

May 2026

GOVT ITI HOLENARSIPURA

Question Paper

Duration: 90 Mins

Total Marks: 30

ID: ITISKILL2424GB

Student Name: _____	Roll No: _____
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1. Which is used to prevent concentration of abrasives on lapping surface?

- | | |
|-------------|-------------|
| A) Vehicle | B) Holder |
| C) Retainer | D) Absorber |

2. Which one of the advantage of mass production?

- | | |
|--|--|
| A) Jigs and fixture are needed | B) Time for manufacturing of components is reduced |
| C) Special purpose machinery are necessary | D) Gauges are to be used |

3. What is the heating temperature in gas nitriding process?

- | | |
|--------------------------|--------------------------|
| A) Up 300 Degree Celsius | B) Up 200 Degree Celsius |
| C) Up 500 Degree Celsius | D) Up 400 Degree Celsius |

4. What is the representation of zero line in limit and fits?

- | | |
|-------------------|----------------|
| A) Tolerance size | B) Basic size |
| C) Nominal size | D) Actual size |

5. What is the type of fit if minimum size of the shaft is larger than maximum size of hole?

- | | |
|-----------------|--------------|
| A) Transition | B) Running |
| C) Interference | D) Clearance |

6. Which one of the following heat treatment process produces a scale free surface on the components?

- | | |
|------------------------|--------------------|
| A) Induction hardening | B) Flame hardening |
| C) Nitriding | D) Case hardening |

7. Which deviation is zero in shft basis system?

- | | |
|---|----------------------------|
| A) Both upper and lower deviation is below basic size | B) Lower deviation is zero |
| C) Both upper and lower deviation is zero | D) Upper deviation is zero |

8. Which axis the tool moves in taper turning attachment?

- | | |
|--------------------------------|---------------------------|
| A) Angular to lathe axis | B) Parallel to lathe axis |
| C) Perpendicular to lathe axis | D) Vertical to lathe axis |

9. What is the purpose of normalizing steel?

- | | |
|--|----------------------------|
| A) Increase the toughness and reduce brittleness | B) Soften the steel |
| C) Improve machinability | D) Remove induced stresses |

10. What is the types of fit for the expression 20H7/g6?

- | | |
|---------------------|-------------------|
| A) Interference fit | B) Force fit |
| C) Clearance fit | D) Transition fit |

11. Which surface is finished by honing?

- | | |
|---------------------------------|---------------------------------------|
| A) Internal cylindrical surface | B) Both external and internal surface |
| C) Flat surface | D) External cylindrical surface |

12. What is the representation IT in limits and fits?

- | | |
|---------------------|--------------------|
| A) Tolerance number | B) Tolerance unit |
| C) Tolerance | D) Tolerance grade |

13. Which one of the following is disadvantages of taper turning by attachments?

- | | |
|--|---|
| A) Both external and internal tapers can be produced | B) Length taper can be produced |
| C) Power feed can be produced | D) Only limited taper angle can be turned |

14. What heat treatment process the nitriding comes under?

- | | |
|----------------|-------------------|
| A) Tempering | B) Case hardening |
| C) Normalizing | D) Hardening |

15. What is the type of fit in expression 75 H8/j7?

- | | |
|---------------------|------------------|
| A) Interference fit | B) Clearance fit |
| C) Transition fit | D) Force fit |

16. Which one of the following is the solid carburizing material?

- | | |
|-------------|-------------|
| A) Petrol | B) Ammonia |
| C) Kerosene | D) Charcoal |

17. What does QA and QC stand for?

- | | |
|--|--|
| A) Quality assurance and quality control | B) Quality assurance and quenching control |
|--|--|

C) Quality assurance and quenching control

D) Quality adjustment and quality complete

A) To increase strength of the metal

B) To make the metal rust-proof

C) To produce certain desired properties

D) To make good appearance on the component

18. What is the hole basis system?

A) Size of both hole and shaft are varied

B) Size of shaft is constant

C) Size of hole is constant

D) Size of the hole is varied

19. Which deviation is zero in hole basis system?

A) Upper deviation is zero

B) Lower deviation is zero

C) Both upper and lower deviation is below basic size

D) Both upper and lower deviation is zero

20. What is direction of finishing in surface texture?

A) Flaw

B) Lay

C) Waviness

D) Roughness

21. Which of the following structures of steel is obtained due to the drastic cooling from the austenite structure?

A) Martensite

B) Cementite

C) Pearlite

D) Ferrite

22. In which case hardening process the ammonia gas is introduced?

A) Induction hardening

B) Carburizing

C) Cyaniding

D) Gas nitriding

23. What is the process of increasing carbon percentage on the surface of low carbon steel?

A) Carburizing

B) Tempering

C) Hardening

D) Nitriding

24. Why heat treatment of metal is necessary?

25. What is the name of the pattern of work surface caused by the movement of cutting tool?

A) Roughness facing

B) Surface texture

C) Roughness

D) Waviness

26. Which metal is to be case hardened?

A) Cast iron (heavy parts)

B) Low carbon steel parts

C) Alloy steel parts

D) High carbon steel

27. What is the fit with expression of fit 30H7/g6?

A) Shaft and hole tolerance

B) Shaft and hole allowance

C) Shaft tolerance grade

D) Hole tolerance grade

28. Which material is used to make the stylus of mechanical surface indicator?

A) High carbon steel

B) Diamond

C) Mild steel

D) High speed steel

29. What is 'L' in tailstock offset method?

A) Length of offset

B) Length of the taper

C) Amount taper

D) Length of the job

30. Which heat process is to increase the toughness and decrease the brittleness?

A) Annealing

B) Normalizing

C) Case hardening

D) Tempering