

PROVISIONAL 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 _____ states and _____ 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 _____ 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:- ± 2 mm

B:- ± 3 mm

C:- ± 5 mm

D:- ± 8 mm

Correct Answer:- Option-C

Question25:-Correction due to refraction is given by

A:- $0.0112 \cdot D^2$

B:- $0.0785 \cdot D^2$

C:- $0.0673 \cdot D^2$

D:- $0.0012 \cdot D^2$

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 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:-Tripod

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 in 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 _____ 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 _____ 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:- $(bh^2)/(24)$

B:- $(bh^3)/(24)$

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:- $3 \text{ kN}/(\text{m}^2)$
- B:- $4 \text{ kN}/(\text{m}^2)$
- C:- $4.5 \text{ kN}/(\text{m}^2)$
- D:- $5 \text{ kN}/(\text{m}^2)$

Correct Answer:- Option-A

Question70:-The angle of contact between mercury and solid surface is

- A:- 0°
- B:- 45°
- C:- 90°
- D:-more than 90°

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:- 494×521
- B:- 594×841
- C:- 520×594
- D:- 420×594

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 _____ projection.

- A:-Perspective
- B:-Isometric
- C:-Oblique
- D:-Orthographic

Correct Answer:- Option-A

Question80:-The angle of a miter line is _____ degrees.

- A:-75
- B:-60
- C:-45
- D:-30

Correct Answer:- Option-C

Question81:-A byte consists of _____ 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 _____.

- A:-ORTHO
- B:-SNAP
- C:-OSNAP
- D:-POLAR

Correct Answer:- Option-B

Question84:-_____ 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:-Erase
- 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 _____ 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:- $(1500 \text{ kg})/(\text{m}^3)$

B:- $(1750 \text{ kg})/(\text{m}^3)$

C:- $(1250 \text{ kg})/(\text{m}^3)$

D:- $(2000 \text{ kg})/(\text{m}^3)$

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 l and carrying a point load W at the centre of the beam is

A:- $Wl/4$

B:- $WI/2$

C:- WI

D:- $\sqrt{WI^2/4}$

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