Reg. No. :					

# **Question Paper Code: 41732**

## B.E. / B.Tech. DEGREE EXAMINATION, NOV 2016

#### Third Semester

# Mechanical Engineering

## 14UME302 – MANUFACTURING TECHNOLOGY - I

	(Regula	ation 2014)				
	Duration: Three hours  Answer A	LL Questions	Maximum: 100 Marks			
	PART A - (10	) x 1 = 10 Marks)				
1. Core print is the part of the						
	(a) Core (b) Pattern	(c) Gate	(d) Moulding tool			
2.	Chills are used in moulds to					
	(a) Achieve directional solidification	(b) Increase freezing zone				
	(c) Reduce freezing zone	(d) Smoothen metal flow for reducing spatter				
3.	The welding process used for weld the non	metal is				
	(a) Gas welding	(b) Arc welding				
(c) Ultrasonic welding		(d) Resistance welding				
4.	The ratio of acetylene to oxygen is a gas welding.	pproximately	for neutral flames used in			
	(a) 1:1 (b) 2:3	(c) 3:2	(d) 2:5			
5.	Recrystallisation temperature is					
	(a) Melting temperature	(b) Above meltin	g temperature			
	(c) Below melting temperature	(d) Solidification temperature				

6.	In deep drawing of sheets, the value of limiting	draw ratio depends on			
	(a) % elongation of sheet metal	(b) Yield strength of the sheet metal			
	(c) Type of press used	(d) Thickness of the sheet			
7.	Annealing leads to				
	(a) Relieve internal stress	(b) Improve surface finish			
	(c) Improve hardness	(d) Improve strength			
8.	Metal extrusion process is generally used for pro	oducing			
	(a) Uniform solid sections	(b) Uniform hollow sections			
	(c) Uniform solid and hollow sections	(d) Varying solid and hollow sections			
9.	Palsticizer used for				
	(a) To improve the viscosity of polymer	(b) To enhance the colour			
	(c) To enhance the polymerization	(d) To improve strength			
10.	Parison is the term used in				
	(a) Injection moulding	(b) Shell moulding			
	(c) Compression moulding	(d) Blow moulding			
	PART - B (5 x 2 :	= 10 Marks)			
11.	What are the causes for the information of blow	holes in the sand casting?			
12.	How does brazing differ from braze welding?				
13.	What is meant by fullering?				
14.	Give the difference between punching and blank	king.			
15.	What is film blowing?				
	PART - C (5 x 16	= 80 Marks)			
16.	16. (a) Explain the steps required to carry out green sand moulding.				
	Or				

	(b)	Illustrate about the lost wax method of moulding to cast quality product. Also state advantages and disadvantages.	their (16)
17.	(a)	Explain the TIG welding process. Give its application.	(16)
		Or	
	(b)	Explain the principle of thermit welding with a neat sketch. Also mention its advantages and applications.	ages (16)
18.	(a)	List out various extruding operations to make hollow tubes with necessary sketches.	(16)
		Or	
	(b)	Enumerate the various hammers used for forging operations.	(16)
19.	(a)	Describe shearing operation in a sheet metal work with a neat sketch.	(16)
		Or	
	(b)	Explain super plasticity forming and its types with neat sketch.	(16)
20.	(a)	Give the schematic illustration of the explosive forming process and list applications.	t its (16)
		Or	
	(b)	Choose the suitable processes for making for advertisement panel, cookies trays packing materials of thermoplastic sheets.	and (16)