Reg. No. : | | | | | | | | | | |

Question Paper Code: 98766

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

One credit

Mechanical Engineering

19UME866- Limits, Fits And Tolerances

(Regulations 2019)

(Common to All branches)

Duration: 1.30 minutes Maximum: 50 Marks

Answer All Questions

PART A - (10x 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.	How many tolerance grade are there as per Indian standards for basic size (i) Upto 500mm, (ii) above 500mm to 3150mm	CO1- U
5.	Explain the meaning Φ50 H6	CO1- U
6.	Explain the upper deviation and lower deviation	CO2- U
7.	What is fundamental deviation	CO2- U
8.	What are the symbols used for fundamental deviation for the shaft and hole	CO2- U
9.	What is zero line	CO2- U
10.	What is mean by fit	CO2- U

PART – B (2 x 15= 30 Marks)

11.	(a)	Explain the terminology of basic size deviations, limits and tolerances	CO1-U	(15)
		Or		
	(b)	Compute the IT tolerance of diameter of 40mm with tolerance grade 5 using empirical formula	CO1-App	(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)