

University of Mumbai
Online Examination 2020

Program: TE Chemical Engineering

Curriculum Scheme: Revised 2012(CBSGS)

Examination: Third Year Semester VI

Course Code: CHE606

Course Name: Advanced Material (Elective)

Time: 1 hour

Max. Marks: 50

Note to the students:- All Questions are compulsory and carry equal marks .

Q1.	One of the characteristic property of polymeric material is -----
Option A:	High temperature stability
Option B:	High mechanical strength
Option C:	High elongation
Option D:	Low hardness
Q2.	The optical opacity of a polymer can be controlled by using
Option A:	Stabilizers
Option B:	Colorants
Option C:	Flame retardants
Option D:	Reinforcements
Q3.	Disadvantage of ceramic material is
Option A:	Toughness and hardness
Option B:	Chemical reactiveness
Option C:	High thermal conductivity
Option D:	Low ductility and low strength
Q4.	Fiberglass materials have a usable temperature up to _____
Option A:	50°C
Option B:	100°C
Option C:	200°C
Option D:	500°C
Q5.	How does the amount of cobalt affect the wear of alloys?

Option A:	High cobalt high wear
Option B:	Low cobalt high wear
Option C:	No cobalt high wear
Option D:	Cobalt does not affect the wear
Q6.	Which of the following material has maximum ductility?
Option A:	Mild steel
Option B:	Copper
Option C:	Nickel
Option D:	Aluminium
Q7.	Crystal structure of a material is, generally, examined by
Option A:	naked eye
Option B:	optical microscope
Option C:	metallurgical microscope
Option D:	X-ray techniques
Q8.	Which of the following is not a laminar composite?
Option A:	Bimetallic
Option B:	Cladding
Option C:	Paints
Option D:	Wood
Q9.	The hardness of steel increases if it contains
Option A:	pearlite
Option B:	ferrite
Option C:	cementite
Option D:	Martensite
Q10.	Composites can be classified based on _____
Option A:	matrix type
Option B:	reinforcement constituent
Option C:	matrix type & Reinforcement constituent
Option D:	neither on matrix type nor on reinforcement constituent type
Q11.	which it breaks with little permanent distortion, is called
Option A:	brittleness
Option B:	ductility
Option C:	malleability
Option D:	plasticity
Q12.	Which of the following material has maximum ductility?
Option A:	Mild steel
Option B:	Copper
Option C:	Nickel

Option D:	Aluminium
Q13.	Metalloids
Option A:	Matrix alloys
Option B:	Metal lattices
Option C:	Metal Matrix composites
Option D:	Metal Matrix composites
Q14.	Which of the following does not combine with fiber to give composites?
Option A:	Metals
Option B:	Ceramics
Option C:	Non-metals
Option D:	Polymers
Q15.	Which of the following is used as reinforcement in advanced polymer matrix composite
Option A:	Glass fibre reinforced
Option B:	Carbon fibre reinforced
Option C:	Wood fibre reinforced
Option D:	Undirectional fibre reinforced
Q16.	Which of the following is not a step in making ceramics
Option A:	Powder pressing
Option B:	Sintering
Option C:	Alloying
Option D:	Vitrification
Q17.	Which of the following catalyst system is used to cross link silicon polymers.
Option A:	Ruthenium and iridium
Option B:	Iridium and Osmium
Option C:	Titanium and ethyl radical
Option D:	Peroxide and platinum
Q18.	Which of the following is a characteristic of alumina
Option A:	Excellent hardness
Option B:	Good tensile strength
Option C:	Good toughness
Option D:	Poor wear resistance
Q19.	Which of the following is an application of glass-fiber reinforced composites?
Option A:	Adhesives
Option B:	Conveyor belts
Option C:	Design of ships
Option D:	Automotive parts

Q20.	The hardness is the property of a material due to which it
Option A:	can be drawn into wires
Option B:	breaks with little permanent distortion
Option C:	can cut another metal
Option D:	can be rolled or hammered into thin sheets
Q21.	A polymer made of identical monomer units is called -----
Option A:	Homopolymer
Option B:	Linear polymer
Option C:	Copolymer
Option D:	Branched polymer
Q22.	Which of the following carbides are used for cutting tools
Option A:	Silicon carbide
Option B:	Tungsten carbide
Option C:	Vanadium carbide
Option D:	Chromium carbide
Q23.	Which of the following is not a class of ceramic
Option A:	Carbide ceramic
Option B:	Oxide ceramic
Option C:	Nitride ceramic
Option D:	Hydride ceramic
Q24.	Thermal properties of CNTs shows that they are
Option A:	Very good thermal conductors along the tube, but good insulators laterally to the tube axis.
Option B:	Bad conductors along the tube, but good conductor laterally to the tube axis.
Option C:	Good conductor in all directions
Option D:	Insulator in all directions
Q25.	The material widely used for making pendulums of clocks is
Option A:	stainless steel
Option A:	high speed steel
Option B:	heat resisting steel
Option C:	nickel steel
Option D:	nickel steel

University of Mumbai
Online Examination 2020

Program: TE Chemical Engineering

Curriculum Scheme: Revised 2012(CBSGS)

Examination: Third Year Semester VI

Course Code: CHE606

Course Name: Advanced Material (Elective)

Time: 1 hour

Max. Marks: 50

Question	Correct Option (Enter either 'A' or 'B' or 'C' or 'D')
Q1.	B
Q2.	A
Q3.	D
Q4	C
Q5	D
Q6	A
Q7	C
Q8.	A
Q9.	D
Q10.	C
Q11.	C
Q12.	B
Q13.	A
Q14.	D
Q15.	B
Q16.	C
Q17.	C
Q18.	C
Q19.	B
Q20.	A
Q21.	C
Q22.	C
Q23.	D
Q24.	C
Q25.	C

