FIRST GRADE DRAFTSMAN/OVERSEER

EXAM DATE:19-01-2016

1.The sum of tread and rise should be lie between

A.40 to 45 cm*

B.55 to 60 cm

C.50 to 55 cm

D.35 to 40 cm

Ans:A

2.When a chain is used at a temperature more than the temperature,it was calibrated the error in measured length will be

A.Observational

B.Negative*

C.Cumulative

D.Compensating

Ans:B

3.Any arbitrarily assumed level line from which vertical distances are measured is known as:

A.Level line

B.Horizontal line

C.Vertical line

D.Datume line*

Ans:D

4.Which of the following instrument is used for measurement of angles?

A.Tellurometer

B.Geodimeter

C.Sextant*

D.Telescope

Ans:C

5.Four wires are made of the same material which of these will have the largest extension when the same tension is applied?

A.Length 50 cm and diameter 0.5 mm*

B.Length 100 cm and diameter 05 mm

C.Length 200 cm and diameter 2 mm

D.Length 300 cm and diameter 3 mm

Ans:A

6.The mercury does not wet the glass.This is due to the property of the liquid known as

A.Cohesion

B.Adhesion

C.Viscosity

D.Surface tension*

Ans:D

7.The pressure at a point 4 m below the free surface of water is

A.19.24 kPa

B.29.24 kPa

C.39.24 kPa*

D.49.24 kPa

Ans:C

8.A weir,generally used as spillway of a dam is:

A.Narrow crested weir

B.Broad crested weir

C.Ogee crested weir*

D.Submerged weir

Ans:C

9.The magnetic bearing of a line is $55^030'$ and the magnetic declination is $4^030'$ west.The true bearing of a line will be

A.30^0

B.$34^030'$

C.49^0

D.51^0*

Ans:D

10.Irrigation canals are generally aligned along

A.Contour line

B.Watershed*

C.Straight line

D.Valley line

Ans:B

11.Concurrent forces are those forces whose line of action

A.Meet at one point*

B.Lie on the same line

C.Meet on the same plane

D.None of these

Ans:A

12.The angle between two forces when the resultant maximum and minimum respectively are

A.$0^0$and 180^0*

B.$180^0$and 360^0

C.90^0 and 180^0

D.90^0 and 360^0

Ans:A

13.When the spring of a watch is wound,it will posses

A.Strain*

B.Kinetic energy

C.Heat energy

D.Electricall energy

Ans:A

14.The moment of inertia of a rectangular section 3 cm wide and 4 cm deep about X-X axisis?

A.$9cm^4$

B.$12cm^4$

C.$16cm^4$*

D.$29cm^4$

Ans:C

15.Which of the following is not an integral part of computer?

A.CPU
B.Mouse

C.Monitor

D.UPS*

Ans:D

16.Pitot tube is a device used in the flowing fluid for measuring

A.Discharge

B.Velocity*

C.Pressure

D.Kinetic energy

Ans:B

17.A man sitting in a boat which is flowing in a pond.If the man drinks some water from the pond,the level of water in the pond will

A.Sink little

B.Rise little

C.Remain stationary*

D.None of these

Ans:C

18.Type of bond in brick masonry in which each course consists of alternate headers and stretcher is called:

A.English bond

B.Flemish bond*

C.Stretcher bond

D.Header bond

Ans:B

19.The extension of wall above the roof level is called

A.Retaining wall

B.Dummy wall

C.Breast wall

D.Parapet wall*

Ans:D

20.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

Ans:C

21.The average domestic demand of water supply for an Indian city is:

A.135 lpcd*

B.275 lpcd

C.400 lpcd

D.750 lpcd

Ans:A

22.If a shaft is subjected to pure twisting moment,an element,on the surface is subjected to

A.Bending stress

B.Pure shear stress*

C.Normal compressive stress

D.Normal tensile stress

Ans:B

23.Longitudianl cracks observed in timber beams are due to

A.Timber not being strong in compression

B.High bending stress

C.Concentrated loads over beams

D.Shear failure between layers*

Ans:D

24.In which the following cases will the shear forces as well as bending moment at the free end of a Cantilever beam be equal to zero?

