

1. Mountabu Hill Station is located in
A) Purvanchal Mountain
B) Aravalli Mountain
C) Vindya Mountain
D) Karakkoram Mountain
2. The least densely populated State in India
A) Arunachal Pradesh
B) Mizoram
C) Meghalaya
D) Sikhim
3. Red soil is found in
A) Deccan Plateau
B) Ladak Plateau
C) Malwa Plateau
D) Chotanagpur Plateau
4. The climate of India is
A) Temperate Monsoon
B) Tropical Continental
C) Tropical Monsoon
D) Temperate Marine
5. 'Tista' is the tributary of
A) Ganges
B) Brahmaputra
C) Indus
D) Godavari
6. Jog waterfalls is located in the
A) Sharavathi river
B) Netravathi river
C) Sabarmathi river
D) Amaravathi river
7. The highest peak in Kerala
A) Ponmudi
B) Chembra
C) Anamudi
D) Agastyamala
8. The British made many attempts to get the support on India during second world war, August Offer was one among them. Who declared this ?
A) Lord Wavell
B) Stafford Cripps
C) Lord Rippon
D) Lord Linlithgow
9. 'Tun muje khoon do, mein thume azadi dunga' [Give me blood, in turn I will give you freedom] who said these famous words ?
A) Subhash Chandra Bose
B) Captain Lakshmi
C) Rash Bihari Bose
D) Bhagat Sing
10. The Organisation formed by Ayyankali
A) Tirvathaancor Mahasabha
B) Sadujana Paripalana Yogam
C) Athmavidya Sangam
D) Yogakshema Sabha

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11. The drama "adukkalayil ninnu arangathekku" written by
A) Premji
B) Toppil Bhasi
C) V.T. Bhattatirippad
D) Bhavatran Nambothiri
12. The Organisation which was pioneer in the expansion of education in Malabar ?
A) Ringle tab
B) Basel evangelical mission
C) London Mission society
D) Salvation army
13. The successful launching of PSLV-C37 with 104 satellites in single flight in Satheesh Dewan Space Centre, Sriharikota was on
A) $16^{\text {th }}$ January 2017
B) $15^{\text {th }}$ December 2017
C) $16^{\text {th }}$ February 2017
D) $15^{\text {th }}$ February 2017
14. The current vice chairman of NITI Ayog of India [National Institution for Transforming India]
A) Mr. Narendra Modi
B) Mr. Monteksing Ahluvalia
C) Mr. K. C. Panth
D) Mr. Aravind Pangaria
15. Who wrote 'the ministry of utmost happiness' ?
A) J.K. Rowling
B) Salman Rushdie
C) Arunthathi Roy
D) Kiren Desai
16. The film in which Mrs. Surabhi Lakshme bagged the best actress national award
A) Rustham
B) Minnaminungu
C) Tirakkatha
D) Ayalum njanum tammil
17. The chief minister of Goa
A) Manohar Parekkar
B) Siddaramayya
C) Yogi adityanath
D) Lekshmikant Perseker
18. Which is the vaccine introduced by central health ministry recently against $T B$ ?
A) Vericella
B) $M M R$
C) Bedaquiline
D) DPT
19. Goods and services tax is an indirect tax throughout India to replace taxes levied by the Central and State governments. This has been implemented as per amendment of Indian Constitution
A) 122
B) 124
C) 112
D) 128
20. The national leader who proclaimed "individual Satyagraha"?
A) Mahatma Gandhi
B) Jawaharlal Nehru
C) Abdul Kalam Azad
D) Vinobha Bhave
21. Invar tape is made up of an alloy of $\qquad$ and steel.
A) Aluminium
B) Nickel
C) Copper
D) Brass
22. $1 \mathrm{~m}=$ $\qquad$ cm.
A) 2.54
B) 10
C) 30.48
D) 100
23. Boundary of a catchment area will be
A) Longitudinal line
B) Datum
C) Ridge line
D) Valley line
24. Instrument used for sighting objects and drawing rays in plane tabling is
A) Alidade
B) Trough compass
C) Spirit level
D) Plumb-bob
25. Which of the following level's telescope can be rotated by surveyor in vertical plane in a smaller amount ?
A) Dumpy level
B) Wye level
C) Auto level
D) Tilting level
26. The process of establishing an intermediate point in a line is called
A) Chaining
B) Offsetting
C) Ranging
D) Levelling
27. Meridian joining earth's true north and south is called
A) Assumed meridian
B) Arbitrary meridian
C) Magnetic meridian
D) True meridian
28. Error $=$
A) Difference in values and sign of observed value
B) Difference in values and sign of true value
C) Observed value - true value
D) True value - observed value

