

PAPER – I  
FITTER  
(THEORY & EMPLOYABILITY SKILLS)  
SEMESTER – I

TIME: 3 HRS.

MARKS: 200

Note: This paper contains two parts – Part A & Part B.  
Attempt all the questions. All questions carry equal marks.  
This paper carries negative marking. 25 % marks will be deducted for each wrong answer.

## PART – A (THEORY)

(MARKS: 150)

Choose the correct answers:

1. If a patient does not respond to mouth to mouth resuscitation treat, a first –aider should immediately \_\_\_\_\_.  
a) Seek medical help  
b) Check the broken limbs  
c) Keep the body warm with blankets  
d) Check pupils of eyes and pulse
2. Which type of chisel is used for cutting keyways. Groove and slots?  
a) Flat chisel  
b) Cross cut chisel  
c) Half round nose chisel  
d) Diamond point chisel
3. The property of a metal by which it can be drawn into thin wire \_\_\_\_\_.  
a) Elasticity  
b) Ductility  
c) Malleability  
d) Plasticity
4. The convexity of file helps \_\_\_\_\_.  
a) To file concave surface  
b) To file convex surface  
c) To prevent rounding of edges of work.  
d) The file to become straight when pressure is applied.
5. The drilling machine used for light duty work \_\_\_\_\_.  
a) Bench type sensitive  
b) Pillar type  
c) Radial  
d) Gang
6. The recommended point angle of the chisel to cut mild steel is \_\_\_\_\_.  
a) 30°  
b) 45°  
c) 55°  
d) 60°

7. Which grade of file is used for removing rapidly a large quantity of metal?  
a) Dead smooth file  
b) Smooth file  
c) Second cut file  
d) Rough file
8. A slight convexity is given in the cutting edge of the flat chisel is to \_\_\_\_\_.  
a) Cut keyway on shaft  
b) Prevent digging of the ends  
c) Cut curved surface  
d) Cut sharp corners
9. The purpose of tempering a hardened steel component is for \_\_\_\_\_.  
a) Increasing its hardness  
b) Reducing its brittleness  
c) Increasing its ductility  
d) Increasing its toughness
10. Number of graduations on the thimble of a metric micrometer \_\_\_\_\_.  
a) 10  
b) 50  
c) 100  
d) 1000
11. Which one of the marking media takes longer time to dry?  
a) Chalk powder  
b) Prussian blue  
c) Copper sulphate  
d) Cellulose lacquer
12. The important elements in soft solder is \_\_\_\_\_.  
a) Tin and lead  
b) Lead and zinc  
c) Tin and copper  
d) Tin and zinc
13. The size of the dividers is specified by the \_\_\_\_\_.  
a) Distance between points when opened fully  
b) Total length of the legs  
c) Distance between the pivot and the points  
d) Length of the legs without points
14. Try square is checking for \_\_\_\_\_.  
a) Check the round surface  
b) Check the groove surface  
c) Check the flat surface  
d) Check the irregular surface

15. The value of one thimble scale division in a micrometer is \_\_\_\_\_.
- a) 1mm
  - b) 0.5mm
  - c) 0.02mm
  - d) 0.01mm
16. Diluted Hydrochloric acid is used as flux for soldering \_\_\_\_\_.
- a) Copper sheets
  - b) Brass sheets
  - c) Stainless steel sheets
  - d) Galvanized iron sheet
17. Least count of micrometer is \_\_\_\_\_.
- a) 0.1 mm
  - b) 0.5 mm
  - c) 0.2 mm
  - d) 0.01 mm
18. What is the part used to change the range of depth micrometer?
- a) Thimble
  - b) Stock
  - c) Graduated sleeve
  - d) Extension rod
19. Which work holding device support the round job, while drilling the job on a drilling machine?
- a) 'V' block and clamps, bolts, packing piece
  - b) The machine vice and bolts, packing piece
  - c) The hand vice with clamps, bolts.
  - d) The pin vice with clamp, bolts
20. The best placement of the stock for heating in the forge is \_\_\_\_\_.
- a) Below the tuyere with the fire coming from deep inside
  - b) On the top of the fire covered with a thin layer of coal
  - c) Away from the tuyere with a thick layer of coal on the top
  - d) Near the tuyere allowing the air to fall directly on the Stock
21. Micrometer is based on the principle of \_\_\_\_\_.
- a) Nut and bolt
  - b) Differences of two scales
  - c) Rack and pinion
  - d) None of these
22. Vernier caliper can be used to measure \_\_\_\_\_.
- a) Outer dia of a hole
  - b) Inner dia of a Hole
  - c) Depth of blind hole
  - d) All of these

