16. Case hardening is done on
   A) Cast Iron
   B) High Carbon Steel
   C) High Speed Steel
   D) Mild Steel

17. Which gear is used for power transmission in parallel shafts?
   A) Worm gear
   B) Rack and pinion
   C) Helical gear
   D) Bevel gear

18. Main property of cutting fluid
   A) Specific gravity
   B) Specific heat
   C) Ductility
   D) Viscosity

19. What SAE 30 number indicate?
   A) Flash point
   B) Viscosity
   C) Pour point
   D) Fire point

20. A tool which is used to enlarge a previously drilled hole is known as
   A) Boring tool
   B) Turning tool
   C) Form tool
   D) Facing tool

21. Which one of the following tapers is used for making shank of lathe centres?
   A) Jerno taper
   B) Non-standard taper
   C) Brown and Sharp taper
   D) Morse standard taper

22. In a shaper rotary motion is converted into reciprocating motion by means of
   A) Shaft and pulley
   B) Rocker arm and bull gear
   C) Rack and pinion
   D) Worm and worm wheel

23. The number of threads per inch can be checked with a
   A) Tool gauge
   B) Metric rule
   C) Ring gauge
   D) Screw pitch gauge

24. Slotter is specified by
   A) Table diameter
   B) Maximum stroke of its ram
   C) Number of strokes per minute
   D) All of the above
25. While planning a work piece the feed is provided intermittently at the
   A) Middle of return stroke   B) Middle of forward stroke
   C) Forward stroke           D) Return stroke

26. Type “A” arbor is used for mounting
   A) Large size face milling cutter
   B) Drills, reamers, clutches etc.
   C) Shell end mill cutter
   D) End mill cutter

27. Solid milling cutters are manufactured from
   A) Stellite                 B) Ceramic
   C) High speed steel        D) Sintered carbide

28. In spur gear of pitch diameter = 168 mm, module = 3.25 mm, the number of teeth
    will be
   A) 48 teeth                B) 24 teeth
   C) 72 teeth                D) 96 teeth

29. How many seconds are there in angle of 5 degree ?
   A) 6000                    B) 9000
   C) 1800                    D) 16000

30. Fire is a combination of
   A) Fuel, light and oxygen   B) Fuel, heat and oxygen
   C) Fuel, heat and carbon dioxide D) Fuel, light and nitrogen

31. The minimum measurement that can be read with the help of a steel rule is
   A) 0.01 mm                  B) 0.02 mm
   C) 0.05 mm                  D) 0.50 mm

32. Drill sleeve is used when the taper shank of the drill is
   A) Smaller than the machine spindle
   B) Larger than the machine spindle
   C) Equal to the machine spindle
   D) None of the above
33. Which one of the following metals has less carbon content?
   A) Cast iron  B) Pig iron  C) Wrought iron  D) Plane carbon steel

34. Which one of the following processes is used for removing scratches from previous operations?
   A) Painting  B) Oxidation  C) Polishing  D) Enameling

35. Which one of the following properties is the most essential for the metals in the process of casting, welding, brazing and soldering?
   A) Fusibility  B) Malleability  C) Tenacity  D) Plasticity

36. Reamer is made of
   A) Alloy steel  B) High speed steel  C) High carbon steel  D) All of the above

37. Least count of vernier bevel protractor
   A) One minute  B) Two minutes  C) Five minutes  D) Ten minutes

38. Stub arbor type “A” used for mounting
   A) Plain milling cutter  B) Face milling cutter  C) Side and face milling cutter  D) Shell end milling cutter

39. The back side of an angle plate has ribs. What is its function?
   A) Easy in making  B) For lifting the angle plate  C) For clamping  D) Protect the angle plate from distortion

40. V-Block is available in how many grades?
   A) A, B and C  B) A and B  C) 1, 2 and 3  D) 1 and 2

41. What type of thread on bench vice spindle is?
   A) V-threads  B) Square threads  C) Acme threads  D) Buttress thread
42. Duraluminium is an alloy of
   A) Silver       B) Nickel
   C) Copper       D) Aluminium

43. The mechanical property of metal is
   A) Colour
   B) Weight
   C) Toughness and brittleness
   D) Magnetism

44. Annealing is done
   A) To reduce distortion
   B) To increase the hardness
   C) To increase the toughness
   D) To increase the machining property

