

**E S-1**

18/A/C/S-3/4/E

**PAPER – I  
FITTER  
(THEORY)  
SEMESTER – III**

**Booklet Series -A**

**036/227**

**TIME: 3 HRS.**

**MARKS: 150**

**Note: Attempt all the questions.**

**All questions carry equal marks.**

**This paper carries negative marking. 25% marks will be deducted for each wrong answer.**

**Choose the correct answer.**

1. In which of the following lathe, so many tools can work together?  
a) None of these  
b) Speed lathe  
c) Turret lathe  
d) Bench lathe
  
2. Which of the following lathe is appropriate for mass production?  
a) Turret lathe  
b) Capstan lathe  
c) Both (a) & (b)  
d) Bench lathe
  
3. Tumbler gear is used for the following work -  
a) To accelerate the carriage from lead screw  
b) To change the direction of the rotation of the lathe  
c) To change the direction of feed  
d) To change the velocity of spindle
  
4. Due to which reason, drill breaks during center drilling?  
a) By giving too much feed  
b) By reducing speed and feed  
c) By trapping of chips  
d) None of these
  
5. Which material is used to make the gauge of good quality?  
a) Vanadium steel  
b) Cast iron  
c) Mild steel  
d) None of these

**Contd....2/-**

6. Clearance between the mating parts is measured by which of the following gauge?  
a) By dial gauge  
b) By plug gauge  
c) By feeler gauge  
d) By caliper gauge
7. Which of the following method is used for putting abrasive on lap?  
a) Lapping  
b) Fixing  
c) Charging  
d) Rubbing
8. As compare to honing, \_\_\_\_\_ metal is removed in lapping.  
a) Less  
b) More  
c) Very less  
d) None of these
9. The surface finish of a surface is measured in ---  
a) Foot  
b) Meter  
c) Micron  
d) Centimeter
10. In honing process, which of the following is used along with simple abrasive and bonding material for making hon?  
a) Sulphur  
b) Resin  
c) Wax  
d) All of these
11. Nitride made the metals -  
a) Corrosion resistant  
b) Wear resistant  
c) Both (a) & (b)  
d) None of these
12. Which of the following structure is formed by the rapid cooling of austenite structure of steel?  
a) Pearlite  
b) Cementite  
c) Martensite  
d) None of these
13. TPI is the unit for measure the following --  
a) Thickness of wire  
b) Diameter of nut  
c) Pitch of threads of nut  
d) Length of bolt

Contd....3/-

14. Split bearing is also known as --  
a) Pedestal bearing  
b) Roller bearing  
c) Pivot bearing  
d) Plain bearing
15. Jobs with asymmetric surface cannot hold in the centre by which of the following chuck?  
a) By four jaw chuck  
b) By three jaw chuck  
c) Both (a) & (b)  
d) None of these
16. After tightening and opening the jobs, chuck key should --  
a) Leave in the chuck  
b) Lock with the chuck  
c) Fasten along with the jobs  
d) Immediately withdraw from the chuck
17. The type of bearing is -  
a) Friction bearing  
b) Anti-friction bearing  
c) Both (a) & (b)  
d) None of these
18. Simple (Ordinary) nut and chuck nut have following difference -  
a) Both are same  
b) Chuck nut have less thickness  
c) Simple nut have less thickness  
d) None of these
19. Ball bearings are made up of metal tablets of -  
a) None of these  
b) Alloy steel  
c) Copper  
d) Cast iron
20. Honing allowance is kept --  
a) 0.01 to 0.02 mm  
b) 0.05 to 0.10 mm  
c) 0.001 to 0.002 mm  
d) None of these
21. Gauges wore out by rubbing on the surface, hence they are made by the following metal --  
a) Alloy steel  
b) Cast steel  
c) Mild steel  
d) Cast iron

