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January 2026

Trinity iti Udupi

Question Paper

Duration: 60 Mins

Total Marks: 43

ID: ITISKILL5012P9

Student Name: \_\_\_\_\_ Roll No: \_\_\_\_\_

1. What is the cause of excessive loading?

- A) Bearing spread      B) Bearing crush      C) Difference in dia measured only at top      D) Difference in dia measured from top to bottom of a crank shaft outer dia
- C) Fatigue failure      D) Bearing struck

2. Which part is connect the piston with crank pin?

- A) Connecting rod      B) Cam Shaft      C) False valve timing      D) Compression loss
- C) Crank Shaft      D) Push rod

3. What is the property of bearing helps to absorb dirt and metal particles?

- A) Thermal conductivity      B) Embedability      C) Box spanner      D) Scraper
- C) Surface action      D) Conformability

4. What is the type of hardening done on crank shaft?

- A) Surface hardening      B) Case hardening      C) Gudgeon pin      D) King pin
- C) Curve hardening      D) Induction hardening

5. What type of bearing fitted in the connecting rod big end?

- A) Needle bearing      B) Ball bearing      C) During assembling radiator      D) During assembling water pump
- C) Taper roller bearing      D) Shell bearing

6. Which tool is used to measure the diameter of the crank shaft main journal?

- A) Master ring gauge      B) Outside micrometer      C) Drift punch      D) 'C' clamp
- C) Inside micrometer      D) Three point internal micrometer

7. Which is transferring energy for the piston to crankshaft?

- A) Connecting rod      B) Gudgeon pin      C) To set the engine timing      D) To set the valve clearance
- C) Cam shaft      D) King pin

8. Which measuring instrument used to check the fly wheel face out?

- A) Dial indicator      B) Compression gauge      C) Double      D) Equal
- C) Feeler gauge      D) Outside micrometer

9. What is ovality of a crank shaft?

- A) Difference in dia measured thrust to non thrust across dia      B) Difference in dia measured only at bottom      C) Bronze      D) HSS
- C) Cast iron      B) Nickel chromium steel

10. What is the effect of taper and ovality of a bore?

- A) Miss firing      B) Difficult starting

11. Which tool is required to remove the valves?

- A) Torque wrench      B) Valve spring lifter

12. Which is the key element in converting reciprocating motion in to rotary motion?

- A) Connecting rod      B) Cam shaft

13. When it is required to coincide the mark with timing gears?

- A) During assembling oil pump      B) During assembling cam shaft

14. Which tool is used to remove the piston ring?

- A) Ring expander      B) Circlip plier

15. What is the purpose of the fly wheel timing mark?

- A) To set the F.I.P timing      B) To coincide the gears

16. What is the speed ratio cam shaft to crank shaft?

- A) Half      B) Triple

17. What is the material of piston pins?

- A) Cast iron      B) Nickel chromium steel

18. Which is the load taken by the roller bearing?

- A) Axial load
- B) Radial and axial load
- C) Thrust load
- D) Radial load

19. Which is the most preferred use of bush bearings?

- A) Oil pumps
- B) Crank shaft
- C) Connecting rods
- D) Fly wheel

20. Which is the most preferred use of taper roller bearings?

- A) Connecting rods
- B) Gear boxes
- C) Fly wheel and water pump
- D) Differential and wheel hub

21. Which is the most preferred use of roller bearings?

- A) Fly wheel
- B) Connecting rods
- C) Differential
- D) Gear boxes

22. What is the property allows a bearing to with stand impact load for a reasonable time?

- A) Toughness
- B) Tensile strength
- C) Hardness
- D) Fatigue strength

23. Which instrument is used to check the vacuum of the cylinder?

- A) Vacuum gauge
- B) Dial gauge
- C) Wire gauge
- D) Compression gauge

24. Which is the bearing used in water pump?

- A) Needle bearing
- B) Taper roller bearing
- C) Roller bearing
- D) Ball bearing

25. Which gauge used to measure the cylinder bore weariness?

- A) Compression gauge
- B) Vacuum gauge
- C) Dial gauge
- D) Depth gauge

26. What is the cause for uneven wear of bearings?

- A) Excessive lubrication
- B) No lubrication
- C) Over heat
- D) Bend twist

27. What is the name the portion below the piston boss?

- A) Crown of the piston
- B) Land of the piston
- C) Ring section of the piston
- D) Skirt of the piston

28. What is the material used to produce crank shaft?

- A) Wrought iron
- B) Cast iron
- C) High speed steel
- D) Chromium vanadium nickel steel

29. Which is connected with piston through piston pin?

- A) Gudgeon pin
- B) Connecting rod
- C) Cam shaft
- D) Rocker arm

30. What is the reason for corrosion of bearing?

- A) Over heated
- B) Less clearance
- C) Over loaded
- D) Water mixed with lubricant

31. What is the material for cam shaft?

- A) Aluminium alloy
- B) Copper alloy
- C) Zinc alloy
- D) Forged alloy steel

32. What is ovality of a bore?

- A) Difference in dia measured only at top
- B) Difference in dia thrust to non thrust side of cylinder
- C) Difference in dia measured top to bottom
- D) Difference in dia measured only at bottom

33. Which instrument is used to check the tappet clearance?

- A) Telescopic gauge
- B) Wire gauge
- C) Screw pitch gauge
- D) Feeler gauge

34. Where is the compression ring is fitted in the piston?

- A) Compression ring between oil ring and piston pin
- B) Compression ring bottom of the piston skirt
- C) Compression ring between piston pin and bottom of skirt
- D) Compression ring above the oil ring in the piston

35. Which part connect the piston with connecting rod?

- A) Crank pin
- B) Piston pin
- C) Cotter pin
- D) Spilt pin

36. What is the property of a bearing helps to with stand metal to metal contact?

- A) Fatigue strength
- B) Surface action
- C) Embeddability
- D) Thermal conductivity

37. What is the load taken by taper roller bearing?

- A) Thrust load
- B) Radial load
- C) Axial and radial load
- D) Radial and axial load

38. What is the material of cylinder block?

- A) Zinc alloy
- B) Bronze
- C) Cast iron
- D) Brass

39. What is the purpose of the timing chain?

- A) To connect crank or cam shaft gear      B) To connect water pump pulley  
C) To connect A/C compressor                      D) To connect alternator
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**40.** Which is the bearing used in differential and wheel of a heavy vehicles?

- A) Ball bearing                                      B) Taper roller bearing  
C) Needle bearing                                D) Roller bearing
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**41.** Which is the bearing used in gear boxes?

- A) Roller bearing                                  B) Ball bearing  
C) Taper roller bearing                        D) Needle bearing
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**42.** Where the fly wheel is fitted in the engine?

- A) Rocker arm shaft                              B) Crank shaft  
C) Primary shaft                                 D) Cam shaft
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**43.** Which tool used to remove the crank shaft pully?

- A) Double and spanner                        B) Pipe wrench  
C) Puller    D) Ring spanner
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