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REPORT ON

BIOMODELLING AND BIO MECHANICS OF FEMUR

A Project report submitted for the partial fulfilment of the requirements for award of Degree of
BACHELOR OF TECHNOLOGY
IN
MECHANICAL ENGINEERING
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(PERMENANTLY AFFLIATED TO JNTU-KAKINADA, ACCREDITED BY NBA & NAAC, APPROVED BY AICTE, RECOGNISED BY UGC 12f & 2b)
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DEPARTMENT OF MECHANICAL ENGINEERING

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CERTIFICATE

This is to certify that the project entitled " BIO MODELLING AND BIO MECHANICHS OF FEMUR" is the record of the work carried out by Athava sai kumar (18115A0303) , Killda siva sai kiran (17811A0329) , Veeravilli sai prasad naidu (17811A0362) , Sanivada ananth sai Krishna (17811A0352) students of final year B. Tech in the department of Mechanical engineering. This work is done for the partial fulfilment for the award of BACHELOR OF TECHNOLOGY during the year 2019-2020.

Project Guide

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Abstract

Bone cancer occurs when a tumor or an abnormal mass of tissue forms in a bone. A tumor maybe malignant which means it's growing aggressively and spreads to other parts of the body. Cancer to Femur bone occurs through metastatic bone disease that begins in one organ and spreads to the bone which results in damage of bone and its tissues. The remedy possible for this type of cancer is bone replacement

In this project we focused on customized modelling of femur bone and replacing it in place of the cancerous bone. Replacement of bone is done firstly by designing the bone, secondly by analysing its properties and its characteristics and then it is to be printed three dimensionally by a 3D Printer and finally the finished bone will be replaced in the place of the infected femur bone.