Important questions – WORKSHOP TECHNOILOGY- 3

Q 1

a. Define gear.

b. Define case hardening and flame hardening.

c. What are modern machining process ?

d. Different types of gears.

e. Define addendum and dedendum.

Q 2 What are the different elements of gear terminology ?

Q 3 What are the different manufacturing methods for gears ?

Q 4 What do you mean by gear hobbing ?

Q 5 Explain the principle of ultrasonic machining and advantages , disadvantages, applications with neat and clean diagram.

Q6 Explain the principle of EDM machining and advantages , disadvantages, applications with neat and clean diagram

Q7.
a) Grinding wheel must be balanced for _____.
b) Crank shaft is finished by _____grinding.
c) Anodizing is a _____process.
d) The cutting tool used in a milling machine is known as _____.
e) LBM stands for _____.
f) In electro discharge machining the tool is made of _____.
g) Brittle materials are processed with ease by _____millions.
h) EDM takes _____time the conventional machines processes.
i) Surface grinding is used to grind _____ surfaces.
j) In Ultrasonic machining rate of _____material will be high.
k) _____ is a hot dipping process.
l) Cutting fluid is used to produce _____and _____.
m) Arbor is the _____holding device for milling.
n) Aluminum oxide is _ _____ abrasive.
o) _____is a tool in which abrasive sticks are held for honing.

Q8.
a) Describe the two methods of milling machine.
b) Explain various job holding devices used on a milling machine.
c) Sketch and briefly describe various dressing and tuning tools.
d) What is balancing of grinding wheel and why it is done?
e) Write a short note on spark erosion machining.
f) What are the principles of working of AJM.
g) Sketch and describe a vertical honing machine.
h) Describe briefly the process of Buffing, Tumbling and Burnishing?

Q9. Name the various types of milling machines. Explain and sketch a plain column and knee type milling, machine.

Q10. Describe with the help of neat sketch the working and construction of cylindrical grinding machine.

Q11. Explain the process of Electron Beam Machining and also describe its advantages and disadvantages.

Q12. Describe and sketch the working of a universal Dividing Head.

Q13. Sketch and explain gear hobbing machine and its principle of working.

Q14. Define “Grinding Wheel”. What do you mean by grain, grade, structure and bend of a grinding wheel.

Q15.Write short note on:
1.EDM
2.LBM
3.EBM
4.Plasma arc machine
5.Electro chemical grinding

Q16.Describe the centreless grinding operation,the machine used,its advantage and limitations.