

**H S-1**

18/A/C/S-2/4/E

Booklet Series - A

036/227

**PAPER-I  
FITTER  
(THEORY)  
SEMESTER-II**

**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. What is used for the levelling of machines?  
a) Spirit level  
b) Marking table  
c) Marking gauge  
d) Scriber
2. Bolts are generally made up of-  
a) Mild steel  
b) Cast iron  
c) Brass  
d) Silver
3. In which furnace cast iron is manufactured?  
a) Blast furnace  
b) Cupola furnace  
c) L.D.M. furnace  
d) Pudding furnace
4. Dally maintenance of machines is known as-  
a) Break – down maintenance  
b) Preventive maintenance  
c) Routine maintenance  
d) None of these
5. \_\_\_\_\_ can also be made from old and wear out files?  
a) Scraper  
b) File  
c) Drill  
d) Blade
6. The difference between maximum & minimum measurement of any part is known as-  
a) Limit  
b) Fit  
c) Tolerance  
d) Allowance
7. For which work, open structure wheel is used?  
a) Rough grinding  
b) Finishing  
c) Super Finishing  
d) All of these

8. What is the point angle of flat drill?  
a)  $112^{\circ}$  b)  $118^{\circ}$   
c)  $90^{\circ}$  d)  $170^{\circ}$
9. In which welding process, filler rod of same material is used?  
a) Heterogeneous welding  
b) Autogeneous welding  
c) Both (a) & (b)  
d) None of these
10. MAG stands for -  
a) Metal Active Gas b) Metal Inert Gas  
c) Metal Arc Gas d) None of these
11. The color of the walls of welding booth is-  
a) Red b) Green  
c) Yellow d) Black
12. Transformer, by which voltage gets down and current gets high is known as-  
a) Step-up transformer  
b) Step-down transformer  
c) Both (a) & (b)  
d) None of these
13. Hematite is the ore of-  
a) Aluminium b) Copper  
c) Iron d) Zinc
14. The filament of bulb is made up of-  
a) Chromium b) Vanadium  
c) Tungsten d) Nickel
15. Which is not the type of pin?  
a) Dovel pin b) Hollow pin  
c) Split pin d) Tab pin

16. In colour code system, what does red colour mean?  
a) Danger  
b) Compulsion  
c) Emergency  
d) All of these
17. Principle of micrometer is based upon-  
a) Nut and bolt  
b) Difference between thimble and vernier scale  
c) Rack and pinion  
d) None of these
18. Which of the following scraper is also known as bearing scraper?  
a) Half round scraper  
b) Triangular scraper  
c) Two-handle scraper  
d) Hook scraper
19. Split die is used by holding it in-  
a) Circular die stock  
b) Adjustable die  
c) Die nut  
d) Solid die
20. Which of the following formula is used for finding the cutting speed of the drill?  
a)  $\pi DN/1000$  m/min  
b)  $\pi \times 1000/DN$  m/min  
c)  $1000 \times D \times N/\pi$  m/min  
d) None of these
21. If there are two flutes in any drill, then the number of cutting edges will be-  
a) Two  
b) Three  
c) Four  
d) Zero
22. Following is the chemical formula of acetylene gas-  
a)  $CH_4$   
b)  $C_2H_2$   
c)  $CH_2$   
d)  $C_4H_4$
23. Heat is produced by the following formula in resistance welding-  
a)  $I.R.T^2$   
b)  $I.R^2.T$   
c)  $I^2.R.T$   
d)  $I.R.T$

24. It is a welding transformer which converts A.C. into D.C.-  
a) Motor generator                      b) Engine generator  
c) Rectifier                                d) All of these
25. Taper tap is the tap in which \_\_\_\_\_ threads are chamfered on the lower side.  
a) 8 to 10                                    b) 3 to 5  
c) 20 to 25                                 d) None of these
26. The tool which gives support to the rivet head, is-  
a) Lolly                                        b) Trolley  
c) Dolly                                       d) None of these
27. Which of the following is mounted in order to support nut, bolt, screw, etc.?  
a) Key                                         b) Coupling  
c) Washer                                    d) None of these
28. Which of the following is not a foundation bolt?  
a) Eye foundation bolt                    b) Rag bolt  
c) Lewis bolt                                d) Cheese head bolt
29. Which of the following is a part of preventive maintenance?  
a) Lubrication                              b) Inspection  
c) Servicing                                 d) All of these
30. Which of the following error occurs in an unused machine?  
a) Depletion                                 b) Corrosion  
c) Jamming                                  d) All of these
31. Dial test indicator is a precision instrument, which is used for measuring-  
a) The size of job                            b) The parallelism and straightness of job  
c) The height of job                        d) None of these
32. Which metal is used in galvanization?  
a) Tin    b) Zinc  
c) Lead                                        d) None of these



33. Purest form of iron is-  
a) Cast iron  
b) Wrought iron  
c) Pig iron  
d) None of these
34. In interference fit, shaft is always \_\_\_\_\_ than / to hole.  
a) Smaller  
b) Bigger  
c) Equal  
d) None of these
35. The measured dimension size of any workpiece or component is known as-  
a) Basic size  
b) Nominal size  
c) Accepted size  
d) Actual size
36. There are 16 grades in British Standard Institute system, which are as follows-  
a) 1 to 16  
b) 0 to 15  
c) A to P  
d) None of these
37. Gauges, which are used for checking the inspection gauges, are known as-  
a) Workshop gauges  
b) Snap gauges  
c) Master gauges  
d) None of these
38. Which of the following gauge is suitable for internal measurements?  
a) Ring gauge  
b) Plug gauge  
c) Both (a) & (b)  
d) None of these
39. 2A46K5B19 is the specification of a grinding wheel. Here, what does 'B' indicate?  
a) Grit size  
b) Resinoid bond  
c) Shellac bond  
d) Grain size
40. Size of superfine grains is given by the numbers ranging from -  
a) 0-20  
b) 24-60  
c) 70-150  
d) 400-600

41. The face of grinding wheel shines and becomes blunt. This phenomena is known as-  
a) Loading  
b) Glazing  
c) Dressing  
d) Gauging
42. The distance covered by a nut in one rotation is known as-  
a) Pitch  
b) Lead  
c) Tap  
d) Screw
43. Which tool is used for taking out the broken tap from job?  
a) Tap puller  
b) Tap opener  
c) Tap chuck  
d) Tap extractor
44. Depth of BIS metric thread is given by-  
a)  $0.6 \times \text{Pitch}$   
b)  $0.6134 \times \text{Pitch}$   
c)  $0.6403 \times \text{Pitch}$   
d)  $0.5 \times \text{Pitch}$
45. Front part of \_\_\_\_\_ is known as pilot.  
a) Reamer  
b) Drill  
c) Counter bore  
d) None of these
46. Capacity of pillar type drill machine is-  
a) 12.5 mm  
b) 10 mm  
c) 25 mm  
d) Infinite
47. Reaming makes a hole size \_\_\_\_\_  
a) Bad  
b) Zig-zag  
c) Finished  
d) None of these
48. In Acetylene gas welding valve should be closed first immediately after backfire-  
a) Acetylene valve  
b) Oxygen valve  
c) Both (a) & (b)  
d) None of these

49. Process of welding of two different metals is known as-
- a) Homogeneous welding
  - b) Heterogeneous welding
  - c) Fusion welding
  - d) Spot welding
50. Oxygen cylinder is filled at the pressure of-
- a) 15-16 kg/cm<sup>2</sup>
  - b) 120-150 kg/cm<sup>2</sup>
  - c) 200-220 kg/cm<sup>2</sup>
  - d) None of these

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