1. The size of bench vice is specified by:
   (A) Weight of vice
   (B) Length of spindle
   (C) Width of jaws
   (D) Length of handle

2. The narrow and thin part of a file which fits into the handle is:
   (A) Shoulder
   (B) Heel
   (C) Tip
   (D) Tang

3. In single cut file the teeth are at an angle of ______ degree to the centre line.
   (A) 40
   (B) 70
   (C) 57
   (D) 60

4. These files are available only in half round shape:
   (A) Rasp cut file
   (B) Single cut file
   (C) Double cut file
   (D) Curved cut file

5. In cases where there is heavy reduction on material a __________ file is used.
   (A) Rough
   (B) Bastard
   (C) Second cut
   (D) Smooth

6. Steel rules are made up of:
   (A) Spring steel
   (B) Mild steel
   (C) Cast iron
   (D) High carbon steel

7. __________ is a precision instrument which is used to check the squareness and flatness.
   (A) Optical pyrometer
   (B) Flat file
   (C) Scriber
   (D) Try square

A 3 [P.T.O.]
8. These calipers are also known as Hermaphrodite calipers.
   (A) Jenny calipers  (B) Firm joint calipers
   (C) Spring joint calipers  (D) None of the above

9. The angle of prick punch is:
   (A) 60 degree  (B) 45 degree
   (C) 30 degree  (D) 53 degree

10. To square the jobs at the corners —— chisels are used.
    (A) Cape  (B) Diamond point
    (C) Web  (D) Half round nose

11. ——— hammer is used for riveting.
    (A) Ball peen  (B) Cross peen
    (C) Straight peen  (D) Sledge

12. ——— is the cutting edge of a drill bit which penetrate into metal while drilling.
    (A) Lip  (B) Shank
    (C) Tang  (D) None of the above

13. Broken drill occurs when:
    (A) Drill is not sharp  (B) Feed rate is too much
    (C) Clearance angle is incorrect  (D) Unequal length of the cutting edges

14. ——— is used to compare the profile of threads.
    (A) Profilometer  (B) Screw pitch gauge
    (C) Lead screw  (D) Dividing head

15. ——— tap is used to size the thread.
    (A) First  (B) Finishing
    (C) Second  (D) Bottoming

16. Die nuts are used for:
    (A) Cutting new thread  (B) Reconditioning damaged threads
    (C) Finishing new threads  (D) Threading nuts
17. For cutting a thread of M6 with 1 mm pitch, the diameter of blank is:
   (A) 5.9 mm  (B) 6 mm
   (C) 6.1 mm  (D) 7 mm

18. Vernier caliper is used to measure an accuracy of:
   (A) 0.02 mm  (B) 0.3 mm
   (C) 0.05 mm  (D) 1.0 mm

19. Heptagon has _______ sides.
   (A) 4  (B) 5
   (C) 7  (D) 8

20. _______ iron is almost pure.
    (A) Cast  (B) Pig
    (C) Malleable  (D) Wrought

21. Brass is an alloy of:
    (A) Copper and tin  (B) Copper and zinc
    (C) Lead and zinc  (D) Copper and lead

22. When a metal can be drawn out in tension without rupture it is said to be:
    (A) Brittle  (B) Fusible
    (C) Strong  (D) Ductile

23. Toughness is the property of a metal:
    (A) to withstand shock
    (B) ability to resist the effect of compression
    (C) to withstand scratching
    (D) by virtue of which it melts when heated

24. The process of giving a protective coating of zinc on iron sheets is known as:
    (A) Tinning  (B) Galvanising
    (C) Cladding  (D) None of the above
25. Manual folding can be performed by using:
   (A) Angle iron   (B) Combination set
   (C) Try square   (D) Gauge block

26. Tinner's hand punch is used for punching the holes upto:
   (A) 6 mm dia   (B) 4 mm dia
   (C) 8 mm dia   (D) 12 mm dia

