

AVTO/Sem-III/PP/R-19/9-6-2022

94737

University of Mumbai

Examinations summer 2022

Time: 2 hour 30 minutes

Max. Marks: 80



Q1.	Choose the correct option for following questions. All the Questions are compulsory and carry equal marks
1.	Which of the following is not a primary shaping process
Option A:	Powder Metallurgy
Option B:	Metal Forming
Option C:	Welding
Option D:	Casting
2.	In which of the following welding process the source of heat is the arc generated between anode and cathode?
Option A:	Resistance welding
Option B:	Gas welding
Option C:	Arc welding
Option D:	Seam welding
3.	Weldability of metals depends on which of the following parameters?
Option A:	Melting point of metals
Option B:	Yield point
Option C:	Breakeven point
Option D:	Ultimate point
4.	Back gear is used in lathe machine to
Option A:	Change the direction of rotation
Option B:	Increase the speed of rotation
Option C:	Decrease the speed of rotation
Option D:	Maintain the continuous speed
5.	Segmental chips are formed during machining
Option A:	Mild steel
Option B:	Cast Iron
Option C:	High speed steel
Option D:	High carbon steel
6.	The purpose of grinding operation is
Option A:	To cut harder material
Option B:	To get good surface finish
Option C:	To maintain dimensional accuracy
Option D:	All of above
7.	Which of the following is not traditional machining?
Option A:	Turning
Option B:	Abrasive jet machining
Option C:	Milling
Option D:	Drilling
8.	Which of the unconventional process can be used effectively for machining of plastic material?



Option A:	Electro chemical machining
Option B:	Laser beam machining
Option C:	Electric discharge machining
Option D:	Ultrasonic machining
9.	Which of the following not uses mechanical energy for metal removal
Option A:	Abrasive Jet Machining
Option B:	Ultrasonic Machining
Option C:	Laser beam Machining
Option D:	Water jet machining
10.	Which of the following is not IoT Technology.
Option A:	Cloud computing
Option B:	RFID
Option C:	EBM
Option D:	Big data analysis

Please use either of the 3 option given below while setting up the subjective/descriptive questions

Q2,	Solve any Four out of Six	5 marks each
A	What are desirable properties of moulding sand	
B	Write short note on adhesive bonding	
C	Explain various defects in rolled parts	
D	Compare lapping and honing machines	
E	Explain ultrasonic machining	
F	Describe rotational moulding with neat sketch	

Option 2

Q3	Solve any Two Questions out of Three	10 marks each
A	What is pattern? Explain various types of pattern with neat sketches.	
B	Explain various methods of gear manufacturing	
C	Write stepwise procedure of powder metallurgy with neat sketch	

Option 3

Q4.	Solve the following	
A	Solve any Two	5 marks each
i.	Compare shaper and planer	
ii.	What is riser, also mentions types and functions of riser	
iii.	Differentiate between blanking and punching operation	
B	Solve any One	10 marks each
i.	Write short note on classification of welding	
ii.	What are various types of forging, compare drop forging with press forging	