

JK Lakshmipat University Jaipur
INSTITUTE OF ENGINEERING AND TECHNOLOGY

End Term Examination, April 2024
BCA , Semester IV,

Roll No.....

ME1229: Computer-Aided Additive Manufacturing

Time: 2:00 hrs

Max. Marks: 40

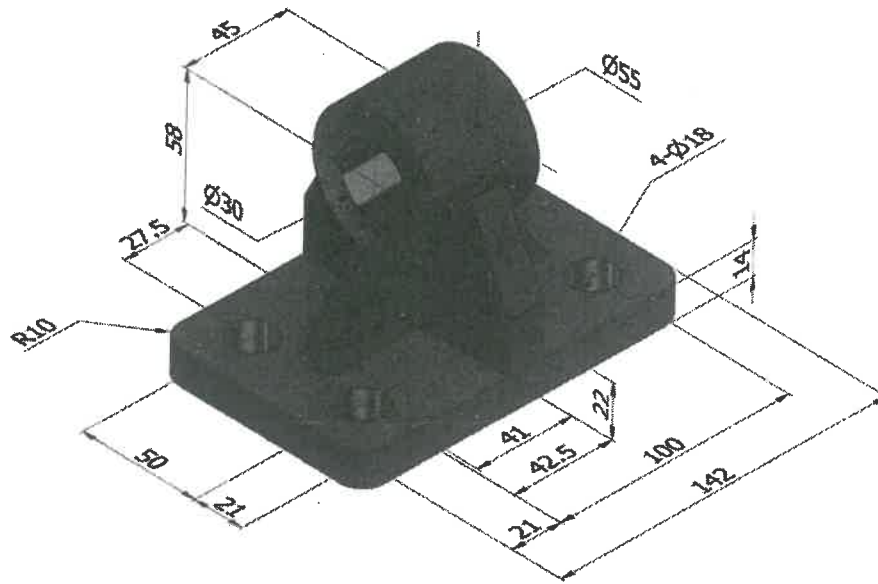
Instructions to students:

1. Do not write anything other than your roll number on question paper.
 2. Mention all the assumptions for your answers clearly.
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|--------|--|---------------|
| Q. 1.1 | How does FDM 3D printer work | 2.0
(CO 1) |
| Q. 1.2 | Is there a difference between 3D printing and additive manufacturing? Explain your answer with reason. | 2.0
(CO1) |
| Q. 1.3 | Are 3D printed goods as good as those manufactured “traditionally”? explain your view. | 2.0
(CO 1) |
| Q.1.4 | Describe the difference between in ABS and PLA | 2.0
(CO 2) |
| Q. 1.5 | List the materials available for FDM technology. | 2.0
(CO 2) |
| Q. 2.1 | Explain with neat sketch the working principal of Selective Laser Sintering process. | 6.0
(CO 2) |
| Q. 2.2 | List out the post processing technique of additive manufacturing parts. Explain any three techniques. | 6.0
(CO2) |
| Q. 2.3 | Explain the application of additive manufacturing | 6.0
(CO2) |

Q. 3.1 List the steps involved in creating this model in Onshape CAD software.

6.0
(CO3)



Q. 3.2 Explain with neat sketch the working principal of Electron Beam Melting (EBM) process.

6.0
(CO3)

all the best!