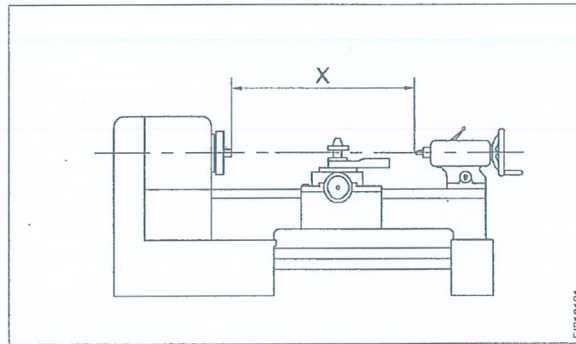


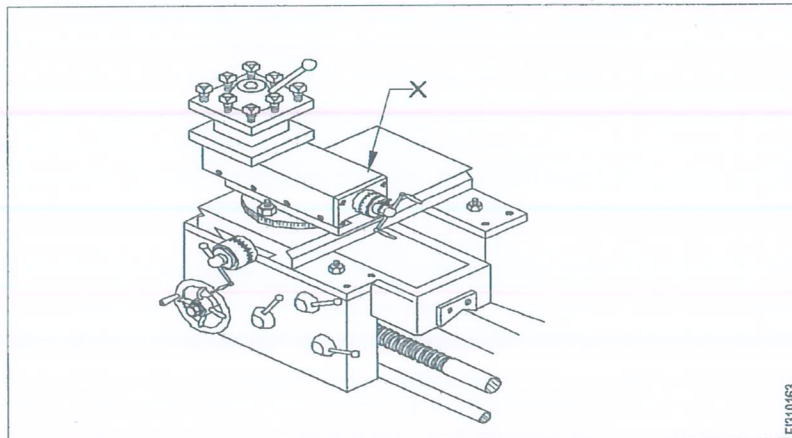
**PAPER-I
FITTER
(THEORY)
SEMESTER – II
(SESSION 2017-2018) – NSQF LEVEL – 5**

TIME : 3 Hrs.**MARKS: 150****Note: Attempt all the questions. All questions carry equal marks.****Choose the correct answer:**

1. What is the name of the lathe specification of marked 'x'?



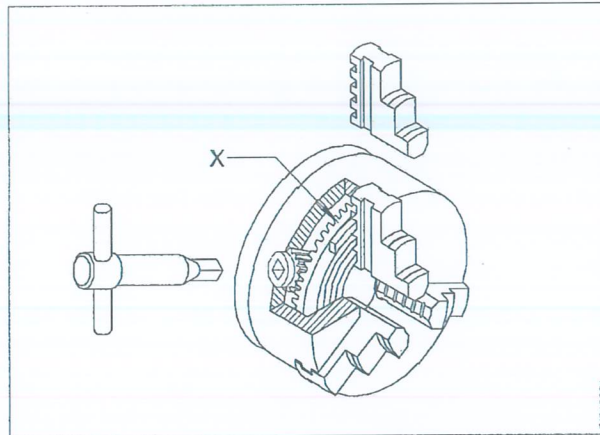
- a) Length between centre
b) Centre height of lathe
c) Length of the bed
d) Diameter of work (Swing)
2. What is the name of the part marked 'X' in the lathe carriage?



- a) Compound rest
b) Tool post
c) Cross slide
d) Saddle lock

Contd...2/-

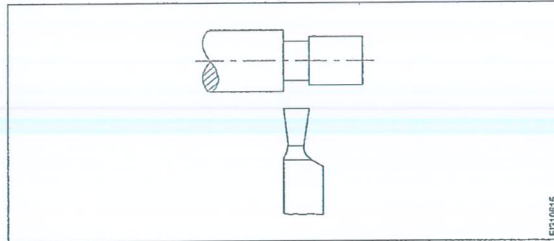
3. What is the merit of the three jaw chuck in the lathe machine?
- Run out cannot be corrected
 - Work can be set with ease
 - Only round and hexagonal components can be held
 - Accuracy decreases as chuck gets worn out
4. What is the name of the part marked 'x'?



