NARASIMHA REDDY ENGINEERING COLLEGE

(Autonomous)

Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad

Accredited by NAAC with A Grade, Accredited by NBA

MECHANICA ENGINEERING

QUESTION BANK

Course Title : **Additive Manufacturing**

Course Code : **ME4101PE**

Regulation : R-21

S No	UNIT-I	
	Question	**Bloom's Taxonomy level**
1	What is STL file?	Understand
2	What is rapid tooling	Remember
3	What is AM Process chain	Remember
4	What is 3D printer	Remember
5	What is virtual prototyping	Remember
6	Classify the AM process	Understand
7	What are the limitation of AM	Remember
8	Write a note on benefits and applications of AM	Understand
9	Write a note on need and development of AM system.	Understand
10	Explain the AM process chain	Understand
11	Write a note on virtual prototyping and rapid tooling	Remember
12	Explain the transition RP to AM	Understand
13	Write a note on impact of AM on product development	Understand
14	Write a note on merits on product development	Remember
	UNIT-II	
S No	Question	Bloom's Taxonomy level
1	Explain the working principle of SLA	Remember

2	Explain the working principle of SGC	Remember
3	Explain the working principle of LOM	Understand
4	Explain the working principle of FDM	Remember
5	What is limitation of FDM	Understand
6	Application of SLA	Understand

	UNIT-III	
S No	QUESTION	Bloom's Taxonomy level
1	Discuss the materials used in SLS process?	Remember
2	What are the applications of 3D printing?	Understand
3	Explain the process of 3D keltool in brief.	Understand
4	Explain the principle of SLS in brief.	Remember
5	Write the specifications of 3DP and write a case study of 3DP?	Remember

	UNITIV	
S No	QUESTION	Bloom's Taxonomy level
1	Write any seven differences between conventional tooling and rapid tooling?	Remember
2	What is DTM rapid tooling process? Explain.	Understand
3	What are newly proposed data formats in RP?	Understand
4	Explain the Rhino, STL view 3Data expert softwares.	Remember
5	Explain in brief about spray metal deposition indirect RT process.	Remember
	UNIT-v	
S No	QUESTION	Bloom's Taxonomy level

1	What are the features of Magics, solid view?	Remember
2	What are the applications of RP in various industries?	Understand
3	What are general STL file problems?	Understand
4	Explain in brief about spray metal deposition indirect RT process.	Remember
5	How RP is applied in (i) arts and architecture (ii) visualization of bimolecular (iii) GIS application	Remember