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29. An EDM based instrument is
A) Micrometer theodolite
B) Total station
C) Dumpy level
D) Chain
30. Imaginary line joining centre of the eyepiece and the objective of the telescope is
A) Line of collimation
B) Axis of bubble tube
C) Axis of altitude bubble
D) Axis of telescope
31. Of the following, which is the primary stage of surveying?
A) Reconnaissance
B) Preliminary survey
C) Final survey
D) Location survey
32. Bad ranging is an example for
A) Positive compensating error
B) Negative compensating error
C) Positive cumulative error
D) Negative cumulative error
33. Survey lines set out to locate interior details of a plot is called
A) Main survey lines
B) Tie lines
C) Check lines
D) Random lines
34. Horizontal angle as well as vertical angle can be measured using a
A) Theodolite
B) Dumpy level
C) Compass
D) Plane table
35. A link of a metric chain is $\qquad$ cm in length.
A) 0.66
B) 10
C) 20
D) 30.48

A
36. Point where the circular curve begins is called as
A) P.T.
B) P.C.
C) P.I.
D) C.P.
37. Which of the following is the prime instrument is used for ranging?
A) Ranging rod
B) Chain
C) Cross-staff
D) Arrow
38. 1 hectare $=$ $\qquad$ $\mathrm{m}^{2}$.
A) $10^{0}$
B) $10^{1}$
C) $10^{2}$
D) $10^{4}$
39. A 20 m metric chain has $\qquad$ links.
A) 10
B) 50
C) 100
D) 150
40. $90^{\circ}$ is set out using
A) cross staff
B) peg
C) plumb-bob
D) line ranger
41. $\qquad$ angles can be set out using French cross staff.
A) $30^{\circ}$
B) $45^{\circ}$
C) $60^{\circ}$
D) $75^{\circ}$
42. Gunter's chain is $\qquad$ in length.
A) 20 m
B) 33 feet
C) 66 feet
D) 100 feet
43. Convert Q.B., $\mathrm{S} 45^{\circ} 00^{\prime} \mathrm{E}$ into W.C.B.
A) $45^{\circ} 00^{\prime}$
B) $135^{\circ} 00^{\prime}$
C) $225^{\circ} 00^{\prime}$
D) $335^{\circ} 00^{\prime}$
44. Station where which B.S. and F.S. are taken is called
A) Intersection point
B) Forward point
C) Tangent point
D) Change point
45. W.C.B. of a survey line is determined using
A) prismatic compass
B) surveyor's compass
C) trough compass
D) circular compass
46. Contour lines merge in the case of
A) Overhanging cliff
B) Vertical cliff
C) Hill
D) Pond
47. Theoretical sum of interior angles of a closed irregular hexagon is
A) $180^{\circ}$
B) $360^{\circ}$
C) $600^{\circ}$
D) $720^{\circ}$
48. Following observations were done in reciprocal leveling. Find level difference between $A$ and $B$.

Dumpy level at A, staff reading at A -1.000 m and staff reading at $B-2.500 \mathrm{~m}$.
Dumpy level at B, staff reading at $A-1.300 \mathrm{~m}$ and staff reading at $B-2.700 \mathrm{~m}$.
A) 1.400 m
B) 1.450 m
C) 1.500 m
D) 2.900 m
49. Convert W.C.B. $320^{\circ} 00^{\prime}$ into Q.B.
A) $\mathrm{S} 40^{\circ} 00^{\prime} \mathrm{W}$
B) $\mathrm{W} 50^{\circ} 00^{\prime} \mathrm{S}$
C) $\mathrm{S} 140^{\circ} 00^{\prime} \mathrm{W}$
D) $\mathrm{W} 140^{\circ} 00^{\prime} \mathrm{S}$
50. $0^{\circ}$ is engraved at $\qquad$ of the graduated ring of the prismatic compass.
A) North
B) East
C) South
D) West
51. Expand GPS
A) Geodetic Parallel Surveying
B) Global Positioning System
C) Geodetic Positioning System
D) Global Parallel Surveying

