroidal axis to the moment of inertia about its base
A:-2
B:-3/4
C:-1/2
D:-1/4
Correct Answer:- Option-D
Question97:-The maximum bending moment of a simply supported beam of span I and carrying a point load W at the centre of the beam is

A:-WI/4

B:-WI/2
C:-WI
D:-` $\left(W I^{\wedge}(2)\right) /(4)^{\wedge}$
Correct Answer:- Option-A
Question98:-In slabs and beams creep is responsible for
A:-Bending
B:-Deflection
C:-Cracking
D:-Shrinkage
Correct Answer:- Option-B
Question99:-In theory of simple bending the bending stress in the beam section varies
A:-Parabolically
B:-Elliptically
C:-Linearly
D:-None of them
Correct Answer:- Option-C
Question100:-In architecture design the absence of monotony is called
A:-Proportion
B:-Balance
C:-Contrast
D:-Rhythm
Correct Answer:- Option-C

