

- Q.24 Explain the working of Profile Projector with neat diagram. (CO6)
- Q.25 Explain Tool Maker Microscope with labeled diagram. (CO8)

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2nd Year / Advance Diploma in Tool and Die Making
Subject : Engineering Metrology

Time : 3 Hrs.

M.M. : 60

SECTION-A

Note: Multiple choice questions. All questions are compulsory (6x1=6)

- Q.1 If the screw pitch is 0.5 mm and divisions on the thimble is 50 then the least count of micrometer is (CO1)
a) 1 mm b) 25 mm
c) 0.01 mm d) 0.001 mm
- Q.2 One inch _____ mm (CO2)
a) 22.4 b) 23..4
c) 24.4 d) 25.4
- Q.3 Which of the following is not a control chart:- (CO4)
a) X - chart b) R-chart
c) P-chart d) A -chart

- Q.4 The angle of 'V' thread is _____ degree. (CO5)
 a) 29 b) 30
 c) 45 d) 60
- Q.5 Surface Plate is made up of (CO7)
 a) Granite b) Cast iron
 c) Glass d) All of these
- Q.6 The full form of VMM is (CO8)
 a) Vision Measuring Machine
 b) Vertical Measuring Machine
 c) Variable Measuring Mechanism
 d) Vacuum Measuring Machine

SECTION-B

Note: Objective/ Completion type questions. All questions are compulsory. (6x1=6)

- Q.7 Define Measurement. (CO1)
- Q.8 Define interchangeability. (CO3)
- Q.9 Define Ring Gauge. (CO4)
- Q.10 Define Pitch of the gear. (CO6)
- Q.11 Define Surface Roughness. (CO7)
- Q.12 Give full form of VMM. (CO8)

SECTION-C

- Note:** Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)
- Q.13 Name any five instruments for angular measurement. (CO1)
- Q.14 Write any four functions of inspection. (CO1)
- Q.15 Define Straightness, flatness, parallelism and ovality. (CO2)
- Q.16 Describe the principle of "Interference fir" with sketch. (CO3)
- Q.17 Explain the function of Surface plate and feeler gauge with diagram. (CO4)
- Q.18 Explain the concept of Go and No Go gauge. (CO4)
- Q.19 Explain 3 wire method with suitable diagram. (CO5)
- Q.20 How will you do the angular measurement using Sine bar? (CO6)
- Q.21 Define surface finish? Write symbols used in surface roughness. (CO7)
- Q.22 Differentiate between VMM and CMM. (CO8)

SECTION-D

- Note:** Long answer type questions. Attempt any two questions out of three questions. (2x8=16)
- Q.23 Explain various types of gauges with suitable diagram. (CO4)