Reg. No. : ☐☐☐☐☐☐☐☐☐☐☐☐☐

Question Paper Code: U8766

B.E. / B.Tech. DEGREE EXAMINATION, APRIL 2024

One credit course

Mechanical Engineering

21UME866 - LIMITS, FITS AND TOLERANCES

(Regulations 2021)

(Table Allowed For End Semester Examination)

Duration: 1:30 Hours   Maximum: 50 Marks

Answer ALL Questions

PART A - (5 x 2 = 10 Marks)

1.	Distinguish between basic size and actual size.	CO1- U
2.	Give the meaning of the Φ45 f 6.	CO1- U
3.	What is clearance?	CO1- U
4.	What is maximum and minimum limit?	CO1- U
5.	Define clearance fit.	CO1- U

PART – B (2 x 20= 40 Marks)

6. (a) Compute the fundamental deviation for a circular hole of 35mm   CO2- U   (20)
diameter finished to H7 tolerance (Φ35 H7).

Or

   (b) Explain the methods of indicating the fits in drawings.   CO2- U   (20)

7. (a) Compute the limit dimensions for an interference fit on the hole   CO2- U   (10)
basis system for a basic size of 20mm diameter, with a negative   (10)
clearance of 0.100mm, tolerance on the hole0.025mm   and
tolerance on the shaft 0.050mm, explain with neat sketch.

Or

   (b) Describe the different types of Fits with neat sketch.   CO2- U   (20)

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