Month -06

### **Sector: Capital Goods And Manufacturing Annual Pattern 1st Year NSQF Level- 4**



New Syllabus \_2022

INDUSTRIAL TRAINING INSTITUTE **MONTHLY TEST: WEEK NO. 21 TO 24** TRADE: FITTER-Jr. DATE: **SEAT NO: TOTAL MARKS: 100** TIME: 2 Hrs. PAPER-I **TRADE CODE :** |4|5 **Note:** Attempt all the questions. All questions carry equal marks 1. Which angle is determined by the helix angle in What is the helix angle of general purpose drill bit? drill? A) 59° A) Point angle B) Rake angle B) 118° D) 8° to 12° D) Clearance angle C) 27.5° C) Chisel angle 2. In number drill series drills are numbered The diameter of drill indicated by letter 'Z' in from -----. letter series is -----. A) 1 to 40 B) 1 to 20 A) 10.490 mm B) 10 mm C) 11.590 mm C) 1 to 80 D) 1 to 50 D) 9.45 mm 3. What is the name of the angle in the drill bit 9. What is the name of the part marked as 'X' of marked 'x'? telescopic gauge? A) Chiselangle A) Spring B) Handle B) Rake angle C) Fixed leg C) Point angle D) Lip clearance angle D) Telescoping leg 10. What is the term, the top surface joining the 4. What is the minimum dimension can measure with telescopic gauge? two sides of a thread? A) 8.0 mm B) 12.7 mm A) Root B) Crest C) 19.0 mm D) 150 mm C) Flank D) Pitch 11. Which part of a reamer is designed for the What is the angle of ACME thread? removal of chips? A) 66° B) 55° A) Face B) Flute C) 29° D) 45° D) Cutting edge C) Heel 12. Which angle determines the rake angle of 6. What is the name of the angle marked as 'X' in drill bit? drills? A) Helix angle A) Helix angle B) Core angle

B) Lead angle

C) Point angle

D) Chisel edge angle

C) Point angle

D) Chisel edge angle

#### 13. What is the name of the part marked as 'X'?

- A) Breast plate
- B) Bevel pinion
- C) Frame work
- D) Locking screw



#### 14. What is the purpose of type "N" twist drills?

- A) Used for hard material
- B) Used for brittle material
- C) Used for soft and tough material
- D) Used for normal low carbon steel

#### 15. What is the purpose of type 'S' twist drill?

- A) Used for hard material
- B) Used for high carbon steel
- C) Used for soft and tough material
- D) Used for normal low carbon steel

#### 16. What is the angle of counter sink?

- A) 60°
- B) 90°
- C) 105°
- D) 120°

## 17. What is the name of the angle marked 'x' in the reamer?



- A) Rake angle
- B) Flute angle
- C) Helix angle
- D) Clearance angle

#### 18. What is the name of part marked as 'X'?

- A) Heel
- B) Cutting edge
- C) Position rake angle
- D) Negative rake angle

# 19. Which reamer is used for reaming internal Metric morse tapered holes?

- A) Helical fluted reamer
- B) Hand reamer with pilot
- C) Taper pin hand reamer
- D) Socket reamer with parallel shank

# 20. Which gauge is used to measure below 8 mm dimension?

- A) Telescopic gauge
- B) Small hole gauge
- C) Depth micrometer
- D) Inside micrometer

#### 21. Which decides the point angle of drill?

- A) Drill material
- B) Job material
- C) Cutting speed
- D) Size of the drill

#### 22. What is the purpose of flute in drill?

- A) To drive out the chips
- B) To reduce the weight
- C) To reduce the cost
- D) To increase the speed

# 23. What is the angle of countersinking for riveting?

- A) 75°
- B) 80°
- C) 90°
- D) 120°

#### 24. Which reamer will have a long taper lead?

- A) Hand reamer
- B) Socket reamer
- C) Machine reamer
- D) Helical fluted reamer

#### 25. What is the name of the tool?

- A) Reamer
- B) Spot facing tool
- C) Countersink tool
- D) Counter boring tool

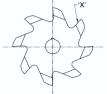


# 26. Which defect occurs in drilling if cutting edges are not sharp?

- A) Oversized hole
- B) Overheated drill
- C) Rough hole
- D) Broken drill

# 27. What is the name of element marked as 'X' in reamer?

- A) Face
- B) Heel
- C) Flute
- D) Cutting edge



# 28. What is the angle of countersink tool used on holes to be threaded?

- A) 75°
- B) 80°
- C) 90°
- D) 120°

# 29. What is the operation of beveling the end of a drilled hole?

- A) Reaming
- B) Spot facing
- C) Counterboring
- D) Counter sinking

#### 30. What is the tap drill size for $M20 \times 1.5$ ?

- A) 18.5
- B) 20
- C) 19
- D) 17

# 31. What is the formula to calculate the blank size of external thread (where p=pitch and d=depth)?

- A) D = d P/10
- B) D = d + P/10
- C)  $D = d \times P/10$
- D) D =  $d \div P/10$