A.When it carries a concentrated load at mid span

B.When it carries a concentrated load at the end

C.When it carries a UD load over the entire span

D.None of the above

Ans:-------

25.The ratio of volume of voids to the total volume of given soil is

A.Porosity*

B.Void ratio

C.Air content

D.Air ratio

Ans:A

26.The total motion possessed by a body,is called

A.Impulsive force

B.Mass

C.Weight

D.Momentum*

Ans:D

27.The timber whose thickness is less than 5 cm and the width exceeds 12 cm,is called a

A.Board*

B.Plank

C.Batten

D.Log

Ans:A

28.A fine aggregate is one whose particle are of size

A.4.75 mm

B.Below 4.75 mm*

C.6.75 mm

D.Above 6.75 mm

Ans:B

29.Seasoning of timber is done

A.To make it water proofing

B.To paint it surfaces

C.To heat it

D.To remove water*

Ans:D

30.Final setting time of cement should not more than

A.5 hours

B.10 hours*

C.30 minutes

D.1 hour

Ans:B

31.In a cement concrete road expansion joints are provided at intervels of

A.4m*

B.10m

C.20m

D.50m

Ans:A

32.Standard rail gauge is

A.1000 mm

B.1435 mm*

C.1524 mm

D.1676 mm

Ans:B

33.The only type of sleeper to be provided over rail bridge

A.Steel sleeper

B.Cast iron sleeper

C.Wooden sleeper*

D.Concrete sleeper

Ans:C

34.Coning of wheels is provided

A.To save material of wheels

B.To suit super elevations

C.To give dynamic stability

D.To prevent lateral slip*

Ans:D

35.The best primer used for structural steel work is----

A.Red lead*

B.Zinc oxide

C.White lead

D.Iron oxide

Ans:A

36.The horizontal member of a frame employed to sub-divided a window opening horizontally is called

A.Sill

B.Million

C.Transom*

D.Horn

Ans:C

37.The term pitch in connection with pitched roofs is defined as thee

A.Apex line of the slopping roof

B.Inclination of the sides to the horizontal plane of the roof*

C.Horizontal distance between the internal faces of the walls

D.Valley line of the pitched roof

Ans:B

38.A solid construction put across the river to raise its water level and divert the water into the canal known as

A.Weir*

B.Marginal bund

C.Barriage

D.Dam

Ans:A

39.In leveling height of instrument is

A.Reduced level of bench mark+ back sight*

B.Reduced level of bench mark+fore sight

C.Reduced level of bench mark+Intermediate sight

D.Back sight+fore sight

Ans:A

40.During leveling if back sight is more than fore sight then

A.Forward staff point is lowerthan backward staff point

B.Backward staff point is lower than forward staff point*

C.Difference in level cannot be measured

D.None of the above

Ans:B

41.Beam constructed monolithicallt with slab is

A.I-section

B.T-beam*

C.Cantilever beam

D.Continuous beam

Ans:B

42.When a door is designated as 10 DT 20,it can be concluded that

A.It is a single shutter door

B.It is a double shutter door*

C.It is a metallic door

D.It is a rolling shutter

Ans:B

43.In a slopping roof,the inclined wooden members laid from the ridge to the eave are known as:

A.Hip rafters

B.Jack rafters

C.Common rafters*

D.Valley rafters

Ans:C

44.In residential buildings the minimum area for bathroom is

A.1.8 m2*

B.2.5 m2

C.3.4 m2

D.4.4 m2

Ans:A

45.The latitude and departure of a traverse line are both positive when the whole circle bearing of the line lies in the

A.First quadrant*

B.Second quadrant

C.Third quadrant

D.Fourth quadrant

Ans:A

46.The water content of a saturated soil is 50%,if the specific gravity of the solids is 2.4,what is its void ratio?

A.1.8

B.1.2d*

C.2.4

D.0.8

Ans:B

47.Which of the following soils has largest permeability?

