Q.26 Explain boring techniques with diagram.

Q.27 Differentiate between up milling and down milling.

Q.28 Explain the stub boring bar.

Q.29 Differentiate between cutting fluid and lubricant.

Q.30 Explain the difference between working principle of reaming and boring.

Q.31 What is the significance of speed ratio? Explain.

Q.32 Explain the function of follower rest with a neat sketch.

Q.33 What is form turning process and how it is carried out?

Q.34 Give the various specification of lathe machine.

Q.35 Explain the working of face plate.

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. (2x10=20)

Q.36 Give the nomenclature of a twist drill with diagram.

Q.37 What are the common methods of lubrication of machine tools.

Q.38 Give the various tool geometry of lathe tool and their effects.

Roll No. .....

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Time : 3Hrs. M.M. : 100

SECTION-A

Note: Multiple choice questions. All questions are compulsory (10x1=10)

Q.1 Drill is a _____.

a) Multi point cutting tool
b) Single point cutting tool
c) Rotary tool
d) Both A & B

Q.2 Super high speed steel is known as _____

a) High carbon steel b) Tungsten carbide
c) Satellite d) Cobalt steel

Q.3 Holes are usually enlarged by

a) Twist drill b) Boring bar
c) Reamer d) Both B & C

Q.4 Which of the following is not a part of lathe?

a) Ram b) Cross slide
c) Carriage d) Lead screw

Q.5 The common material used for hand tap is

a) High carbon steel b) High speed steel
c) Carbide tool d) Both A & B

Q.6 Pneumatic drill makes use of _____ for its operation

a) Steam b) Compressed air

c) Vacuum d) Cold Air

Q.7 By increasing the cutting speed, the amount of heat generated is _____

a) Decreased

b) Remains constant

c) Increased

d) Depends on other factors also

Q.8 In a shaper, the length of stroke is increased by

a) Increasing the center distance of bull gear and crank pin

b) Decreasing the center distance of bull gear and crank pin

c) Increasing the length of the arm

d) Decreasing the length of the slot in the slotted lever

Q.9 The main constituent of high speed steel is

a) Chromium b) Tungsten

c) Vanadium d) Cobalt

Q.10 In a planer

a) The tool is stationary and work reciprocates

b) Work is stationary and tool reciprocates

c) The tool moves over stationary work

d) The tool moves over reciprocating work

SECTION-B

Note: Objective type questions. All questions are compulsory. (10x1=10)

Q.11 The greater the _____ radius, the stronger the tool.

Q.12 In lathe, the carriage and tail stock are guided on ____ (same/ different) guideways.

Q.13 Knurling operation is performed on milling machine? (True/False)

Q.14 Which milling is known as conventional milling?

Q.15 Planer uses ____ point cutting tool.

Q.16 Tool life-_____ as the cutting speed increases?

Q.17 Name two types of cutting tool.

Q.18 The tail stock centre is called_____.

Q.19 No cutting fluid is used while machining_____ (cast iron/ aluminum)

Q.20 A good lubricant must have _____ flash point.

SECTION-C

Note: Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

Q.21 Explain the principle of turning with diagram.

Q.22 Define and drive the formula of cutting speed of cutting tool. Give its units.

Q.23 Explain any four cutting tool materials.

Q.24 Explain the working of taper turning attachment.

Q.25 Classify milling machines with brief description.