# 32. Which of the following is not a cause of oversized holes?

- A) Unequal length of lips
- B) Spindle running out of centre
- C) Cutting speed too high
- D) Unequal point angle

#### 33. What is the name of the die?



- A) Split die
- B) Half die
- C) Solid die
- D) Adjustable screw plate die

# 34. 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

#### 35. What is the name of part marked as 'X'?

- A) Collar
- B) Square head
- C) Fingers
- D) Body



### 36. Why centre screw is provided in the die stock?

- A) To tighten the die
- B) To adjust the depth of cut
- C) To adjust the dia of internal thread
- D) To adjust the dia of external thread

#### 37. Reamers are classified as ------

- A) Diameter of reamer
- B) Length of reamer
- C) Length of reamer and Diameter of reamer
- D) Hand reamers and Machine reamers

# 38. Which defect occurs in drilling if flutes are clogged with chips?

- A) Oversized hole
- B) Overheated drill
- C) Rough hole
- D) Broken drill

# 39. Which of the following is not a cause of overheated drill?

- A) Incorrect clearance angle
- B) Drill point not in centre
- C) Feed rate is too high
- D) Drill is not sharp

# 40. What is the method of removing broken stud?



- B) Prick punch
- C) Making drill hole
- D) Using square taper punch



# 41. What is the reason for over heated drill while drilling?

- A) Drill held not correctly
- B) Work is not rigidly held
- C) Clearance angle is incorrect
- D) Flutes are clogged with chips

# 42. What will happen if the spindle running out of the centre while drilling?

- A) Drill will break
- B) Drills are over heated
- C) Drill make rough hole
- D) Over sized holes are made

#### 43. What is the type of defect on drilled hole?

- A) Rough holes
- B) Over heated drill
- C) Oversized holes
- D) Unequal flow of chips



## 44. What is the reason if the drilled hole is larger than the drill size?

- A) Drill is not sharp
- B) Feed rate is too high
- C) Cutting speed is too high
- D) Unequal angle of cutting edge

## 45. Why grey cast iron s widely used for machine tools?

- A) Rapid cooling
- B) Reduce vibration
- C) High tensile strength
- D) Very difficult to matching

### 46. 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

# 47. What is the effect if clearance angle is incorrect?

- A) Over sized holes
- B) Over heated drills
- C) Rough holes
- D) Broken drill

#### 48. What is the reason for rough holes in drilling

- A) Unequal point thinning
- B) Drill point not in centre
- C) Clearance angle is incorrect
- D) Drill cutting edges are not sharp

# 49. Why drilled holes are over sized in drilling operation?

- A) Drill is not sharp
- B) Unequal lip length
- C) Feed rate is too high
- D) Cooling is insufficient

#### 50. Why drilled holes are over size than drill dia?

- A) Feed ratio is more
- B) Cooling is in effective
- C) Insufficient clearance angle
- D) unequal length of cutting edge



www.visionprakashan.com



# Sector: Capital Goods And Manufacturing <u>Annual Pattern 1st Year NSQF Level- 4</u> INDUSTRIAL TRAINING INSTITUTE



•	TRADE : FITTER-Jr.	MONTHLY TEST : WEEK NO. 21 TO 24
---	--------------------	----------------------------------

DATE: PAPER-I TRADE CODE: 453

TOTAL MARKS: 100 ANSWER KEY

Note: Attempt all the questions. All questions carry equal marks

Q.No.	ANS
1	B
2	G
3	D
4	A
5	D A C
6	G
7	G
8	A
9	D
10	B
11	В
12	A
13	B
14	D
15	D
16	B
17	G
18	D D
19	D
20	B
21	В
22	A
23	A B
24	
25	G

Q.No.	ANS
26	G
27	A
28	D
29	O
30	A
31	A
32	G
33	B
34	G
35	G
36	В
37	O
38	D
39	B
40	A
41	G
42	D
43	G
44	D
45	B
46	G
47	B
48	D
49	B
50	D