A.Clay

B.Silt

C.Gravel*

D.Sand

Ans:C

48.The main clear working space for a pit as recommended by IS code is

A.1 x 1 m

B.1.4 x 1.4 m*

C.1.2 x 1.2 m

D.2 x 2 m

Ans:B

49.Undreamed piles are generally

A.Bored piles*

B.Driven piles

C.Precast piles

D.All the above

Ans:A

50.A raft foundation is preferred for

A.Load bearing walls of multistoried building

B.Columns of a building which are closely spaced*

C.Columns of industrial buildings

D.None

Ans:B

51.Rolling of road should be

A.From centre to edge

B.From one edge to another

C.From edge to centre with an overlap of minimum 30 cm*

D.From edge to centre

Ans:C

52.The height of the cone in slump test is:

A.20 cm

B.30 cm*

C.45 cm

D.60 cm

Ans:B

53.The bricks arranged projecting in alternate courses for the purpose of bonding future work is called

A.Lacing

B.Throating

C.Stooling

D.Toothing*

Ans:D

54.The estimating ,for plastering usually no deduction is made for

A.Ends of bean

B.Small opening

C.Ends of refters

D.All the above*

Ans:D

55.In a detailed estimate the provision for contingencies is,usually

A.1%

B.3 to 5%*

C.10%

D.12 to 15%

Ans:B

56.Size of A4 (trimmed size in mm)drawing sheet is

A.210 x297*

B.148 x210

C.597 x 814

D.841 x1189

Ans:A

57.If bearing of AB=N 10^0W,bearing of BC=S 80^0 W then angle ABC is

A.250^0

B.110^0

C.90^0*

D.70^0

Ans:C

58.The most commonly used the odolite operations are

A.Right face and right swing
B.Left face and right swing*

C.Right face and left swing

D.Left face and left swing

Ans:B

59.Bar chart is drawn for

A.Time versus activity*

B.Progress versus time

C.Activity versus resources

D.Resources versus progress

Ans:A

60.CPM is

A.Activity oriented*

B.Event oriented

C.Time oriented

D.Resource oriented

Ans:A

61.A couple produces

A.Translator motion

B.Rotational motion*

C.Combined translator and rotational motion

D.None of the above

Ans:B

62.A beam encastered at both ends is called

A.Simply supported beam

B.Fixed beam*

C.Continuous beam

D.Cantilever beam

Ans:B

63.The slenderness ratio is the ratio of

A.Area of the column to least railius of gyration

B.Length of column to least radius of gyration*

C.Least radius of gynation to area of column

D.Least radius of gyration to length of column

Ans:B

64.A reinforced-cement concrete beam is considered to be made of

A.Homogenous material

B.Heterogenous material

C.Composite material*

D.Isotropic material

Ans:C

65.Factor of safety is defined as the ratio of

A.Ultimate stress to working stress*

B.Working stress to ultimate stress

C.Breaking stress to ultimate stress

D.Ultimate stress to breaking stress

Ans:A

66.Bifurcated stair is commonly used

A.At the entrance of public building*

B.In small residential building

C.Emergency stair at the back of the building

D.None of these

Ans:A

67.The maximum diameter of the reinforcement bars in RCC slab is

A.Span/100

B.Thickness of slab'8*

C.16 mm

D.20 mm

Ans:B

68.An aquifer is a geological formation which

A.Does not contain water

B.Contain water and also transmits water*

C.Contain water but does not transmit

D.An out crop oozing out water

Ans:B

69.The type of recording rain gauge used in India is:

A.Weighing type

B.Tipping bucket type

C.Float type*

D.None of the above

Ans:C

70.Reaver dam is a type of

A.Timber dam*

B.Earth dam

C.Buttress dam

D.Steel dam

Ans:A

71.In preparing cement concrete by volume the size of the wooden box used to measure aggregate is

A.35 * 25 *40 cm*

B.35 *30 *40 cm

C.40*25 *30 cm

D.30*30*30 cm

Ans:A

72.The standard width of asbestos cement corrugated sheet is

A.1.25 m

B.1.05 m*

C.1.0 m

D.0.9m

Ans:B

73.A work costing less than Rs.20,000 is termed as

A.Minor work

B.Casual work

C.Petty work*

D.Major work

Ans:C

74.The most economical section for a column is

A.Square section

B.Circular section

C.Rectangular section

D.Tubular section*

Ans:D

75.In multi storied government buildings,the floor height is usually restricted to

A.4.2 m

B.3.4 m*

C.2.4 m

D.3.0 m

Ans:B

76.An earthen embankement built on each side of a river for some distance as a flood control measure is called

A.Retaining wall

B.Weir

C.Groyne

D.Dyke*

Ans:D

77.In most efficient trapezoidal section which of the following time is:

