

Q.26 State the function of dielectric fluids use in EDM process. (CO-07)

Q.27 Define wire gun method of metal spraying with the help of neat sketch. (CO-08)

Q.28 Define electro plating with the help of neat sketch. (CO-08)

Q.29 What is buffing process. Give purpose and application of buffing process. (CO-09)

Q.30 What is lapping process. Gives types of lapping operation. (CO-09)

Q.31 Define different type of honing. (CO-09)

Q.32 Define different material used for milling cutter. (CO-02)

Q.33 What is gear grinding. (CO-04)

Q.34 Define PAM. (CO-07)

Q.35 Write the properties of enamels. (CO-08)

#### SECTION-D

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

Q.36 Explain classification of milling machine with neat sketch. (CO-02)

Q.37 Explain the followings: (CO-04)  
a) Centreless grinding b) Surface grinding

Q.38 Explain the followings with neat sketches. (CO-07)  
a) USM b) LBM

(Note: Course outcome/CO is for office use only)

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Sem. / Mechanical

Subject : Workshop Tech. - III

Time : 3 Hrs.

M.M. : 100

#### SECTION-A

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

(Course Outcome/CO)

Q.1 Milling cutter is a (CO-02)

- a) Single point Cutting tool
- b) Multi point cutting tool
- c) Single bit cutting tool
- d) None of the above

Q.2 Gang milling is. (CO-02)

- a) Process of cutting gears
- b) Process in which two more cutter are used simultaneously
- c) Milling process for generating hexagonal surface
- d) None of the above

Q.3 Which of the following is not a gear finishing process. (CO-06)

- a) Lapping b) Gear shaving
- c) Gear hobbing d) Gear grinding

Q.4 Abrasive slurry in ultrasonic machine is (CO-07)

- a) Water based b) Mercury based
- c) Alcohol based d) Oil based

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~~Q.5~~ The principle used in electro chemical machining is given by. (CO-07)

- a) Faraday                      b) Newton  
c) Fleming                      d) None of the above

~~Q.6~~ The process of providing a thin layer of zinc coating on iron and steel is called. (CO-08)

- a) Electroplating              b) Cementation  
c) Metal cladding              d) Galvanising

~~Q.7~~ Which of the following is a surface finishing operation? (CO-09)

- a) Drilling                      b) Honing  
c) Milling                      d) Turning

~~Q.8~~ Most cylindrical grinding include a \_\_\_\_\_ to allow the forming of tapered piece. (CO-04)

- a) Grinding dog  
b) Swivel  
c) Center driver  
d) None of the above

~~Q.9~~ For honing ceramics, Which of the following abrasives is used? (CO-09)

- a) silicon carbide  
b) Aluminium oxide  
c) Diamond  
d) None of the above

~~Q.10~~ Which of the following is a dielectric fluid? (CO-07)

- a) Kerosene                      b) Silicon Oil  
c) White spirit                      d) None of the above

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## SECTION-B

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

~~Q.11~~ Give the name of two milling method. (CO-02)

~~Q.12~~ What are limitation of a milling machine (CO-02)

~~Q.13~~ Define form milling. (CO-02)

~~Q.14~~ Write the advantage of gear shaping. (CO-06)

~~Q.15~~ Name of different type of gear. (CO-06)

~~Q.16~~ What is the material of gear. (CO-06)

~~Q.17~~ What is thread grinding. (CO-04)

~~Q.18~~ What is glazing. (CO-04)

~~Q.19~~ Write full form of laser. (CO-07)

~~Q.20~~ What is deburring. (CO-08)

## SECTION-C

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

~~Q.21~~ Compare a milling machine with an engine lathe. (CO-02)

~~Q.22~~ Define tool holding device with sketches. (CO-02)

~~Q.23~~ Define the process of gear hobbing. (CO-06)

~~Q.24~~ Define mounting of grinding wheel. (CO-04)

~~Q.25~~ What is the function of abrasives in a grinding wheel. Name any two types of abrasives used in grinding wheels. (CO-04)