27. Eutectoid steel is known as:
   (A) Cementite   (B) Ferrite
   (C) Pearlite    (D) None of the above

28. Cutting angle of a Tinnman's shear is:
   (A) 90 degree   (B) 45 degree
   (C) 83 degree   (D) 87 degree

29. Hollow mandrel stake is a:
   (A) Measuring tool   (B) Supporting tool
   (C) Striking tool    (D) None of the above

30. Turning the edges to 90 degree to form a mouth piece is called:
   (A) Flanging   (B) Passivating
   (C) Embossing  (D) Seaming

31. For all ranges of micrometers the graduations marked on the barrel is:
   (A) (0 – 25 mm)   (B) (0 – 50 mm)
   (C) (0 – 100 mm)  (D) (0 – 20 mm)

32. The sheet metal hammers are specified by:
   (A) Length of handle and material
   (B) Material and weight
   (C) Type of peen and weight
   (D) Length of handle and peen
33. For hot working compared to cold working rivets will have holes with:
(A) Same clearance
(B) More clearance
(C) Lesser clearance
(D) None of the above

34. The operation of closing down the edges of the plates and heads of the rivets to form a metal to metal joint is:
(A) Chaulking
(B) Fullering
(C) Swaging
(D) Crushing

35. For a locked grooved joint the width of the groover is 6 mm and the thickness of sheet is 5 mm, then width of fold is:
(A) 5.3 mm
(B) 4.5 mm
(C) 5 mm
(D) 6.5 mm

36. Bench plates are used for:
(A) Folding soft metals
(B) Levelling of contours
(C) Adjusting the height of work pieces
(D) Positioning stakes

37. To cut out interior waste stock from a metal part with a die is:
(A) Planishing
(B) Punching
(C) Piercing
(D) Forming

38. The joining of two pieces at an evenly divided angle is:
(A) Embossing
(B) Hemming
(C) Mitering
(D) Crimping

39. Lazy tong is:
(A) A braking mechanism
(B) Hand operated riveting tool
(C) Forging tool
(D) Lubrication device

40. The shear used for the inside cutting of an intricate work is:
(A) Aviation shear
(B) Bench shear
(C) Hawk billed shear
(D) Electric portable shear

41. This seam is also called hammer lock:
(A) Grooved seam
(B) Dovetail seam
(C) Lap seam
(D) Pittsburgh seam
42. Sweating is:
   (A) Press operation
   (B) Soldering operation
   (C) Hardening operation
   (D) Normalising operation

43. Generally the tube size is specified by:
   (A) Outer diameter
   (B) Inner diameter
   (C) Both outer and inner diameter
   (D) None of the above

44. Spelter is used in:
   (A) Soldering
   (B) Brazing
   (C) Mig welding
   (D) Arc welding

45. Jig is a:
   (A) Work holding device
   (B) Tool holding device
   (C) Both work holding and tool guiding device
   (D) None of the above

46. Steel cylinder painted in maroon colour is used for storing:
   (A) Acetylene
   (B) Oxygen
   (C) Carbon dioxide
   (D) Carbon monoxide

47. The part of an anvil used for bending and rounding operation is:
   (A) Beak
   (B) Face
   (C) Tail
   (D) Base

48. The heat treatment process consisting of re-heating the hardened steel to a temp. below 400 degree followed by cooling is:
   (A) Annealing
   (B) Normalising
   (C) Tempering
   (D) Hardening

49. Enlarging a previously punched hole is known as:
   (A) Honing
   (B) Drifting
   (C) Nibbling
   (D) Piercing
50. Stake joint is connected with:
   (A) Stakes            (B) Gold ornaments
   (C) Heavy structures  (D) Toys

51. The process of giving a shining or a mirror finish to the article to give it an attractive appearance:
   (A) Polishing         (B) Galvanising
   (C) Grinding          (D) Buffing

