

**PAPER-I
FITTER
(THEORY & EMPLOYABILITY SKILLS)
SEMESTER-I
(SESSION 2017-2018) – NSQF LEVEL – 5**

TIME: 3 HRS.

MARKS: 200

Note: Attempt all the questions. All questions carry equal marks.
This paper contains two parts – Part (A) & Part (B).

PART-A (THEORY)

(150)

Choose the correct answer:

1. Name the warning sign.



- a) School
c) Pedestrian crossing

- b) Guarded
d) Unguarded

2. What is the class of fire caused by fire wood, paper, cloth?

- a) Class 'C' fire
c) Class 'A' fire

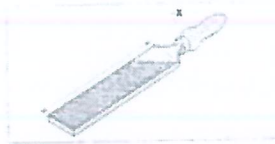
- b) Class 'B' fire
d) Class 'D' fire

3. Which fire extinguisher filled with carbon tetra chloride and bromochloridifluoro methane (BCF)?

- a) Carbon dioxide
c) Halon extinguisher

- b) Foam extinguisher
d) Dry powder extinguisher

4. Name the part marked 'x' of the file.



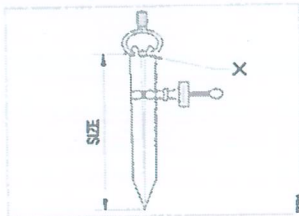
- a) Heel
c) Edge

- b) Ferrule
d) Shoulder

Contd....2/-

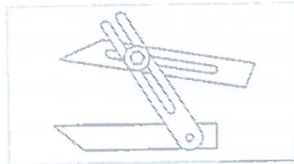
5. Which file is used for bringing the job close to the finishing size?
 a) Second cut file
 b) Curved cut file
 c) Single cut file
 d) Double cut file
6. Which file having the parallel edges throughout the length?
 a) Bastard file
 b) Hand file
 c) Rasp cut file
 d) Single cut file
7. What is the material is used to manufacture bench vice?
 a) Tool steel
 b) High carbon steel
 c) Medium carbon steel
 d) Cast iron
8. Which marking media provide clear lines on machine finished surfaces?
 a) White wash
 b) Cellulose lacquer
 c) Copper sulphate
 d) Prussian blue
9. What is the purpose of slots provided in the slotted angle plate?
 a) Reduce weight
 b) Easy handling
 c) Job clamping
 d) Better appearance
10. Which caliper is used to mark the centre of round bar?
 a) Firm joint caliper
 b) Inside caliper
 c) Outside caliper
 d) Jenny caliper

11. Name the part 'X' marked.



- a) Fulcrum
 b) Peg
 c) Washer
 d) Leg

12. Name the angular measuring instrument.

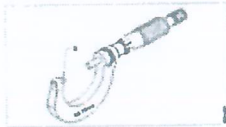


- a) Bevel protractor
 b) Bevel gauge
 c) Universal bevel gauge
 d) Universal surface gauge

Contd....3/-

21. Which file is used for sharpening the teeth of wood working saws?
 a) Barrete file
 b) Tinker's file
 c) Millsaw file
 d) Riffler file
22. Where will be the weight of the hammer stamped?
 a) Face
 b) Pein
 c) Cheek
 d) Eye hole
23. What will be the effect if the clearance angle of chisel is less than recommended angle while chipping?
 a) Cutting edge cannot penetrate, chisel will slip
 b) Cutting edge digs in, cut will be deeper
 c) Cutting edge will break
 d) Cutting edge of chisel move freely on straight line
24. Name the property of metal to resist the effect of tensile forces without rupture.
 a) Tenacity
 b) Ductility
 c) Elasticity
 d) Malleability

25. Name the part 'x' marked.



- a) Spindle lock
 b) Thimble
 c) Spindle
 d) Anvil
26. What is the accuracy of metric outside micrometer?
 a) 0.01 mm
 b) 0.001 mm
 c) 0.02 mm
 d) 0.002 mm

27. Which factor determine the current setting during welding?
 a) Types of joint
 b) Diameter of electrode
 c) Length of electrode
 d) Position of weld

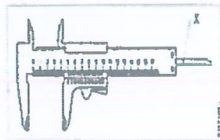
28. Name the part 'x' marked.