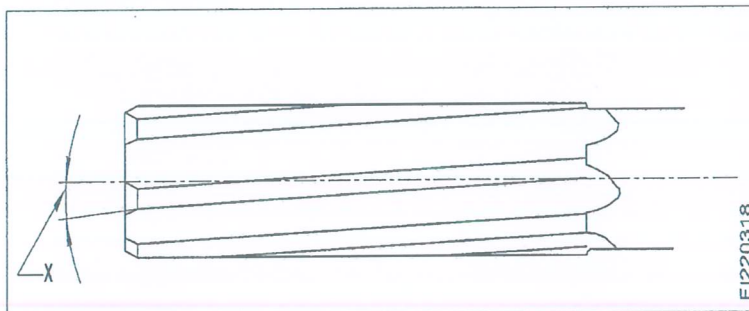
- Scroll Plate
 - Back plate
 - External jaw
 - Body
5. What is the de-merit of the four jaw chuck?
- Small and finished work will be damaged
 - Irregular shape job can be hold
 - Heavy cuts can be given
 - Jaws are reversible
6. Which type of rake angle make slope from the front towards back of the tool?
- End rake angle
 - Side rake angle
 - Negative rake angle
 - Positive top rake angle
7. What will be the effect, if the carriage is not locked while facing?
- Correct face
 - Concave face
 - Convex face
 - Pip left in the centre
8. What is the name of the operation carried out in turning to remove burr and sharpness from the edge of component?
- Chamfering
 - Grooving
 - Step turning
 - Plain turning

Contd...3/-

9. Find out the spindle speed for turning dia 40mm cast iron rod, if the cutting speed is 15 m/min?
 a) 119.3 rpm
 b) 100.3 rpm
 c) 219.3 rpm
 d) 109.4 rpm
10. What is the name of the operation?



- a) Square shoulder
 b) Filleted shoulder
 c) Undercut shoulder
 d) Bevelled shoulder
11. What type of cutting tool used in mass production?
 a) Solid tools
 b) Throw away type tools
 c) Brazed tools
 d) Inserted bits with holders
12. What is the name of the angle marked 'x' in the reamer?



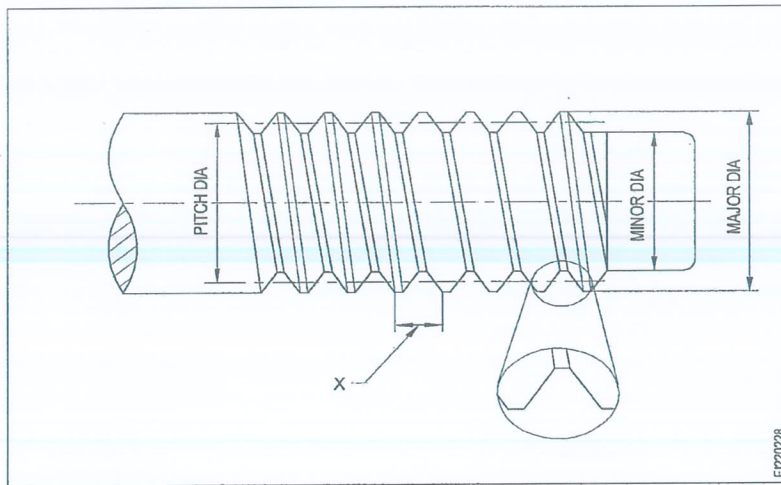
- a) Helix angle
 b) Flute angle
 c) Rake angle
 d) Clearance angle
13. What is the name of the process of finishing the drilled hole?
 a) Counter boring
 b) Spot facing
 c) Reaming
 d) Counter sinking
14. Why hand reamers have uneven spacing of teeth?
 a) Increase the life of
 b) Remove more metals
 c) Increase the efficiency
 d) Reduce chattering the tool

Contd...4/-

15. What is the purpose of clearance angle in twist drill?
a) Prevent rough holes
b) Prevent over size holes
c) Prevent friction of drill behind the cutting edges
d) Prevent unequal angle of cutting edges
16. What is the angle of counter sinking for riveting?
a) 80°
b) 75°
c) 90°
d) 120°
17. What is the reason for over heated drill while drilling?
a) Drill held not correctly
b) Clearance angle is incorrect
c) Work is not rigidly held
d) Flutes are clogged with chips
18. What is the name of the operation to enlarge the hole for given depth?
a) Reaming
b) Spot facing
c) Counter boring
d) Counter sinking
19. What will happen if the clearance angle of drill is more?
a) Cutting edge will be blunt
b) Cutting edge will not be sharp
c) Cutting edge will become weak
d) Cutting edge will not cut material
20. What will happen if the spindle running out of centre while drilling?
a) Drill will break
b) Drills are over heated
c) Over sized holes are made
d) Drill make rough hole
21. Which gauge is used to compare the profile of thread?
a) Screw pitch gauge
b) Feeler gauge
c) Radius gauge
d) Plug gauge