45. Hole tolerance is size difference
   A) Maximum hole and minimum hole
   B) Maximum hole and maximum shaft
   C) Maximum hole and minimum shaft
   D) Minimum hole and minimum shaft

46. Lathe bed is made of
   A) High speed steel
   B) High carbon steel
   C) Mild steel
   D) Cast iron

47. Back gear is used in cone pulley headstock on lathe
   A) To increase speed
   B) To decrease speed
   C) To change the direction of speed
   D) None of these

48. Which type of chuck is used for self alignment?
   A) Magnetic chuck
   B) Three jaw chuck
   C) Four jaw chuck
   D) None of these

49. What is the backbone of lathe machine?
   A) Lathe bed         B) Tool post
   C) Tail stock        D) Carriage
50. To convert circular motion into longitudinal motion which type of bolt is used?
   A) Cotter bolt  B) Sheckle bolt
   C) Levis bolt  D) Eye bolt

51. Which type of nut is used in precision instrument?
   A) Ring nut  B) Dome nut
   C) Cap nut  D) Thumb nut

52. Jig and fixtures are made in such type that
   A) To guide the cutting tool
   B) To hold the job strongly
   C) To prevent the job from slipping
   D) To get the maximum production in short time

53. Main use of coolant on machine tool
   A) To minimize the friction between two mating parts
   B) To cool the parts of machine
   C) To wet the two mating parts
   D) To save the machine tool from heating

54. Counter boring is done for
   A) Accommodating socket head screws
   B) Finishing bored holes
   C) Enlarging holes to accurate size
   D) Deburring hole ends

55. Quick return mechanism is provided on shaper to reduce the time required for
   A) Forward stroke  B) Return stroke
   C) Forward and return stroke  D) None of these

56. Clapper box of a shaper is used to
   A) Avoid overhanging of tools  B) Lift the tool in the middle of strokes
   C) Lift the tool during return stroke  D) Lift the tool during cutting stroke
57. The size of a planer is determined by the maximum length of the
   A) Housing       B) Work piece      C) Stroke       D) Bed
58. An angular surface is machined on a planer
   A) By fixing the job at an angle
   B) By swivelling the tool head of the planer
   C) By swivelling the tool head and fixing the tool at an angle
   D) By tilting the table of the planer
59. Gang milling operation is usually performed when
   A) Single piece to be milled     B) Repair work is to be done
   C) For mass production          D) None of these
60. In a spur gear the pitch diameter 40 mm, outside diameter 48 mm, module
    4 mm, the number of teeth will be
   A) 10 teeth   B) 20 teeth   C) 30 teeth   D) 40 teeth
61. Slitting saw is used for
   A) Angular machining          B) Cutting key way
   C) Cutting convex grooves     D) Cutting of long slot
62. Truing of grinding wheel is done by which tool ?
   A) Diamond tool    B) V-tool   C) White tool   D) Round nose tool
63. Cutting tool used in planning machine is
   A) Multipoint cutting tool    B) Single point cutting tool
   C) End mill cutter            D) None of these
64. Which of the following is not the part of combination set ?
   A) Centre head          B) Square head
   C) Stock                D) Protractor head
65. Which one of the following materials is used for making a grinding wheel ?
   A) Calcium carbonate     B) Sand
   C) Granite               D) Silicon carbide

A
66. Which one of the following cutting fluids is used during grinding mild steel?
   A) Paraffin     B) Soluble oil   C) Mineral oil   D) Kerosene

67. The distance a drill moves into the work for each revolution of the spindle is called
   A) Speed of drill   B) Cutting speed of drill
   C) Feed of drill     D) Depth of drill

68. The difference between maximum limit of size to its corresponding basic size of a component is
   A) Tolerance   B) Lower limit
   C) Actual deviation     D) Upper deviation

69. C N C machines are operated by controller of
   A) Programme   B) Cam
   C) An operator     D) Board system

70. You have to cut threads on aluminium, which one of the following coolants will you use?
   A) Kerosene   B) Lard oil
   C) Soluble oil     D) Vegetable oil

71. Indexing head mechanism works with
   A) Rack and gear   B) Worm and worm gear
   C) Two helical gear     D) Two bevel gear

