



SREE CHITRA TIRUNAL INSTITUTE FOR MEDICAL SCIENCES & TECHNOLOGY

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ROLL NUMBER

**WRITTEN TEST FOR THE POST OF TECHNCIAN (FITTER) – A To B**

DATE: 19/03/2024

TIME: 9.30 to 10.30 AM

DURATION: 60 MINUTES

Total Marks: 50

**INSTRUCTIONS TO THE CANDIDATES**

1. Write your Roll Number on the top of the Question Booklet and in the answer sheet.
2. Each question carries 1 mark.
3. There will not be any Negative Marking.
4. Write legibly the alphabet of the most appropriate answer (A, B, C or D) in the separate answer sheet provided.
5. Over-writing is not permitted.
6. Candidate should sign in the question paper and answer sheet.
7. No clarifications will be given.
8. Candidate should hand over the answer sheet to the invigilator before leaving the examination hall.

Signature of the Candidate

*(Signature)*  
19/3/24

**MFCP -1 TECHNICIAN (FITTER)**

1. State which of the following is used for permanent fastening.
  - a. Stud
  - b. Key
  - c. Pin
  - d. Rivet
2. Gears used for connecting intersecting shafts?
  - a. Helical Gear
  - b. Bevel Gear
  - c. Spur Gear
  - d. Rack and Pinion
3. The difference between the maximum and minimum size limits is called
  - a. Clearance
  - b. Tolerance
  - c. Limit
  - d. Allowance
4. Loads applied parallel to the axis of the bearing are called
  - a. Thrust Loads
  - b. Shear Loads
  - c. Concentric Loads
  - d. Central loads
5. The instrument used for precision measurement of angles
  - a. Vernier Caliper
  - b. Micrometer
  - c. Universal Bevel Protractor
  - d. Combination Set
6. The type of drill used for general-purpose drilling work is
  - a. Type H
  - b. Type F
  - c. Type S
  - d. Type N
7. The radial height of a tooth above the pitch circle is called
  - a. Centre Distance
  - b. Rack
  - c. Addendum
  - d. Dedendum
8. The suitable cutting fluid for drilling the M.S plate is
  - a. Soluble Oil
  - b. Water
  - c. Compressed Air
  - d. Soap solution
9. The cutting tool used to finish and enlarge a hole is known as
  - a. Drill
  - b. Tap
  - c. Die
  - d. Reamer
10. A grinding wheel marked with 'C' is made with abrasive
  - a. Aluminum Oxide
  - b. Silicon Carbide
  - c. Diamond
  - d. Corundum
11. You must select a grinding wheel with suitable abrasive to grind glass. What is the type of Abrasive you will select?
  - a. Diamond
  - b. Emery
  - c. Quartz
  - d. Silicon Carbide
12. Snagging is a process used to remove metal by
  - a. Filing
  - b. Hacksawing
  - c. Chipping
  - d. Grinding

13. The calculated tap drill size for an internal thread of M12 with 1.75 pitch is  
 a. 10 mm c. 12 mm  
 b. 13.75 mm d. 10.25 mm
14. The operation of sharpening a grinding wheel is called  
 a. Dressing c. Balancing  
 b. Trueing d. Shaping
15. The operation of producing patterns on the cylindrical external surface by pressing a tool is known as  
 a. Boring c. Taper Turning  
 b. Turning d. Knurling
16. The tool used to cut external thread is known as  
 a. Tap c. Die  
 b. Drill Bit d. Reamer
17. The process of enlarging and finishing previously drilled holes to accurate sizes using a multipoint tool is  
 a. Boring c. Reaming  
 b. Counter Boring d. Tapping
18. If a thread is designated as M12 X 1.25, then 1.25 designates the  
 a. Diameter of the thread  
 b. Pitch of the thread  
 c. Angle of the thread  
 d. Distance between crest and roof of the thread
19. Drill chucks are fitted on the drilling machine spindle by means of  
 a. Pinion and key c. Knurled ring  
 b. Drift d. Arbor
20. Ability of a material to withstand shock and impact  
 a. Toughness c. Hardness  
 b. Brittleness d. Ductility
21. The first tap, second tap, and bottoming tap differ in  
 a. Thread size c. Taper lead  
 b. Thread pitch d. Type of thread
22. One of the following is not a work-holding accessory of a lathe  
 a. Faceplate c. Mandrel  
 b. Catch plate d. Self-centering chuck.
23. What percentage (%) of 72 is 18?  
 a. 4 c. 40  
 b. 30 d. 25

