

FACULTY OF ENGINEERING

B.E. 4/4 (M/P) II – Semester (New) (Main) Examination, April / May 2014

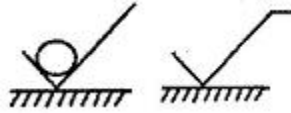
Subject: Production Drawing

Time: 3 Hours

Max.Marks: 75

Note: Answer all questions from Part A. Answer all questions from Part B.**PART – A (25 Marks)**

- 1 A schematic representation of basic size and its deviations are given. Calculate the following in each case for a shaft size of 50 mm basic size (i) Upper and lower deviation, (ii) Upper and lower size, (iii) Tolerance. 3
- 2 Compute the limit dimensions for a clearance fit on the hole basis system for a basic size of 40 mm diameter, with a minimum clearance of 0.05 mm, tolerance on the hole 0.021 mm and the shaft tolerance of 0.15 mm. 3
- 3 What is meaning of the following surface finish symbol. 3



- 4 What is meaning and values of the following surface roughness and sketch lay symbols. 3
R, M, ∇
- 5 What is surface finish symbol specification – Give all information. 3
- 6 What is RMS value of surface finish? Explain with a neat diagram. 3
- 7 What are geometric features of Form Tolerancing? Explain with help of neat diagram. 2
- 8 What are geometric features of position tolerancing? Explain with help of neat diagram. 2.5
- 9 Give a neat sketch of layout of title block with various contents. 2.5

PART – B (50 Marks)

- 10 Give fits between the parts 10
- 11 Draw the following components and give necessary dimensional and geometric tolerances and surface roughness values. 25
(a) Pin (b) Fork (c) collar
- 12 Give the process sheet for the component centre block. 15