A.The top width is twice the length of slopping side*

B.The hydraulic radius is half the depth of flow

C.The shape is half of regualar hexagon

D.All the above

Ans:A

78.A septic tank is water light tank where the following operation(s)takes place

A.Sedimentation

B.Sedimetation+Digestion*

C.Digestion
D.Decomposition of organic matter by bacteria

Ans:B

79.A major disadvantage of intermittent system of supply of water is

A.Bigger pipe and pumps are used

B.More number of valves required

C.Consumers should store water*

D.Infiltration of impurities may occur through leaky joints

Ans:C

80.To disinfect swimming pool water,we use
A.Iodine

B.Fluorine

C.Bromine

D.Chlorine

Ans:-------

81.The Ezhava Memorial was submitted to

A.Chithira Tirunal

B.Sri Mulam Tirunal*
C.Swathi Tirunal

D.Avittom Tirunal

Ans:B

82.Name the book written by Brahmananda Siva Yogi

A.Lalithopaharam

B.Vivekachodamani

C.Ananda Sutram*
D.Chinta Tarangam

Ans:C

83.The first editor of 'Swadeshbhimani'C.P.Govinda Pillai had earlier worked as the editor of:

A.Pachimodayam*

B.Rajya Samacharam

C.Deepika

D.Kerala Panchika

Ans:A

84.Sadhu Jana Paripalana Yogam was founded in

A.1905

B.1907*

C.1893

D.1885

Ans:B

85.In which year Sri Narayana Guru founded an Advaitha Ashram at Aluva?

A.1888

B.1913*

C.1903

D.1896

Ans:B

86.The spacecraft launched by NASA in 2006 to study the dwarf planet Pluto

A.Orion

B.New Horizons

C.Curiosity

D.Endeavour*

Ans:D

87.Present Israeli Prime Minister

A.Ehud Olmert

B.Ariel Sharon

C.Ehud Barak

D.Benjamin Nethanyahu*

Ans:D

88.Maggi is a product of

A.Hinaustan Unilever

B.Glaxo Smithkline

C.Cadbury

D.Nestle*

Ans:D

89.Scientist have recently nick named the brightest galaxy after a famous footballer.Who is he?

A.Ronaldo*

B.Pele

C.Messi
D.Maradona

Ans:A

90.'Ithihaasathinte Ithalukal'a reinterpretation of Ramayana was written by

A.B.Sandhya*

B.K.R.Meera

C.M.P.Veerendrakumar

D.George Onakkur

Ans:A

91.In which of the following river is the Majuli River Island situated?

A.Ganga

B.Godavari

C.Kaveri

D.Brahmaputra*

Ans:D

92.Palk Straits separates India from

A.Sri Lanka*

B.Pakistan

C.Myanmar

D.Maldives

Ans:A

93.The Banihal Pass is on

A.Greater Himalayas

B.Zaskar

C.Ladakh

D.Pir Panjal*

Ans:D

94.Name the river that feeds the canal system of the Bhakra Nangal Project.

A.Ravi
B.Chinab

C.Satluj*

D.Jhelum

Ans:C

95.The famous Soochipara ecotourism centre is situated in which district?

A.Palakkad

B.Idukki

C.Wayanad*

D.Pathanamthitta

Ans:C

96.Who led the Revolt of 1857 at Lucknow?

A.Bahadur Shah II

B.Beegum Hazrat Mahal*

C.Nana Saheb

D.Jhansi Rani

Ans:B

97.'A Gift to Monotheists'was written by

A.Iswara Chandra Vidyasagar

B.Swami Dayananda Saraswathi

C.Raja Ram Mohan Roy*

D.Swami Vivekananda

Ans:C

98.The organization which is related with Kakori Conspiracy

A.Gadar Party
B.Abhinav Bharat Society
C.Hindustan Republican Association*

D.Anusheelan Samithi

Ans:C

99.Bhagat Singh was hanged in 1931 March 23 at

A.Lahore Jail*

B.Tihar Jail

C.Yervada Jail

D.Cellular Jail

Ans:A

100.The Viceroy at the time of Salt Satyagraha

A.Irwin*

B.Ripon

C.Chelmsford

D.Stafford Cripps

Ans:A