

B.SC(AE), 2014
MANUFACTURING PROCESS
PAPER CODE: BTAE304
PAPER ID:[A1149]

Time Allowed: 03 Hours

Max. Marks: 60

Note: The question paper consists of *three sections*. **Section A** is compulsory. Candidates are required to attempt any four questions from **Section-B** and any two questions from **Section-C**.

Q.No.	Section-A	Marks
1(a)	What are the applications of arc welding?	2x10=20
(b)	What are common welding defects?	
(c)	What is moulding?	
(d)	Define core and core prints?	
(e)	Define rolling?	
(f)	What is jig boring?	
(g)	Define up milling?	
(h)	What is the principle of electric discharge machining?	
(i)	Write down the properties of dielectric fluid?	
(j)	Define chemical machining?	
	Section-B	5x4=20
2	What is electrode covering and why it is provided?	
3	Explain the difference between TIG and MIG welding?	
4	Describe the different types of pattern and materials used for making them in brief.	
5	Differentiate between surface and centre less grinding?	
6	Explain the working principle of abrasive water jet machining with the help of neat sketches?	
	Section-C	10x2=20
7	With the help of neat sketches, explain the geometry of a single point cutting tool? Also explain what is tool signature?	
8(a)	What is directional solidification? Discuss the methods to make the solidification directional?	
(b)	Differentiate between hot and cold rolling?	
9(a)	Explain the working of a plasma arc welding?	
(b)	Describe the various elements of a gating and riser system?	