

NGSPM'S
Brahma Valley college of Engineering and Research Institute Anjaneri, Nashik
Department of Mechanical Engineering
Second Year (2017-2018)
Unit Test- II

Date :
 Subject : Manufacturing Process-1 (202041)
 Max. Marks : 30
 Semester : I

Time: 11.00-12.00

Instructions to the Candidates:

1. Question paper based on syllabus completion till date.
2. Solve Any 1 Question each from Q.1 OR Q.2. and Q.3 OR Q.4.
3. Assumptions made if any should be justified
4. Test will be of (10 Marks MCQ and 20 marks descriptive)

Q.No		Question Statement	Marks
1	a)	1) Explain Extrusion of Film(CO-3)	5
	b)	2) Explain in brief thermoforming process.(CO-3)	5
OR			
2	a)	Write Short notes on Transfer Moulding.(CO-3)	5
	b)	Explain with sketch injection moulding.(CO-3)	5
3	a)	Write a short notes on gas welding flames (CO-4)	5
	b)	Compare Between TIG & MIG welding process(CO-4)	5
OR			
4	a)	Write a short notes on classification of adhesives (CO-5)	5
	b)	State the Five points of difference between A.C. welding & D.C. welding (CO-5)	5
5	a)	Pressure (kg/cm ²) applied in electric resistance welding is in the range of: a) 150-65 b) 65-150 c) 250-550 d) 600-850(CO-3)	1
	b)	Tip of the electrodes used in spot welding are made of: a) Soft Iron b) Mild steel c) Copper d) Aluminium(CO-3)	1
	c)	Oxyacetylene welding mostly employs _____ flame a) Oxidizing b) Carburising c) Neutral d) Reducing(CO-3)	1
	d)	Neutral flame cannot be used for welding a) Cast iron b) Mild steel c) Copper and aluminium d) none of these(CO-4)	1
	e)	The filler material used for brazing process is a) silver alloy b) copper alloy c) nickel alloy d) all of these(CO-4)	1
	f)	Which of the following welding process uses non consumable electrode a) TIG welding b) MIG welding c) Manual Arc welding d) Submerged Arc welding(CO-4)	1
	g)	Spot welding is an example of a) Gas welding b) Resistance welding c) Arc welding d) tungsten inert gas welding(CO-5)	1
	h)	These polymers can not be recycled a) Thermoplasts b) Thermosets c) Elastomers d) All polymers(CO-5)	1
	i)	These polymers consist of coil-like polymer chains: a) Thermoplasts b) Thermosets c) Elastomers d) All polymers(CO-5)	1
	j)	In general, strongest polymer group is a)Thermoplasts b) Thermosets c) Elastomers d) All polymers(CO-5)	1



Budetti
 PRINCIPAL
 Brahma Valley College of Engg. & RI

NGSPM'S
Brahma Valley college of Engineering and Research Institute Anjaneri, Nashik
Department of Mechanical Engineering
Second Year (2017-2018)
Unit Test- I

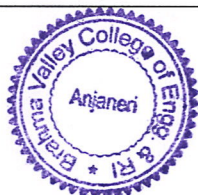
Date :
 Subject : Manufacturing Process-1 (202041)
 Max. Marks : 30
 Semester : I

Time: 11.00-12.00

Instructions to the Candidates:

1. Question paper based on syllabus completion till date.
2. Solve Any 1 Question each from Q.1 OR Q.2. and Q.3 OR Q.4.
3. Assumptions made if any should be justified
4. Test will be of (10 Marks MCQ and 20 marks descriptive)

