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Roll No. 181753/171753
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Semester : 5th
Branch : Mechanical/Prock, T&D, CNC, CAD, CAM
Found & Forg. Mech. Engg (Fabrication Tech)
Mechanical Engg. (CAD/CAM Design & Robotics)

Time : 3Hrs. Subject:- Working Technology-III M.M. : 100

SECTION-A

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

- Q.1 Specification of the wheel grain size is indicated by (CO3)
- a) Numbers b) Symbols
c) Alphabets d) None of these
- Q.2 Radial distance between the addendum circle and pitch circle is called (CO2)
- a) Addendum b) Basic circle
c) Face d) Flank
- Q.3 Which is not a chemical machining process (CO4)
- a) Chemical milling b) Chemical engraving
c) Buffing d) Chemical blanking
- Q.4 The process metal removal which utilizes an ionized stream of a gas jet by an (CO4)
- a) Plasma arc machining
b) Chemical machining
c) Abrasive jet machining
d) None of these
- Q.5 Milling cutter is a (CO1)
- a) Single point cutting tool
b) Multi point cutting tool

- c) Single bit cutting tool
d) None of the above

- Q.6 In a vertical milling machine the spindle axis is (CO1)
- a) Horizontal b) Vertical
c) Inclined d) None of the above
- Q.7 The smaller of two mating gears is called (CO2)
- a) Rack b) Pinion
c) Small gear d) Small wheel
- Q.8 Operation is the process of improving cutting action of a grinding wheel (CO3)
- a) Facing b) Dressing
c) Truing d) None of these
- Q.9 The tool used in electro-chemical machining acts as (CO4)
- a) Anode b) Cathode
c) Any of above d) None of the above
- Q.10 The process of providing a thin layer of zinc coating on iron and steel is called (CO5)
- a) Electroplating b) Cementation
c) Metal cladding d) Galvanizing

SECTION-B

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

- Q.11 The spindle in a horizontal milling machine is (vertical/horizontal) (CO1)

(1) 181753/171753
/121753/031753

(2) 181753/171753
/121753/031753

- Q.12 A dividing head is also known as _____ (CO1)
 Q.13 Define module (CO2)
 Q.14 Name different types of hobbling. (CO2)
 Q.15 The process of grinding a flat surface in a horizontal position is called _____ (CO3)
 Q.16 The full form of USM is (CO4)
 Q.17 The dielectric fluid used in electric discharge machining should have high electric strength (True/False) (CO4)
 Q.18 Two types of powder coating are _____ and _____ (CO5)
 Q.19 Anodizing coating is generally used for _____ (aluminum/copper) (CO5)
 Q.20 Material removed in buffing is _____ (almost nil/high) (CO6)

SECTION-C

- Note:** Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)
 Q.21 Comparison between conventional milling and climb milling (CO1)
 Q.22 Name different types of milling cutters. (CO1)
 Q.23 Define the following (CO2)
 (a) Pitch circle (b) Addendum
 (c) Fillet (d) Pitch point
 Q.24 Write the precautions in the production of gears. (CO2)
 Q.25 Write the advantages of Hobbing (CO2)

- Q.26 Name different bonds used in manufacturing of grinding wheels. (Co3)
 Q.27 Explain surface grinding (CO3)
 Q.28 Write the properties of dielectric fluid used in electric discharge machining. (CO4)
 Q.29 Write the applications of ultrasonic machining (CO4)
 Q.30 Write the advantages of plasma arc machining (CO4)
 Q.31 Why is surface treatment needed? (CO5)
 Q.32 What is galvanizing. Explain in short. (CO5)
 Q.33 What is the purpose of finishing surfaces? (CO6)
 Q.34 Explain the process of honing? (CO6)
 Q.35 What is the polishing and write the purpose of polishing (CO6)

SECTION-D

- Note:** Long answer type questions. Attempt any two questions out of three questions. (2x10=20)
 Q.36 Explain principle parts of a knee and column type milling machine with neat diagram (CO1)
 Q.37 Explain any four gear finishing processes in detail (CO2)
 Q.38 Explain the principle and process of electro chemical machining (CO4)