- a) Lip
 b) Land
 c) Flank
 d) Cutting edge

Contd....5/-

29. Which type of taper provided in the drill shank?
- a) Morse taper
b) Metric taper
c) Pin taper
d) Jerno taper
30. Which is used to remove drills and sockets from the machine spindle?
- a) Drift
b) Sleeve
c) Punch
d) Hammer
31. Name the tap wrench used in the restricted place.
- a) 'T' handle tap wrench
b) Box type tap wrench
c) Solid type tap wrench
d) Double ended adjustable tap wrench
32. In the ISO metric thread, calculate the tap drill size M10 x 1.5 thread.
- a) 8.2 mm
b) 8.7 mm
c) 8.75 mm
d) 8.65 mm
33. What is the unit of feed in drilling operation?
- a) $\frac{m}{rev}$
b) $\frac{m}{min}$
c) $\frac{mm}{rev}$
d) $\frac{mm}{min}$
34. Which cutting fluid is used in automatic lathe?
- a) Soluble oil
b) Stright mineral oil
c) Blended oil
d) Chemical solution
35. Name the part 'x' marked in vernier caliper.



- a) Depth bar
b) Fixed bar
c) Beam
d) Thumb lever
36. What is the accuracy of protractor head in combination set?
- a) 1°
b) 5°
c) 5' minute
d) 5" second
37. Which key with rounded ends may be fitted tightly or screwed in a shaft?
- a) Woodruff key
b) Gib head key
c) Feather key
d) Flat saddle key

Contd....6/-

38. What is the OCV for welding in step-down transformer which reduces the main supply voltage (220 or 440 volts)?
- a) 30 and 20 volt
b) 50 and 100 volt
c) 40 and 100 volt
d) 20 and 25 volt

39. Which is the welding machine designed to supply both A.C and D.C current for welding ferrous and non-ferrous metals using all types of electrode?
- a) Rectifier set
b) Transformer set
c) Motor generator set
d) Engine generator set

40. Name the safety operation carried out in welding plant shown in the figure.



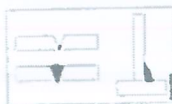
- a) Compressor used to force out fuses
b) Cooling the surface to clear gases
c) Exhaust duct capture fuses and gases
d) Water forced to clean the surface
41. Identify the part marked as 'x'.



- a) Safety plug
b) Steel bottle
c) Valve spindle
d) Dissolved acetylene
42. What is the name of distortion occurs in the weld direction?
- a) Longitudinal distortion
b) Bending distortion
c) Angular distortion
d) Transverse distortion

43. What is the name of the the metal edge in an angle during welding and cutting operations?
- a) Kerf
b) Bevel
c) Drag
d) Gouging

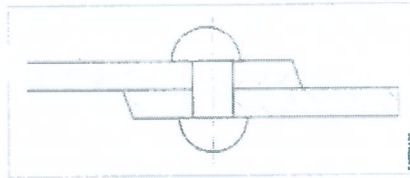
44. Identify the welding defect shown in figure.



- a) Under cut
b) Cracking
c) Lack of fusion
d) Incomplete penetration

Contd....7/-

45. Name the process to refine the structure of steel components.
- a) Hardening
 - b) Tempering
 - c) Annealing
 - d) Normalising
46. What is the heat treatment process followed to retain the sharpness of the cutting edge after hardening?
- a) Tempering
 - b) Carburising
 - c) Normalising
 - d) Annealing
47. Which rivet is used in heavy structural work?
- a) Conical head rivet
 - b) Snap head rivet
 - c) Counter sunk rivet
 - d) Pan head rivet
48. What is the name of tool is used to support the snap head rivet?
- a) Rivet snap
 - b) Drift
 - c) Rivet set
 - d) Dolly
49. Name the riveting defect shown.



- a) Improper joining of plates
 - b) Rivet head not centred with the shank
 - c) Burrs between plates
 - d) Body of the rivet not perpendicular to the plate
50. Which tool used in sheet metal work to scribe a circle or arc with a large diameter?
- a) Trammel
 - b) Spring compass
 - c) Wing compass
 - d) Ordinary compass