Contd...5/-

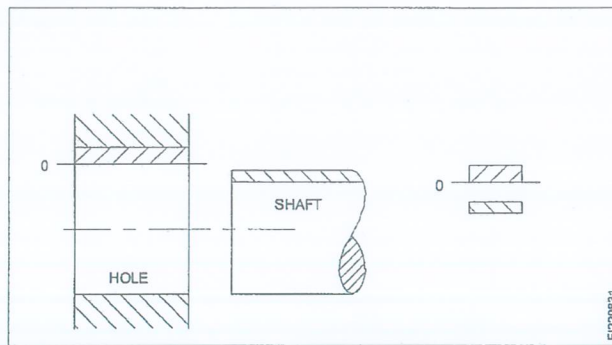
22. What is the name of the element marked 'x' of the thread?



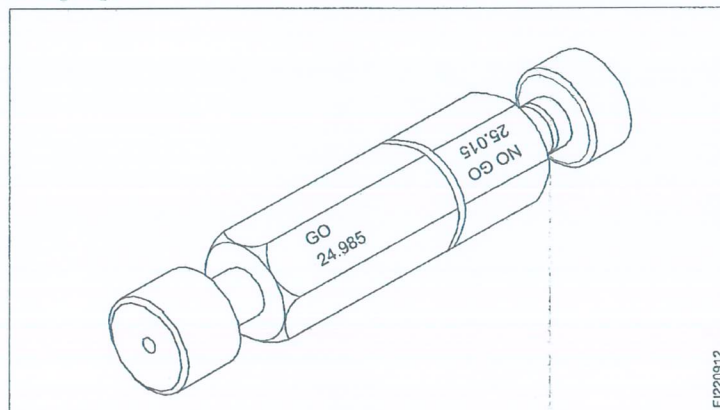
- a) Pitch
b) Lead
c) Root
d) Flank
23. Which term describes the axial advancement of screw in one complete turn?
a) Depth
b) Flank
c) Pitch
d) Lead
24. Calculate the blank size for external threading M16 x 2.0
a) 14.0 mm
b) 18.0 mm
c) 16.0 mm
d) 15.8 mm
25. What is 'A' represents in grinding wheel specification 32A46H8V?
a) Grade
b) Grain size
c) Type of bond
d) Type of abrasive
26. What is the name of the defect if burr clogges in the pores of the grinding wheel?
a) Truing
b) Glazing
c) Dressing
d) Loading
27. What is to be done after mounting the new grinding wheel to run concentric?
a) Glazing
b) Truing
c) Loading
d) Dressing

Contd...6/-

28. What is the name of the fit?



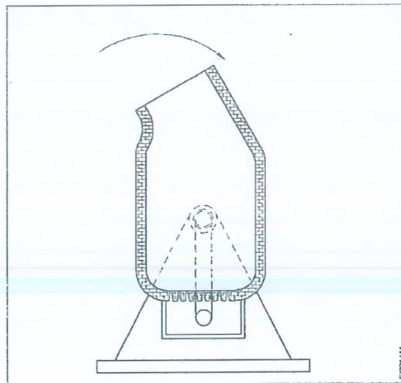
- a) Clearance fit
b) Transition fit
c) Shrinkage fit
d) Interference fit
29. What is the term of the algebraic difference between a size, to its corresponding basic size?
- a) Deviation
b) Upper deviation
c) Lower deviation
d) Actual deviation
30. What is the name of the gauge?



- a) Snap gauge
b) Plain ring gauge
c) Progressive plug gauge
d) Double ended plug gauge
31. What is the upper deviation of the component size $20^{+0.008}_{-0.005}$?
- a) 0.005
b) 20.008
c) 19.995
d) 0.008
32. What is the term used for the relationship exists between two mating parts?
- a) Allowance
b) Limit
c) Tolerance
d) Fit

Contd...7/-

33. What is the name of the process?



- | | |
|------------------------|---------------------|
| a) L.D process | b) Electric process |
| c) Open hearth process | d) Bessemer process |
34. Which type of thread is used in screw jack?
- | | |
|-------------------|------------------|
| a) Vee thread | b) Acme thread |
| c) Knuckle thread | d) Square thread |
35. What is the product obtained from blast furnace?
- | | |
|-----------------|-------------------|
| a) Pig iron | b) Cast iron |
| c) Wrought iron | d) Malleable iron |
36. Which metal is used to manufacture magnets, ball bearing and cutting tool?
- | | |
|-------------|---------------|
| a) Cobalt | b) Cadmium |
| c) Vanadium | d) Molybdenum |
37. How much copper contains in pyrites ore?
- | | |
|--------|--------|
| a) 32% | b) 45% |
| c) 50% | d) 15% |
38. Which metal is resistant to many types of acids?
- | | |
|---------|-------------|
| a) Tin | b) Nickel |
| c) Lead | d) Chromium |
39. What is the least count of vernier micrometer?
- | | |
|-------------|-------------|
| a) 0.01 mm | b) 0.02 mm |
| c) 0.001 mm | d) 0.002 mm |

