

PSC Trade Instructor Grade ii - Sheet Metal - Technical Education Examination Previous Year Question Paper

***Exam Name: Trade Instructor Grade ii - Sheet
Metal - Technical Education***

Date of Test : 21.05.2015

Question Paper Code: 095/2015

Medium of Questions: English



95/2015

Maximum : 100 marks

Time : 1 hour and 15 minutes

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

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 rangers 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) Planshing (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 hold is known as :
(A) Honing (B) Drifting
(C) Nibling (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) Ahammedabad
(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) Kulashekhara Alwar
(C) Rajashekhara Varma (D) Ravi Varma
94. The text, 'Mokshapradeepam' was written by :
(A) Vaikunda Swami (B) Brahmananada 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