23. After hardening process, the metal becomes more \_\_\_\_\_.  
a) Malleable  
b) Brittle  
c) Tough  
d) Ductile
24. Which hammer is used for sheet metal work?  
a) Ball pein Hammer  
b) Sledge Hammer  
c) Cross pein Hammer  
d) Soft Hammer(wood)
25. Drill chud is used to hold \_\_\_\_\_.  
a) Straight shank drill  
b) Taper shank drill  
c) Arbor  
d) Drill socket
26. The purpose of the rivet set used in riveting is \_\_\_\_\_.  
a) To bring the sheet closely together  
b) To straighten the sheet before riveting  
c) To remove the burr between the sheets  
d) To align the rivet in correct position
27. Striking portion of the hammer is called \_\_\_\_\_.  
a) Eye  
b) Peen  
c) Handle  
d) Cheek
28. More spatters are used for \_\_\_\_\_.  
a) Slow speed  
b) Excess current  
c) More speed  
d) Bigger gauge of electrode
29. A micrometer has negative error 0.03mm shows a reading of 25.52mm. The correct dimensions is \_\_\_\_\_.  
a) 25.50 mm  
b) 25.55 mm  
c) 25.57 mm  
d) 25.60 mm
30. Temperature of hotness of workpiece in a forge is judged approximately \_\_\_\_\_.  
a) Color  
b) Weight  
c) Structure  
d) Smell

31. After threading a hole by a tap, it was found that the crest of the thread was not formed completely. Why?
- a) Hole size slightly more than the tap drill
  - b) Insufficient coolant supply
  - c) Broken the tip of cutting edge of the tap.
  - d) Hole size slightly less than the tap drill size.
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32. Anvil is made of \_\_\_\_\_.
- a) Mild steel
  - b) Cast iron
  - c) Copper
  - d) Ceramic
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33. Which type of non destructive test is suitable to check the internal defects of weld in high pressure boiler welding?
- a) Visual Test
  - b) Liquid penetrant test
  - c) Magnetic particle test
  - d) Radiographic test
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34. A new hacksaw blade after a new strokes become loose because of the \_\_\_\_\_.
- a) Wing nut thread being worn out
  - b) Improper selection of the set of screw
  - c) Stretching of the blade
  - d) Wrong pitch of the blade
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35. Length of file is measured from tip to \_\_\_\_\_.
- a) Edge
  - b) Heel
  - c) Face
  - d) Tang
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36. The sizes of a wing compass range between \_\_\_\_\_.
- a) 0 to 50mm
  - b) 50 to 200 mm
  - c) 200 to 500 mm
  - d) 500 to 1000 mm
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37. Fire clay, dinas and talc bricks are main refractory material employed in Forge. What is the melting point of natural talc \_\_\_\_\_.
- a) 1000°C
  - b) 1200°C
  - c) 1500°C
  - d) 1700°C

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38. The swage is a tool used in forge shop which is made of \_\_\_\_\_.
- a) High carbon steel  
b) Malleable Cast iron  
c) Medium Carbon steel  
d) Low carbon steel
39. The type of Hammer used in forge shop weigh from 1 to 2 kgs and is fitted with short wooden handle is \_\_\_\_\_.
- a) Hand Hammer  
b) Sledge Hammer  
c) Ball pane hammer  
d) Straight pane hammer
40. Drawing out process is done on anvil. Name the part on operation is done \_\_\_\_\_.
- a) Face  
b) Beak  
c) Tail  
d) Round Hole
41. Already ormed head of rivet is supported by \_\_\_\_\_.
- a) Rivet Set  
b) Dolly  
c) Snap  
d) Drift
42. Name the cutting tool fixed in the Anvil square hole \_\_\_\_\_.
- a) Hot set  
b) Hard Die  
c) Cold set  
d) Anvil
43. While normalizing the component should be cooled by \_\_\_\_\_.
- a) Dipped in water  
b) FORCED air  
c) Quenching in oil  
d) In still air to room temperature
44. Shapes of file is specified by its \_\_\_\_\_.
- a) Length  
b) Width  
c) Cross section  
d) Thickness
45. Scribers are made of \_\_\_\_\_.
- a) Mild steel  
b) High carbon steel  
c) Brass  
d) Cast Iron

17/B/C/S-1/4/E

46. Solder used for cooking utensils \_\_\_\_\_.
- a) Copper
  - b) Zinc
  - c) Tin
  - d) Lead
47. The acetylene gas cylinder is painted \_\_\_\_\_.
- a) Black
  - b) Maroon
  - c) Red
  - d) Blue
48. Protect eyes from welding spark \_\_\_\_\_.
- a) Hydrochloric Acid
  - b) Zinc Chloride
  - c) Phosphoric acid
  - d) Resin
49. The preferred material for soldering bit is \_\_\_\_\_.
- a) Lead
  - b) Tin
  - c) Copper
  - d) Zinc
50. The type of brush used to remove coarse rust in a sheet metal before painting is \_\_\_\_\_.
- a) Wooden brush
  - b) Nylon brush
  - c) Wire Brush
  - d) Painting brush

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