52. The process of sheet metal discs rolled to specific shapes by forcing the metal to flow over a suitable mandrel is known as:
   (A) Bending          (B) Forming
   (C) Spinning         (D) Rolling

53. The operation of cutting sheet metal in a straight line along the length is:
   (A) Lancing          (B) Slitting
   (C) Blanking         (D) Piercing

54. Pick up the operation which is not connected with sheet metal work?
   (A) Bending          (B) Notching
   (C) Forming          (D) Taper turning

55. In blanking, the size of the blank is governed by the size of:
   (A) Punch           (B) Die
   (C) Stripper plate  (D) None of the above

56. The ideal temperature for spray painting is:
   (A) 27 degree C     (B) 100 degree C
   (C) 20 degree C     (D) 24 degree C

57. In electroplating the part to be plated is connected to:
   (A) Cathode         (B) Neutral
   (C) Anode           (D) None of the above

58. Corrosion in metals is due to:
   (A) Pyrolysis       (B) Thermal expansion
   (C) Oxidation       (D) Photosynthesis
59. Squeezing is:
   (A) Forging process  (B) Press work
   (C) Die casting technique (D) Surface coating technique

60. To avoid repetitive measuring and marking the same dimension and when many identical parts are required ——— can be used.
   (A) Trammel (B) Surface plate
   (C) Templates (D) Plate gauges

61. Chisel used to separate metals after chain drilling is:
   (A) Cross cut chisel (B) Half round nose chisel
   (C) Cape chisel (D) Web chisel

62. The hammer's head is made up of:
   (A) Cast iron (B) Zinc passivated mild steel
   (C) Plain carbon steel (D) Drop forged carbon steel

63. Spring back is a phenomenon in:
   (A) Welding (B) Nibbling
   (C) Bending (D) Coining

64. The minimum distance from the edge of the metal to the centre of any rivet is:
   (A) Four times the diameter of rivet (B) Two times the diameter of rivet
   (C) Ten times the thickness of sheet (D) Same as that of the diameter of rivet

65. The method applied for developing the pattern of articles which are tapered to an apex is:
   (A) Radial line method (B) Parallel line method
   (C) Conical method (D) Triangular method

66. False wiring is:
   (A) Modern electric wiring method (B) Surface hardening technique
   (C) Hot rolling process (D) Edge stiffening method

67. Blow lamp is:
   (A) Portable signal lamp (B) Portable heating appliance
   (C) Internal crack detecting device (D) Blinking decorative lamp
68. For retaining the hardness and original shape of punches and drifts:
   (A) They should frequently heat treated   (B) They should be frequently cooled
   (C) They should be frequently annealed   (D) None of the above

69. The point angle of a general purpose standard drill is:
   (A) 118 degree   (B) 119 degree
   (C) 90 degree   (D) 145 degree

70. Tap drill size is:
   (A) (Major dia + pitch)   (B) (Major dia – 1/2 pitch)
   (C) (Major dia – Minor dia.)   (D) (Major dia – pitch)

71. The legs of the divider should always be:
   (A) Unequal length   (B) Adjustable length
   (C) Equal length   (D) None of the above

72. Enclosed angle of a Hexagon is:
   (A) 90 degree   (B) 45 degree
   (C) 120 degree   (D) 60 degree

73. Metals which have little or no iron are called:
   (A) Non-corrosive metals   (B) Non-metals
   (C) Alloys   (D) Non-ferrous metals

74. Function of a soldering flux is to:
   (A) Lubricate the surface   (B) Cool the surface
   (C) Prevent oxidation   (D) Accelerate oxidation

75. In bending the layer in the middle of the material is under:
   (A) Compression
   (B) Both compression and tension
   (C) Tension
   (D) Not subjected to either tension or compression
76. Soft solder is an alloy of:
   (A) Lead and zinc
   (B) Lead and tin
   (C) Copper and zinc
   (D) Zinc and tin

77. Thickness of the sheet is measured with the help of:
   (A) Steel rule
   (B) Brass rule
   (C) Standard wire gauge
   (D) Combination set