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- ~~Q.27~~ Explain balancing of grinding wheel. (CO4)
- ~~Q.28~~ Write any five precautions to be taken in grinding. (CO3)
- ~~Q.29~~ Enlist various limitations of LBM. (CO7)
- ~~Q.30~~ What are the main advantages and disadvantages of electrochemical machining. (CO7)
- ~~Q.31~~ Explain with neat sketch the principle of lapping. (CO9)
- ~~Q.32~~ Write the five properties of good paint. (CO8)
- ~~Q.33~~ Define polishing process. Explain a polishing method. (CO9)
- ~~Q.34~~ Enlist any five purposes of finishing surfaces. (CO9)
- ~~Q.35~~ Write a short note on buffing process. (CO9)

#### SECTION-D

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

- ~~Q.36~~ Draw a neat sketch of knee and column type milling and explain principle parts. (CO2)
- ~~Q.37~~ Explain centreless grinding and cylindrical grinding in details. (CO4)
- ~~Q.38~~ Define Ultrasonic machining (USM). Explain its principle of operation. Also write its various applications. (CO7)

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**5th Sem./ Mech./ Prod./ T&D/ CAD/ CAM / F&F**

**Subject : Workshop Technology - III**

Time : 3 Hrs.

M.M. : 100

#### SECTION-A

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

- ~~Q.1~~ Surfacing can be performed more effectively by \_\_\_\_\_ milling machine. (CO2)
- a) Horizontal
- ☒ b) Vertical
- c) Can't say anything
- d) None of the mentioned
- ~~Q.2~~ Which of the following motion does a milling machine has ? (CO4)
- a) Vertical motion b) crosswise motion
- c) longitudinal motion ☒ d) all of the mentioned
- ~~Q.3~~ Which of the following methods produces gear by generating process (CO6)
- a) Hobbing ☒ b) Casting
- c) Punching d) Milling
- ~~Q.4~~ Hobbing is a special type of which of the following ? (CO6)
- a) Casting b) Grinding
- ☒ d) Milling

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~~Q.5~~ Grinding wheel is specified as C 8 K 5 B 17".  
Grain size of a wheel will be (CO4)

- ☒ a) Coarse                      b) Medium  
c) Fine                      d) Very fine

~~Q.6~~ Operation done to make periphery of grinding wheel concentric with its axis to recover its lost shape is known as (CO3)

- a) Loading                      b) Glazing  
c) Dressing                      ☒ d) Trueing

~~Q.7~~ In mechanical machining, material is removed by \_\_\_\_\_ (CO1)

- ☒ a) Erosion                      b) Corrosion  
c) Abrasion                      d) Vaporization

~~Q.8~~ An example of an anodic coating is \_\_\_\_\_ (CO8)

- ☒ a) Zinc                      b) Copper  
c) Nickle                      d) Chromium

Q.9 Honing is used for finishing (CO9)

- ☒ a) External cylindrical surface  
b) Internal cylindrical surface  
c) Both (a) and (b)   
d) None of the above

~~Q.10~~ In lapping, the lubricant used to hold or retain the abrasive grains during operation is known as

- ☒ a) Vehicle                      b) Holder  
c) Absorber                      d) Retainer

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## SECTION-B

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

~~Q.11~~ Define milling. (CO2)

Q.12 Define straddle milling. (CO2)

~~Q.13~~ Define gear shaping. (CO6)

~~Q.14~~ Write the disadvantages of hobbing. (CO6)

~~Q.15~~ Define grinding wheel. (CO3)

~~Q.16~~ Name any two artificial abrasives. (CO4)

~~Q.17~~ Name any abrasive used in ultrasonic machining. (CO7)

~~Q.18~~ What is the other name of electric discharge machining? (CO7)

~~Q.19~~ Write purpose of lapping processes. (CO8)

~~Q.20~~ Define form lapping. (CO8)

## SECTION-C

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

Q.21 Describe the form milling operation. (CO2)

Q.22 Explain briefly gang milling. (CO2)

Q.23 How is a milling machine specified? (CO5)