Contd...4/-

22. The length of sine bar is given by the following –  
a) By the length of sine bar  
b) By the distance between the centers of rollers  
c) By the distance between the end point of both rollers  
d) None of the above
23. For supporting the pipe-shaped hollow job, following centroid is used -  
a) Revolving center  
b) Inverse center  
c) Half center  
d) Pipe center
24. The full name of SWG is –  
a) Standard Wire Gauge  
b) Straight Wire Gauge  
c) Standard Width Gauge  
d) Standard Wire Gear
25. Which of the following is the characteristic of bearing?  
a) Minimum friction  
b) Vibration free base  
c) The ability to keep the shaft on its place  
d) All of these
26. Which of the following washer is used where the loosening of bolts due to vibrations or shocks are more likely to be happen?  
a) Plain washer  
b) Spring washer  
c) Tap washer  
d) Fiber washer
27. Woodruff key have following type of shape --  
a) Rectangular  
b) Shape of the sector of circle  
c) Round and Taper  
d) Square
28. \_\_\_\_\_ is used for the picking of steel.  
a) Dilute sulfuric acid  
b) Spirit  
c) Troicloroethylene  
d) Carbon Tetra Chloride
29. In lapping process, aluminum oxide abrasive is used --  
a) For hard metals  
b) For non-ferrous metals  
c) For hard steel  
d) None of these

Contd....5/-



30. Among the following, reference surface while marking on any job is –  
 a) Surface gauge  
 b) Workpiece  
 c) None of these  
 d) Surface of marking table
31. The taper of the work piece kept on the lathe machine can be checked by following –  
 a) Taper plug gauge or taper ring gauge  
 b) Universal bevel protector  
 c) Steel rule and micrometer  
 d) Sine bar and slip gauge
32. Which taper is used in the spindle of tail stock?  
 a) Morse taper  
 b) Browne and shape taper  
 c) Jarno taper  
 d) None of these
33. Face plate is made up of which of the following metal?  
 a) Cast iron  
 b) Wrought iron  
 c) High carbon steel  
 d) None of these
34. For using taper turning attachment, the setting angle is calculated by the following formula –  
 a)  $\tan\theta = D - d / 2l$   
 b)  $\tan\theta = D - d / l$   
 c)  $\tan\theta = 2d / D - d$   
 d)  $\tan\theta = 2 / D - d$
35. If the number size in wire gauge increases then the thickness of the wire will get –  
 a) Less  
 b) More  
 c) Neither less nor more  
 d) None of these
36. Nut is a –  
 a) Temporary fastner  
 b) Semi-permanent fastner  
 c) Permanent fastner  
 d) None of these
37. Which of the following instrument is used to check the hills & vallies for the surface of the job?  
 a) By ammeter  
 b) By dial gauge  
 c) By barometer  
 d) By profile meter
38. The place where bearing are fit is known as –  
 a) Friction  
 b) Housing  
 c) Shell bearing  
 d) Ball bearing

Contd....6/-



39. Lead screw of lathe is used for –  
a) Step turning  
b) Boring  
c) Taper turning  
d) Thread cutting
40. Which of the following protects the long job from bending during turning?  
a) Mandrel  
b) Steady rest  
c) Revolving center  
d) Dog chuck
41. The method of cutting taper by tail stock is known as –  
a) Copying  
b) Offset  
c) Long nose tool  
d) Taper turning
42. Jobs are placed in ash or \_\_\_\_\_ for annealing.  
a) Limestone  
b) Coke  
c) Pig iron  
d) All of these
43. The included angle of acme thread is –  
a)  $30^{\circ}$   
b)  $29^{\circ}$   
c)  $47 \frac{1}{2}^{\circ}$   
d)  $60^{\circ}$
44. Thread snap gauge is used to check –  
a) External diameter  
b) External thread  
c) Internal diameter  
d) Internal thread
45. For correctly fixing the threading tool, \_\_\_\_\_ is used.  
a) Try square  
b) Threaded gauge  
c) Center gauge  
d) Tool attached with the face of the job
46. Which chuck has reversible jaws?  
a) Collet chuck  
b) Four jaw chuck  
c) Tail stock  
d) Head stock

Contd...7/-



47. \_\_\_\_\_ is done for removing more brittleness of chisel.  
a) Tempering  
b) Hardening  
c) Carburizing  
d) Annealing
48. The percentage of carbon in grey cast iron is --  
a) More than 6.67 %  
b) More than 2.1 %  
c) Less than 2.1 %  
d) None of these
49. The diameter of NOT GO end is kept slightly \_\_\_\_\_ than the actual size.  
a) Bigger  
b) Smaller  
c) Equal  
d) None of these
50. What does 16 represents in M16 x 55?  
a) Length of shank  
b) Diameter of threads  
c) Both (a) & (b)  
d) None of these

\*\*\*\*\*