A
52. W.C.B. is always reckoned from
A) North
B) East
C) South
D) West
53. Magnetic bearing of a line determined was $140^{\circ}$ but later it was found that Declination at the place is $2^{\circ} \mathrm{W}$. Find the magnetic bearing of the line.
A) $40^{\circ}$
B) $50^{\circ}$
C) 138
D) $142^{\circ}$
54. Projection of a survey line onto $\mathrm{N}-\mathrm{S}$ line is termed as
A) Closing error
B) Latitude
C) Departure
D) Random line
55. Which of the following is known as the ideal transition curve ?
A) Froude's curve
B) Bernoulli's lemniscate
C) Cubic parabola
D) Clothoid
56. Change in declination at place happening in 24 hours is $\qquad$ type of variation.
A) Secular
B) Diurnal
C) Annual
D) Irregular
57. $\qquad$ surveying can be performed without field book.
A) Plane table
B) Chain
C) Compass
D) Theodolite
58. Process of revolving telescope of theodolite in the horizontal plane with respect to vertical axis of the theodolite is called
A) Transiting
B) Reversing
C) Swinging
D) Plunging

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59. Angle subtended by radius at the centre of the curve is called as
A) Deflection angle
B) Intersection angle
C) Direct angle
D) Central angle
60. F.B. of Rs. is $S 45^{\circ} 15^{\prime}$ E. F.B. of $P R$ is $S 30^{\circ} 00^{\prime} E$. Included angle PRS measured in clockwise direction is
A) $104^{\circ} 45^{\prime}$
B) $134^{\circ} 45^{\prime}$
C) $164^{\circ} 45^{\prime}$
D) $195^{\circ} 15^{\prime}$
61. Gradient existing between two points is found to be 1 in 1000. Level difference between same points is 5.00 m . Find distance between two points is
A) 50 m
B) 0.500 km
C) 1000 m
D) 5 km
62. Which of the following plane table method involves in finding an instrument station ?
A) Resection
B) Radiation
C) Intersection
D) Traversing
63. Angle between the preceding line and succeeding line is called
A) Bearing
B) Direct angle
C) Deflection angle
D) Angle to the right
64. In levelling operation, the point of known elevation is termed as
A) Bench mark
B) Contour
C) Plane
D) Backsight
65. The structure which is used to carry canal over natural drain is called
A) fly level
B) aqueduct
C) super passage
D) level crossing
66. Last level reading taken before shifting a level is entered as
A) FS
B) BS
C) IS
D) LS
67. Scale $1: 200$ is classified as
A) full scale
B) scale of chords
C) enlarged scale
D) reduction scale
68. RL of $B M$ is 100.000. Without taking reading on $B M$ another two staff readings, 1.000 and 3.000 were observed. What is the level difference between these two points ?
A) Can't determine
B) 1.000
C) 2.000
D) 4.000
69. Imaginary line formed by joining points of equal elevations on earth's surface is called
A) contour
B) section
C) bench mark
D) single plane
70. The multiplying constant of a tacheometer fitted with an anallactic lens is
A) 0
B) 1
C) 100
D) 1000
71. Which of the following is called as Easement curve?
A) Simple circular curve
B) Compound curve
C) Reverse curve
D) Transition curve
72. Two straights connected using a single arc of constant radius is known as
A) Simple circular curve
B) Compound curve
C) Reverse curve
D) Transition curve
73. In India a curve is designated by
A) Radius of the curve
B) Degree of the curve
C) Deflection angle
D) Long chord
74. Survey related to large water bodies is called
A) Hydrographic surveying
B) Land surveying
C) Air surveying
D) Aerial surveying