Q.No		Question Statement	Marks
1	a)	Explain with neat sketch centrifugal casting process.(CO-1)	5
	b)	Expalin the Pattern Making Allowance I detail(CO-1)	5
OR			
2	a)	Explain in brief various allowances provided on pattern.(CO-1)	5
	b)	Describe the following casting defects with its cause & remedies. i) Blow holes. ii) Hot tears(CO-1)	5
3	a)	Explain in detail wire Drawing operation(CO-2)	5
	b)	Differentiate between hot & cold working processes.(CO-2)	5
OR			
4	a)	2) Describe the different types of rolling mills.(CO-2)	5
	b)	3) Explain different types of forging defects with causes & remedies(CO-2)	5
5	a)	Which of the following casting process is used for making of aluminum pistons.... a) Sand casting b) Permanent mould casting c) die casting d) All of the above (CO-1)	
	b)	When the pattern is made in three parts, the bottom part is known as? a) Drag b) cheek c) Cope d) None of these (CO-1)	
	c)	Investment casting uses pattern made of ? a) wax b) Clay c) Metal d) Wood (CO-1)	
	d)	structural section such as rail ,angels, I-beam are made by a) Hot rolling b) Hot drawing c) Hot piercing d) Hot extrusion(CO-1)	
	e)	Pattern is always made than the required size of casting a) smaller b) Larger c) of the same size d) None of these(CO-1)	
	f)	Which of the following material can be used for making patterns a) Aluminium b) wax c) Lead d) All of these (CO-2)	
	g)	Cold working of metal increases a) tensile strength b) hardness c) yield strength d) all the above (CO-2)	
	h)	The binder commonly used in making oil sand ,is..... a) Clay-type sand b) organic type binder c) inorganic type binder d) None of these(CO-2)	
	i)	Cold working process can be applied on the components having diameter up to a) 12mm b) 25 mm c) 49 mm d) 50mm(CO-2)	
	j)	Metals like lead and tin are hot worked at temperature around a) 500-600'c b) 200-300'c c) about 100'c d) Room Temperature(CO-2)	



Budhetti
PRINCIPAL
 Brahma Valley College of Engg. & RI

NGSPM'S
Brahma Valley college of Engineering and Research Institute Anjaneri, Nashik
Department of Mechanical Engineering
Second Year (2017-2018)
Unit Test- II

Date : Time: 11.00-12.00
Subject : Material Science (202044)
Max. Marks : 30
Semester : I

Instructions to the Candidates:

1. Question paper based on syllabus completion till date.
 2. Solve Any 1 Question each from Q.1 OR Q.2. and Q.3 OR Q.4.
 3. Assumptions made if any should be justified
 4. Test will be of (10 Marks MCQ and 20 marks descriptive)
-

Q1.

- a) State and explain characteristics of metal powder? (CO-2) **5marks**
b) Explain Green Strength?. (CO-2) **5marks**

OR

- Q2.** What is air Blasting and why it is necessary? (CO-2) **5 marks**
Explain application of powder metallurgy?(CO-2) **5 marks**

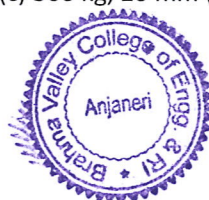
- Q3.** What is Granular Corrosion (CO-3) **5 marks**
Write short note on Corrosion Inhibitors (CO-3) **5 marks**

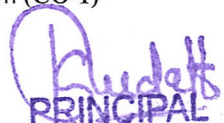
OR

- Q4.** Explain: a) Sintering b) Compacting (CO-3) **5 marks**
b) Explain anodic protection in details. (CO-3) **5 marks**

Q5. Attempt the Following. (01 mark each)

1. The arrangement of multiple unit cell together is called.....
a) Unit cell b) crystal lattice c) lattice constant d) lattice angle (CO-2)
2. In a face centered cubic crystal structure the face atom is shared by.....adjacent unit cells.
a) 1 b) 2 c) 4 d) 8 (CO-2)
3. Coordination number is also referred to as....
a) ligancy number b) average number of atoms per unit cell c) atomic packing factor d) simple cubes (CO-2)
4. In a body centered crystal structure, there isnumber of center atoms
a) 1 b) 4 c) 8 d) 0 (CO-2)
5. Lead has...crystal structure
a) simple cube b) body center cubic c) face centered cube d) Hexagonal closed packed (CO-2)
6. Brinell hardness is measured by pressing
a) a spherical ball against a flat surface
b) a sharp cone against a rough flat surface
c) a spherical ball against a flat or curved surface
d) a sharp cone against a finished curved surface (CO-1)
7. The load and standard steel ball used for Brinell hardness number are
(a) 300 kg, 1mm (b) 300 kg, 5 mm (c) 300 kg, 10 mm (d) 3000 kg, 10 mm (CO-1)




PRINCIPAL
Brahma Valley College of Engg. & RI

8. Vicker's Pyramid Number (VPN) is equal to
a) $2P \sin\theta/d^2$ b) $P \sin\theta/d^2$ c) $P \sin\theta/2 /d^2$ d) None of these(CO-1)
9. Knoop hardness number (KHN) is equal to
(a) P/LC (b) P/L^2C (c) $2P/LC$ (d) $2P/L^2C$ (CO-1)
10. The alloying elements that help improve corrosion resistance of steels are
a) Ni and Mo) Mo and Cr) Ni and Cr) Cr and W (CO-1)

Budetti



PRINCIPAL
Brahma Valley College of Engg. & RI



PRINCIPAL
Brahma Valley College of Engg. & RI