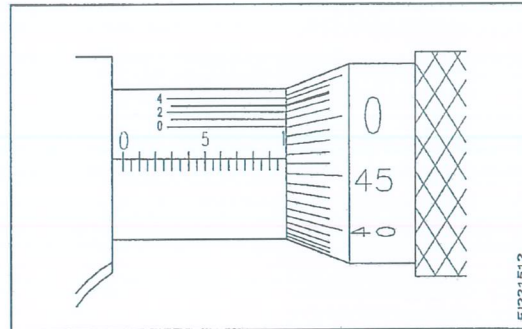
Contd...8/-

40. What is name of the tool?

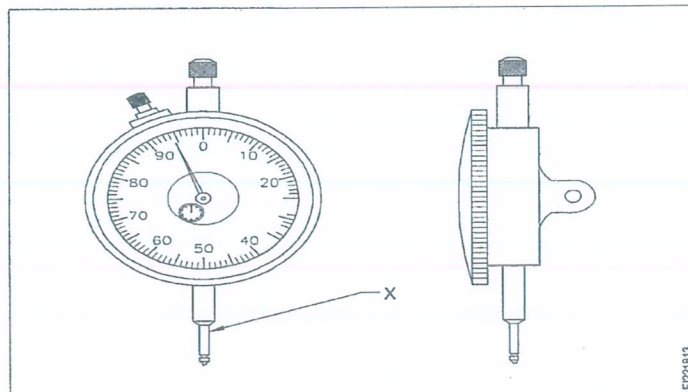


- a) Flat scraper
b) Hook scraper
c) Half round scraper
d) Three square scraper
41. How chipped out scraper can be repaired?
a) Grinding or horning
b) Lapping
c) Chiselling
d) Filing

42. What is reading of vernier micrometer?



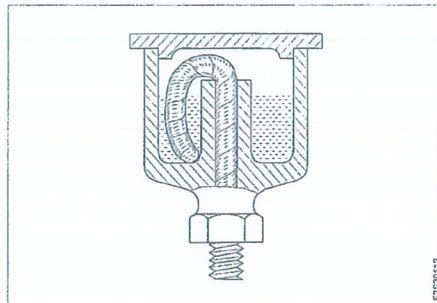
- a) 9.923 mm
b) 9.963 mm
c) 9.563 mm
d) 9.763 mm
43. Which instrument is used to measure the effective diameter of screw threads?
a) Screw thread micrometer
b) Outside micrometer
c) Screw pitch gauge
d) Screw thread caliper gauge
44. What is the name of part marked 'x' in dial gauge?



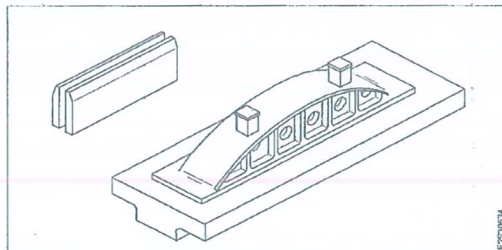
- a) Plunger
b) Stem
c) Pointer
d) Anvil

Contd...9/-

45. What is the use of telescopic gauge?
 a) Measure depth
 b) Measure size of holes, slots
 c) Measure angular dimension
 d) Measure external dimension
46. Which gauge is used to check the internal thread?
 a) Thread plug gauge
 b) Taper plug gauge
 c) Thread ring gauge
 d) Radius gauge
47. Why the Go-end is made longer than No-Go end of limit gauges?
 a) Easy handling
 b) Fast inspection
 c) Easy identification
 d) Easy measuring
48. What is the name of lubrication method?



- a) Wick feed
 b) Ring oiler
 c) Splash lubrication
 d) Pressure grease gun
49. What is the name of the device?



- a) Block sprit
 b) Solid mandrel
 c) Straight edge
 d) Hollow mandrel
50. Which method is suitable to remove the broken stud very near to the surface?
 a) Ezy out method
 b) Making drill hole
 c) Prick punch method
 d) Using square taper punch