24. In oxy acetylene welding, which gas is closed first to avoid backfire  
a. Oxygen  
b. Argon  
c. Acetylene  
d. Nitrogen
25. Which of the following is used for cutting keyways and grooves?  
a. Cross-cut chisel  
b. Flat chisel  
c. Web chisel  
d. Punching chisel
26. Which of the following is an example of a comparator?  
a. Vernier Caliper  
b. Micrometer  
c. Steel rule  
d. Dial Gauge
27. Ability of a material to be drawn out into thin wires  
a. Malleability  
b. Ductility  
c. Toughness  
d. Elasticity
28. In a grinding wheel, "Grade" denotes  
a. Grain size  
b. Abrasive  
c. Hardness  
d. Structure
29. The engineer's hammer is specified by its  
a. Volume  
b. Length  
c. Weight  
d. Material
30. Density of water is  
a. 1000 Kg per cubic meter  
b. 10000 kg per cubic meter  
c. 100 Kg per cubic meter  
d. 1 kg per cubic meter
31. From the following, select the commonly used tool for laying out large circles  
a. Trammel  
b. Scriber  
c. Hermaphrodite caliper  
d. Divider
32. Torque is expressed in  
a. Kg  
b. N/m<sup>2</sup>  
c. Pascal  
d. N.m
33. The ratio of stress and strain is called  
a. Safety Coefficient  
b. Modulus of Elasticity  
c. Elasticity coefficient  
d. Poisson's Ratio
34. The shape of a rasp cut file is  
a. Triangular  
b. Flat  
c. Half Round  
d. Round

35. The Ball peen Hammer is generally used for
- a. Wedging
  - b. Riveting
  - c. Bending
  - d. Removing nails
36. Name the instrument for checking the gap between mating parts
- a. Feeler Gauge
  - b. Radius Gauge
  - c. Fillet Gauge
  - d. Drill Gauge
37. Which of the following represents a bi-directional valve
- a. Check valve
  - b. Butterfly Valve
  - c. Non-Return Valve
  - d. None of the above
38. A gasket is primarily employed for
- a. Reducing the speed
  - b. Providing leak-tight joint
  - c. Reducing the torque
  - d. Reducing the wear and tear
39. Which among the following is not the unit of pressure
- a. Pascal
  - b. Bar
  - c. Joule
  - d. Torr
40. Which valve is used for flow in One Direction only
- a. Check Valve
  - b. Globe Valve
  - c. Butterfly Valve
  - d. Gate Valve
41. What is the momentum of a body
- a. Force x Velocity
  - b. Mass x Velocity
  - c. Mass x Acceleration
  - d. Moment of Inertia x velocity
42. The unit of Energy is
- a. Watt
  - b. Newton
  - c. Joule
  - d. Newton per meter
43. Kelvin is the unit of
- a. Power
  - b. Energy
  - c. Density
  - d. Temperature
44. In gas welding, the gas mixture used is
- a. Oxygen-Hydrogen
  - b. Oxygen-Acetylene
  - c. Oxygen-Propane
  - d. Oxygen-Coal Gas
45. The commonly used gas for TIG welding is
- a. Argon
  - b. Hydrogen
  - c. Acetylene
  - d. None of the above

46. The Vacuum Pump installed in SCTIMST is

- a. Screw
- b. Scroll
- c. Reciprocating
- d. Rotary Vane

47. The term S S Valve in Medical Gas system is

- a. Stainless Steel
- b. Self-Sealing Valve
- c. Self-Screw
- d. None of the above

48. The process of making cup-shaped components from sheet metal blanks is called

- a. Drawing
- b. Spinning
- c. Extrusion
- d. Piercing

49. Dowel pins are used for

- a. Measurement of depth of the hole
- b. Measurement of the diameter of the hole
- c. Hidden Fastening
- d. None of the above

50. The angle of prick punch is

- a.  $90^\circ$
- b.  $60^\circ$
- c.  $45^\circ$
- d.  $30^\circ$

Name of category: Technician FitterANSWER KEY

1	d	21	c	41	b
2	b	22	b	42	c
3	b	23	d	43	d
4	a	24	c	44	b
5	c	25	a	45	a
6	d	26	d	46	c
7	c	27	b	47	b
8	a	28	c	48	a
9	d	29	c	49	c
10	b	30	a	50	d
11	a	31	a		
12	d	32	d		
13	d	33	b		
14	a	34	c		
15	d	35	d		
16	c	36	a		
17	c	37	b		
18	b	38	b		
19	d	39	c		
20	a	40	a		

(Kau)-  
19/3/24