Question Paper Code: 98766

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2022

One credit course

Mechanical Engineering

19UME866 - Limits, Fits and Tolerances

(Regulations 2019)

Duration: 1.30 hours   Maximum: 50 Marks

Answer ALL Questions

PART A - (10 x 2 = 20 Marks)

1.	Distinguish between basic size and actual size	CO1- U
2.	What is tolerance explain	CO1- U
3.	What is zero line	CO1- U
4.	Write the needs of Limits, Fits &Tolerance	CO1- U
5.	What is clearance	CO1- U
6.	Explain the upper deviation and lower deviation	CO2- U
7.	What is fundamental deviation	CO2- U
8.	What is maximum interference and minimum interference	CO2- U
9.	What is zero line	CO2- U
10.	Explain the transition fit	CO2- U

PART – B (2 x 15= 30 Marks)

11. (a) Compute the fundamental deviation for a circular hole of 35mm diameter finished to H7 tolerance (Φ35 H7).   CO1- App   (15)

Or

(b) Explain fundamental deviation with neat sketch.   CO1- U   (15)

12. (a) Compute the limit dimensions for an interference fit on the hole basis system for a basic size of 20mm diameter, with a negative clearance of 0.100mm, tolerance on the hole0.025mm   and tolerance on the shaft 0.050mm, explain with neat sketch.   CO2- App   (15)

Or

(b) Briefly explain the different types of Fits with neat sketch.   CO2- U   (15)

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