Q.24 How the milling machine are classified. (CO5)

~~Q.25~~ Describe the process 'Gear Shaping'. (CO6)

~~Q.26~~ Describe gear hobbing process. (CO6)

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~~Q.30~~ Define the process of powder coating. (CO-08)

~~Q.31~~ Write the application of polishing. (CO-09)

~~Q.32~~ Define hand lapping. (CO-09)

~~Q.33~~ Define surface roughness measurement method (CO-09)

Q.34 Define offset milling machine. (CO-02)

~~Q.35~~ Write the application honing process. (CO-07)

#### SECTION-D

**Note:** Long Answer type question. Attempt any two questions. (2x10=20)

Q.36 Explain any four milling operation. (CO-02)

~~Q.37~~ Explain cylindrical grinding machine with the help of neat sketch. (CO-04)

~~Q.38~~ Explain the principle and process of electric discharge machine. (CO-07)

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5th Sem, **Branch : Mechanical**

**Subject : Workshop Technology-3**

**Time : 3 Hrs.**

**M.M. : 100**

#### SECTION-A

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

Q.1 Removal of metal by feeding work against a rotating cutter is called. (CO-02)

- a) Shaping                      b) Milling
- c) Turning                      d) None of the above

~~Q.2~~ Gears can be cut easily on. (CO-06)

- a) Lathe                      b) Drilling
- c) Milling machine              d) None of the above

~~Q.3~~ Which of the following is a gear finishing process? (CO-06)

- a) Lapping                      b) Gear hobbing
- c) Gear shaping              d) All of the above

~~Q.4~~ Grinding operation is used for. (CO-04)

- a) Dressing                      b) Finishing
- c) Planning                      d) None of the above

~~Q.5~~ While specifying a wheel, grain size is indicated by. (CO-04)

- a) Numbers                      b) Symbols
- c) Alphabets                      d) None of the above

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~~Q.6~~ Which machine needs jet of high temperature ionized gas? (CO-07)

- a) EBM                      b) LBM  
c) EDM                     d) PAM

~~Q.7~~ The process of providing a thin layer of zinc coating on iron and steel is called. (CO-08)

- a) Electroplating        b) Cementation  
c) Metal cladding       d) Galvanising

~~Q.8~~ In electro planting, the work piece act as. (CO-08)

- a) Anode                    b) Cathode  
c) Neutral                  d) None of the above

~~Q.9~~ Which of the following material may be used for the body of lap? (CO-09)

- a) Lead                     b) Copper  
c) Soft cast iron         d) All of the above

~~Q.10~~ Ultrasonic machining is based upon. (CO-07)

- a) Uniform machining  
b) Uniform grinding  
c) Uniform heating  
d) Vibrational waves of high frequently

### SECTION-B

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

~~Q.11~~ What is ideal surface. (CO-09)

~~Q.12~~ What is descaling. (CO-08)

~~Q.13~~ The full form of USM. (CO-07)

~~Q.14~~ What is grinding wheel. (CO-04)

~~Q.15~~ Name different type of hobbing. (CO-06)

~~Q.16~~ What is Module. (CO-06)

~~Q.17~~ What is fillet. (CO-07)

~~Q.18~~ Conventional milling is also known as (CO-02)

~~Q.19~~ What is gang milling. (CO-02)

~~Q.20~~ What is milling cutter. (CO-02)

### SECTION-C

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

~~Q.21~~ What are the purposes of supplying abrasive slurry in ultra-sonic machine. (CO-07)

~~Q.22~~ Write the application of laser beam machining. (CO-07)

~~Q.23~~ Define surface grinding. (CO-04)

~~Q.24~~ Explain balancing of grinding wheels. (CO-04)

~~Q.25~~ Write the advantage of milling machine. (CO-02)

~~Q.26~~ Define any two milling cutter. (CO-02)

~~Q.27~~ Define the different type of gear. (CO-06)

~~Q.28~~ Define gear shaping. (CO-06)

~~Q.29~~ Explain galvanising with the help of neat sketch. (CO-08)