A
75. Closely spaced contours indicate
A) flat
B) steep slope
C) gentle slope
D) mild slope
76. Magnetic equator is an example for
A) Isogonic line
B) Agonic line
C) Isoclinic line
D) Aclinic line
77. F.B. of CD is $30^{\circ}$. FB of DE is $260^{\circ}$. Find $<\mathrm{CDE}$ measured in clockwise direction.
A) $50^{\circ}$
B) $80^{\circ}$
C) $230^{\circ}$
D) $290^{\circ}$
78. 6020 seconds $=$
A) $00^{\circ} 05^{\prime} 40^{\prime \prime}$
B) $01^{\circ} 40^{\prime} 20^{\prime \prime}$
C) $03^{\circ} 01^{\prime} 00^{\prime \prime}$
D) $6^{\circ} 02^{\prime} 00^{\prime \prime}$
79. Bearing measured in the direction of the progress of surveying is called
A) Fore bearing
B) Back bearing
C) Intermediate bearing
D) Reverse bearing
80. Bessel's solution to three point problem is related to
A) Trial and error method
B) Tracing paper method
C) Mechanical method
D) Graphical method
81. Principle of plane table surveying is
A) Triangulation
B) Offsetting
C) Orientation
D) Levelling
82. $\qquad$ is the equation for finding correction value for refraction.
A) $0.0005 \mathrm{D}^{2}$
B) $0.0112 \mathrm{D}^{2}$
C) $0.0673 \mathrm{D}^{2}$
D) $0.0785 \mathrm{D}^{2}$
83. Slope along the longitudinal direction is often termed as
A) Gradient
B) Transverse slope
C) Section
D) Camber

A
84. F.B. of a line PQ is $140^{\circ}$. What is the F.B. of the line QP ?
A) $40^{\circ}$
B) $180^{\circ}$
C) $230^{\circ}$
D) $320^{\circ}$
85. Level reading taken on a BM is 2.000. RL of BM is 10.000. Then a level reading of 3.5000 was taken on top of a stake. Find the RL of the top of the stake.
A) 98.500
B) 12.000
C) 8.500
D) 8
86. Equal gradient lines along a slope are called
A) Grade contours
B) Contour gradients
C) Vertical equivalents
D) Horizontal equivalents
87. Offsets are said to be large when offset length exceeds $\qquad$ m.
A) 5
B) 10
C) 15
D) 20
88. A set of arrows provided with chain has $\qquad$ arrows.
A) 10
B) 15
C) 20
D) 30
89. Which of the following is also referred as versed sine of the curve?
A) Tangent length
B) Long chord
C) Apex distance
D) Mid-ordinate
90. Of the following which is the correct input method to draw a line of 100 units at an angle of $40^{\circ}$ in anticlockwise direction from positive $X$ axis on a default AutoCAD working space?
A) $<40 @ 100$
B) $@ 100<40$
C) $@ 40<100$
D) $<100 @ 40$
91. Which of the following instrument is used for ranging?
A) Peg
B) Cross staff
C) Optical square
D) Line ranger
92. Which of the permanent adjustment test checks the perpendicularity between horizontal axis and vertical axis ?
A) Plate level test
B) Collimation test
C) Spire test
D) Azimuth test
93. Area of land irrigated divided by the unit volume of irrigation water is called
A) Head water
B) Duty
C) Delta
D) Base period
94. Portion of a brick made by cutting across it lengthwise into exactly two parts is known as
A) bevelled closer
B) queen closer
C) king closer
D) bat
95. Vertical angle with which magnetic needle makes with the horizontal is called
A) Declination
B) Transiting
C) Swinging
D) Dip
96. When the bed level of canal and drainage is at the same level, $\qquad$ is provided.
A) Aqueducts
B) Superpassage
C) Level crossings
D) Delta
97. Which function key is used for on/off object snap, while drafting in AutoCAD ?
A) F8
B) F5
C) F4
D) F3
98. Formula for finding area of a plane triangle whose base is $b$, height $h$, is
A) bh
B) 0.5 bh
C) $0.5[(b+h) / 2]$
D) $2[(b+h) / 2]$
99. Main constituent of portland cement is
A) clay
B) sand
C) lime
D) magnesium
100. In $\qquad$ headers and stretchers are laid alternatively in the same course.
A) English bond
B) Stretcher bond
C) Header bond
D) Flemish bond

## Space for Rough Work

