

AITT - JAN / FEB 2017

SEM - III
SUB : TRADE THEORY
TRADE : FITTER

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. Which one of the following governs the selection of feed when turning on work piece?
 - a. Tool geometry
 - b. Surface finish required
 - c. Type of coolant required
 - d. All of these
2. Centred drilling should be done at -
 - a. Higher rpm with a slower feed
 - b. Higher rpm with a higher feed
 - c. Slower rpm with a higher feed
 - d. Slower rpm with a slower feed
3. For setting of tool for threading it is aligned with the work by -
 - a. Try square
 - b. Centre gauge
 - c. Thread plug gauge
 - d. Template
4. Which one of the reason for torn threads while thread cutting on lathe?
 - a. Blunt tool
 - b. Heavy depth cut
 - c. Insufficient side clearance
 - d. Any one of these
5. Nut dimension is represented by-
 - a. Head of Bolt
 - b. Pitch Diameter of Bolt
 - c. Nominal Diameter of Bolt
 - d. Core Diameter of Bolt
6. Speed while knurling should be -
 - a. Low
 - b. High
 - c. Intermittent
 - d. None of these
7. Workshop gauges keep at the temperature of-
 - a. 10 °C
 - b. 20 °C
 - c. 15 °C
 - d. 25 °C

Contd....2/-

8. Gauge has GO and NO GO at its one end-
- a. Fixed type plug gauge
 - b. Adjustable plug gauge
 - c. Progressive plug gauge
 - d. Double ended plug gauge
9. Main purpose of Screw pitch gauge-
- a. To check limits of screw thread
 - b. To check distance between crest to crest of screw thread
 - c. To check minor diameter of screw thread
 - d. To check major diameter of screw thread
10. Taper ring gauge is used for-
- a. To check inner taper
 - b. To check outer taper
 - c. To check internal thread
 - d. To check outer thread
11. Clearance between the mating parts is measured by-
- a. Feeler Gauge
 - b. Caliper gauge
 - c. Dial Gauge
 - d. No Go Gauge
12. According to Indian Standard, set of slip gauges has-
- a. 71 pieces
 - b. 81 pieces
 - c. 112 pieces
 - d. 120 pieces
13. Shape of warding files are-
- a. Square
 - b. Rectangular
 - c. Half Round
 - d. Round
14. Taper made on the nose of headstock spindle of lathe-
- a. Morse taper
 - b. Jarno Taper
 - c. Metric Taper
 - d. Pin Taper
15. A sine bar is available in standard sizes which one of these is not a standard size?
- a. 100 mm
 - b. 200 mm
 - c. 250 mm
 - d. 300 mm
16. While normalizing the steel should be cooled?
- a. In still air to room temperature
 - b. In oil
 - c. By forced air
 - d. In water

Contd....3/-

17. Cutting tool, is affected by
- Job metal
 - Tool metal
 - Depth of cut
 - All of these
18. According to BIS, front clearance angle is put in the range of-
- 4° to 8°
 - 2° to 5°
 - 6° to 10°
 - More than 10°
19. Tip of tip tool is made up of-
- Cobalt Steel
 - Tungsten
 - Both (a) & (b)
 - None of these
20. Lead screw is made up of-
- High Speed Steel
 - Carbon Steel
 - Mild Steel
 - None of these
21. Point angle of Morse Standard Taper is-
- 30°
 - 45°
 - 15°
 - 60°
22. If the side rack is less on tool top, the effects are-
- Smooth Cutting
 - Improper Cutting
 - No effect on cutting
 - None of these
23. File has circular teeth on both edges-
- Warding Files
 - Pillar Files
 - Mill Files
 - Crossing Files
24. Shape of barrette file is-
- Rectangular
 - Square
 - Circular
 - Triangular
25. According to BIS the width of Flat Scraper-
- 10 to 20 mm
 - 20 to 30 mm
 - 12 to 15 mm
 - 12 to 20 mm
26. According to Size, 80 number drill is-
- Smaller one
 - Bigger one
 - Middle one
 - None of these

Contd....4/-

27. According to BIS, slip gauges are divided in grades
a. 1 c. 3
b. 2 d. 4
28. Angle of B S F Thread is-
a. 55° c. 45°
b. 60° d. 30°
29. Templates are made up of-
a. Carbon Steel c. Mild Steel
b. Tool Steel d. High speed Steel
30. Depth of Indian Standard Thread is indicated by-
a. 0.6403P c. 0.6134P
b. 0.6304P d. 0.6143P
31. In M 10 x 1.5, 10 represents-
a. Metric Thread c. Depth of Thread
b. Pitch of Thread d. Diameter of Thread
32. In above question, 1.5 represents-
a. Metric Thread c. Depth of Thread
b. Pitch of Thread d. Diameter of Thread
33. Capacity of lathe is expressed by -
a. Horse power & chuck diameter c. Bed length & spindle speed
b. Swing and distance between centres d. Tool post size & lathe travels
34. For smaller precision components, suitable thread is-
a. BSW c. Acme
b. BA d. Square
35. Angle of Indian Standard Thread is-
a. 55° c. 45°
b. 60° d. 30°
36. Which one is not part of centre lathe?
a. Saddle c. Arber
b. Feed rod d. Lead screw

Contd....5/-

37. Lower Critical Temperature of High carbon Steel while hardening-
a. 560 °C
b. 723 °C
c. 850 °C
d. 960 °C
38. The sliding surface of lathe bed are -
a. Flame hardened
b. Case hardened
c. Normalized
d. Tempered
39. Advantages of four Jaw Chuck are –
a. Irregular work pieces can be held easily
b. It has more gripping power
c. Large diameter can be held by reversing the jaw
d. All of these
40. The internal part of the shaft of bearing is called
a. Journal
b. Cage
c. Outer Race
d. Inner race
41. Bearing suitable for heavy radial load-
a. Thrust bearing
b. Self-Aligning ball Bearing
c. Ball Bearing
d. Roller Bearing
42. Bearing assembled in two parts in special plumber block-
a. Adjustable Slide Bearing
b. Solid Bearing
c. Split Bearing
d. Self-Aligning Ball Bearing
43. Bearings are used for-
a. To move shaft freely
b. To support shaft in a fixed position
c. To guide shaft
d. All of these
44. The material for Indenter of mechanical surface measuring machine-
a. Cast Steel
b. Diamond
c. Carbide
d. Tool Steel
45. Which one of the following tool angle is provided to avoid rubbing of the body of the tool with the work piece?
a. Rake angle
b. Helix angle
c. Clearance angle
d. None of these

Contd....6/-

46. Pattern made by the movement of Cutting tool on the Work Surface is called-
- a. Roughness
 - b. Smoothness
 - c. Waviness
 - d. Surface Texture
47. Abrasive used for lapping of Gauges-
- a. Boron carbide
 - b. Silicon carbide
 - c. Aluminium Oxide
 - d. Diamond
48. The movement of Honing machine while honing is ...
- a. Vertical
 - b. Reciprocating
 - c. Vertical and Reciprocating
 - d. Horizontal
49. In which metallic coating, chromium powder is used-
- a. Cladding
 - b. Sherardising
 - c. Calorising
 - d. Chromising
50. Hard abrasive for lapping is-
- a. Diamond
 - b. Boron carbide
 - c. Silicon Carbide
 - d. Aluminium Oxide