78. 12 Swg sheet will be having a thickness of:
   (A) 1.257 mm
   (B) 25.4 mm
   (C) 12 mm
   (D) 2.571 mm

79. Any type of metal sheets that are thick are termed as sheet metal.
   (A) 10 swg or less
   (B) More than 10 swg
   (C) 8 swg or more
   (D) 10 mm

80. Soldering irons are normally made of:
   (A) Cast iron
   (B) Stainless steel
   (C) Mild steel
   (D) Copper or copper alloys

81. The First Viceroy of India:
   (A) Lord Canning
   (B) Lord Dalhousie
   (C) Lord Litton
   (D) Lord Rippon

82. The Author of the book ‘First War of Indian Independence’:
   (A) R.P. Dutt
   (B) M.N. Roy
   (C) V.D. Savarkar
   (D) A.R. Desai

83. Raja Ram Mohan Roy belonged the present State of:
   (A) Gujarat
   (B) Bihar
   (C) Uttar Pradesh
   (D) Bengal

84. Who passed the ‘Vernacular Press Act’?
   (A) Lord Litton
   (B) Lord Dufferine
   (C) Lord Rippon
   (D) None of these
85. The 'Safety Valve Theory' is associated with:
   (A) Tilak          (B) Gokhale
   (C) Dadabhai Naorojee (D) Lala Lajpat Rai

86. The Partition of Bengal took place in the year:
   (A) 1905          (B) 1906
   (C) 1907          (D) 1908

87. The First Political experiments of Gandhiji launched in:
   (A) Kheda          (B) Ahmedabad
   (C) Champaran      (D) Bombay

88. The founder of 'Madras Labour Union':
   (A) N.M. Joshi     (B) C.F. Andrews
   (C) V.V. Giri      (D) B.P. Vaadiya

89. Quit India Movement was launched in the year of:
   (A) 1940          (B) 1941
   (C) 1942          (D) 1943

90. A person who, associated with the 'Two Nation Theory'?
   (A) Jinnah         (B) Rahmat Ali
   (C) Muhammad Iqbal (D) None of these

91. An ancient kingdom in South Kerala, during the Sangam period:
   (A) Ezhimala dynasty (B) Ayi dynasty
   (C) Chera dynasty   (D) None of these

92. The Capital City of the early Cheras:
   (A) Madurai        (B) Thanjavoor
   (C) Vanchi Muthur  (D) Kodungalloor
93. Sankaranarayana, the astronomer lived in the court of:
   (A) Sthanu Ravi  (B) Kulasekhara Alwar
   (C) Rajashekhara Varma  (D) Ravi Varma

94. The text, 'Mokshapradeepam' was written by:
   (A) Vaikunda Swami  (B) Brahmananda Sivayogi
   (C) Vagbhatananda  (D) Chattampi Swamikal

95. The father of 'Modern Kerala Renaissance':
   (A) Brahmananda Sivayogi  (B) Ayyankali
   (C) Chattampi Swamikal  (D) None of these

96. The editor of 'Mitavadi':
   (A) C. Krishnan  (B) T.K. Madhavan
   (C) Manjeri Rama Iyer  (D) K. Kelappan

97. The newspaper Kerala Kaumudhi was started by:
   (A) Mannath Padmanabhan  (B) C.V. Kunhiraman
   (C) Kesavan Asan  (D) K. Ayyappan

98. Who is known as the 'Lion of Kerala'?
   (A) Velu Thampi  (B) Pazhassi Raja
   (C) Paliyat Acchan  (D) Thalakkal Chanthu

99. The National Energy Conservation day is observed in:
   (A) 2nd December  (B) 6th December
   (C) 12th December  (D) 14th December

100. K. Balachander, a famous film director and producer passed away recently, belonged in which language?
   (A) Tamil  (B) Kannada
   (C) Marathi  (D) Telugu