

Program: FE (All branches)
Curriculum Scheme: Revised 2012
Examination: First Year Semester II

Course Code: FEC203
Time: 1-hour

Course Name: Applied Chemistry
Max. Marks: 50

=====

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

Q1.	Green film of basic carbonate on surface of Cu contains CuCO_3 and _____.
Option A:	BaCO_3
Option B:	Ba(OH)_2
Option C:	Cu(OH)_2
Option D:	CuO
Q2.	Presence of silicate anions leads to formation of _____ reaction products.
Option A:	Soluble
Option B:	Poisonous
Option C:	Corrosive
Option D:	Insoluble
Q3.	Evolution of hydrogen type corrosion occurs in _____ environment.
Option A:	Acidic
Option B:	Neutral
Option C:	Basic
Option D:	Alkaline
Q4.	_____ is the process of coating Fe or steel with a zinc coating.
Option A:	Tinning
Option B:	Hot dipping
Option C:	Galvanizing
Option D:	Metal cladding
Q5.	Volatile oxidation corrosion product of a metal is,
Option A:	Fe_2O_3
Option B:	MoO_3
Option C:	Fe_3O_4
Option D:	FeO
Q6.	Which of the following can be used for cathodic protection?
Option A:	Al
Option B:	Cu
Option C:	Pt
Option D:	Mg

Q7.	What is the ignition temperature of a good fuel?
Option A:	High
Option B:	Low
Option C:	Moderate
Option D:	1000C
Q8.	Artificial fuels are mainly prepared from _____
Option A:	petrol
Option B:	peat
Option C:	coal
Option D:	natural gas
Q9.	To calculate the net calorific value, the products are _____
Option A:	cooled
Option B:	allowed to escape
Option C:	heated
Option D:	collected
Q10.	In determination of % of C and H, the coal is burnt in the stream of _____
Option A:	pure sulphur
Option B:	pure nitrogen
Option C:	pure alcohol
Option D:	pure oxygen
Q11.	Find the % of C from following data: % of moisture:10g % of volatile matter:9.5g % of ash:11.6g
Option A:	68.9g
Option B:	62.1g
Option C:	63.1g
Option D:	70.8g
Q12.	Weight of the coal is 2g and after heating the coal sample, the weight of the coal is 1.82g. What is the % of the moisture in coal?
Option A:	20%
Option B:	9%
Option C:	10%
Option D:	30%
Q13.	If there is more oxygen content in fuel, then the calorific value of the fuel is _____
Option A:	high
Option B:	low
Option C:	moderate
Option D:	very high
Q14.	Wood's metal contains _____ composition in %.
Option A:	Bi=50% Pb=25% Sn=12.5% Cd=12.5%
Option B:	Bi=25% Pb=50% Sn=12.5% Cd=12.5%

Option C:	Bi=12.5% Pb=12.5% Sn=50% Cd=25%
Option D:	Bi=50% Pb=15% Sn=13.5% Cd=13.5%
Q15.	Metal bonded diamond & cutting tools is manufacture by _____
Option A:	Hot compression
Option B:	Cold pressing
Option C:	PIM
Option D:	Axial or isostatic pressing
Q16.	Al-clad is _____
Option A:	Duralumin sandwiched between 99.5% Al
Option B:	Al sandwiched between 99.5% Duralumin
Option C:	Magnalumin sandwiched between 99.5% Al
Option D:	Al sandwiched between 99.5% Magnalumin
Q17.	Which one of the following elements is not present in stainless steel?
Option A:	Iron
Option B:	Tungsten
Option C:	Chromium
Option D:	Nickel
Q18.	Composite materials are classified based on:
Option A:	Type of matrix
Option B:	Size-and-shape of reinforcement
Option C:	Both
Option D:	None
Q19.	Major load carrier in dispersion-strengthened composites
Option A:	Matrix
Option B:	Fiber
Option C:	Both
Option D:	Can't define
Q20.	Usually stronger constituent of a composite is
Option A:	Matrix
Option B:	Reinforcement
Option C:	Both are of equal strength
Option D:	Can't define
Q21.	The following material can be used for filling in sandwich structures
Option A:	Polymers
Option B:	Cement
Option C:	Wood
Option D:	All
Q22.	Green chemistry applies across the _____ of a chemical product like design, manufacture, and use.
Option A:	Life cycle

Option B:	Properties
Option C:	Uses
Option D:	Efficiency
Q23.	_____ + CH ₃ NH ₂ → CH ₃ CH ₂ CONHCH ₃ + CH ₃ CH ₂ OH
Option A:	CH₃ CH₂COC₂H₅
Option B:	CH ₃ CH ₂ NHC ₂ H ₅
Option C:	CH ₃ COC ₂ H ₅
Option D:	CH ₃ CO CH ₃
Q24.	Green chemistry improves _____ of chemical manufacturers.
Option A:	Competitiveness
Option B:	Easiness of production
Option C:	Services
Option D:	Chemicals
Q25.	According to the green chemistry, the chemical involved in the production must be _____
Option A:	Nontoxic
Option B:	Toxic
Option C:	Highly toxic
Option D:	Produces the toxic by products