72. The distance between two teeth is called
   A) Lead   B) Margin
   C) Pitch     D) None of these

73. Which one of the following standard tapers is self holding type?
   A) Morse taper   B) Matric taper
   C) Brown and sharp taper     D) Jerno taper

74. The taper shank drills are held on the machine by means of
   A) Chucks   B) Drifts
   C) Sleeves     D) Vice
75. The distance which the cutting edge of a tool passes over the material in a minute while machining is called
   A) RPM  B) Machine speed  C) Cutting speed  D) Feed

76. Centre drilling is an operation of
   A) Drilling and counter sinking  B) Marking the centre location before drilling  C) Drilling and counter boring  D) Enlarging the diameter of a hole

77. The feeler gauge is used for
   A) Checking the accuracy of hole  B) Checking surface roughness  C) Checking the radius of work  D) Checking the gap between mating parts

78. The size of three-jaw chuck is specified by
   A) The diameter of the body of the chuck  B) The thickness of each jaw  C) The size of each jaw  D) Width of the body of the chuck

79. One of the taper turning methods is by offsetting the tail stock. Which part of the tail stock is offset?
   A) Body  B) Base  C) Carriage  D) Spindle

80. Tap is used for
   A) Making round hole on a job  B) Making internal threads in a hole  C) Making external threads on a rod  D) All of the above
81. The greatest mountain in Aravalli Ranges
   A) Gurusikhara   B) Mahendra Giri   C) Kyawir   D) Nandadevi

82. Among the following rivers which is flow through desert?
   A) Patma   B) Godavari   C) Luni   D) Amaravati

83. The first Biosphere Reserve in India
   A) Tenmala   B) Nilagiri   C) Gian Bharathi   D) Dibrusaikov

84. Which among the following is selected for the Gandhi Peace Prize in 2015?
   A) NHRC   B) ISRO   C) SEBI   D) IGNOU

85. The 12th SAF Game has been decided to conduct in
   A) Tamil Nadu   B) Karnataka   C) Bihar   D) Kerala

86. Which state in India firstly issued soil health cards to farmers?
   A) Haryana   B) Bihar   C) Punjab   D) Uttarakhand

87. Which monument in Nepal, considered to be the world’s oldest Buddhist shrine, was damaged in the recent earthquake?
   A) Swayambhunath Stupa   B) Barhut Stupa
   C) Amaravati Stupa   D) Sanchi Stupa

88. To whom the Jnanapita award of 2014 is given?
   A) Amrita Preetham   B) Tharasankar Bandopadhyaya
   C) Balachandar Nornade   D) Sumithranandan Panth

89. The GST Bill was passed by Lok Sabha on

90. The Vernacular Press Act was passed in the year
   A) 1885   B) 1878   C) 1875   D) 1856

91. Communal Award was announced by
   A) Lord Linlithgo   B) Lord Wavel   C) Lord Minto   D) Ramse Macdold

92. Brahma Samaj was formed in the year
   A) 1830   B) 1825   C) 1828   D) 1875
93. The East Indian Association was formed by
   A) Dada Bai Naoroji  B) Surendranath Bannerji
   C) Gopalakrishna Gokhale  D) Bala Gangadhara Tilak

94. Choorni is the old name of
   A) Pamba  B) Chaliyar
   C) Periyar  D) Bharatha Puzha

95. The length of Kerala Sea Coast
   A) 585 km  B) 580 km
   C) 568 km  D) 565 km

96. The birth place of Vagbadananda
   A) Thalassery in Kannur  B) Patyam in Kannur
   C) Venganoor in Thiruvananthapuram  D) Venganur in Thiruvananthapuram

97. The book ‘Shivashathakam' written by
   A) Chattambi Swamikal  B) Ayya Vaikundar
   C) Brahmananda Sivayogi  D) Shreenarayan Guru

98. The organisation ‘Vidya Poshini' was formed by
   A) Pandit Karuppan  B) Ayyankali
   C) Poikayil Yohannan  D) Sahodaran Ayyappan

99. Sadhujana Paripalana Sangam was formed by
   A) Ayyankali  B) Sahodaran Ayyappan
   C) Kumara Guru  D) Vaikunda Swamikal

100. ‘Al Islam' is the news paper of
    A) Sir Sayyid Ahmed Khan  B) K. M. Moulavi
    C) Vakkam Abdul Khader Moulavi  D) Abdul Rahiman