Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE SEMESTER- Ist /IInd (SPFU)• REMEDIAL EXAMINATION – SUMMER-2015

Subject Code: BSC001 **Date:10/06/2015**

Subject Name: Chemistry

Time: 10.30AM-01.00PM **Total Marks: 70**

Instructions:

1. **Question paper is divided in two sections: objective section and subjective section.**
2. **Attempt both the sections.**
3. **Make suitable assumptions wherever necessary.**
4. **Figures to the right indicate full marks.**

SECTION (I) OBJECTIVE SECTION[Q.1 to Q.25(Marks=1 each),Q.26 toQ.30(Marks=2 each)]
Time:60 mins. Total Marks:35

1	Iron corrodes faster in_____			
	A	distilled water	B	soft water
	C	hard water	D	demineralised water
2	Galvanizing is a method of _____			
	A	coating tin on zinc	B	coating zinc on tin
	C	coating iron on zinc	D	coating zinc on iron
3	Corrosion is a _____ process.			
	A	Oxidation	B	Reduction
	C	Redox	D	None of these
4	Corrosion of iron is also known as_____			
	A	Rusting of iron	B	Decay of iron
	C	Coating of iron	D	All of these
5	Dry corrosion is also known as_____ corrosion.			
	A	Biological	B	Bacterial

	C	Physical	D	Chemical
6	_____ undergo corrosion.			
	A	Wood	B	Glass
	C	Metal	D	None
7	Starch is a_____ Polymer.			
	A	Natural	B	Synthetic
	C	Semi synthetic	D	elastomer
8	Addition of_____ gives strength and rigidity to rubber.			
	A	S	B	N
	C	O	D	C
9	Polythene is formed by _____			
	A	Phenol	B	Aniline
	C	Ethylene	D	None

10	monomer of PVC is			
	A	Ethylene	B	vinyl chloride
	C	vinyl cyanide	D	acetic acid
11	Polymer that soften on heating and stiffen on cooling is known as			
	A	Thermosetting	B	Thermoplastic
	C	Fibre	D	Elastomer
12	Higher is the percentage of_____ more is the calorific value.			
	A	ash content	B	carbon content
	C	moisture content	D	non volatile matter content
13	_____is secondary fuel.			
	A	Coal	B	CNG
	C	wood	D	crude petroleum
14	Ideal fuel has ____ moisture content.			
	A	Low	B	High
	C	Moderate	D	None of these
15	Ideal fuel has ____ Ignition temperature.			
	A	Low	B	High
	C	moderate	D	Zero
16	A good fuel should possess_____			
	A	very low ignition temperature	B	high moisture content
	C	high calorific value	D	all of these
17	Dehydration means_____			
	A	Addition of water	B	Removal of water
	C	Addition of air	D	Removal of air

18	Souring of milk is due to_____			
	A	Purification	B	Condensation
	C	Fermentation	D	Distillation
19	_____ temperature is favoured for the process of fermentation.			
	A	Very high	B	Very low
	C	Room	D	Any one of these
20	Enzyme activity is _____			
	A	Random	B	Organized
	C	Non specific	D	Very specific
21	Distillation is the process of purification of _____ compounds.			
	A	Solid	B	Gaseous
	C	Liquid	D	None of these
22	6-10% 0f acetic acid solution is called_____			
	A	Alcohol	B	Vinegar
	C	Ester	D	Aldehyde
23	Enzymes are _____ to temperature.			
	A	Sensitive	B	Non sensitive
	C	Hard	D	Soft
24	_____ is renewable source of energy.			
	A	petrol	B	Diesel
	C	bio ethanol	D	Coal
25	Mantra of 3R's is very important according to green chemistry. The 3R's are:			
	A	reduce, recycle and reuse	B	reaction, reagent and resource
	C	reactant, reuse and resource	D	any of these

26	Which of the following is not the principle of green chemistry?			
	A	waste prevention	B	atom economy
	C	safer products	D	excess use of solvent
27	_____ or VOCs, have been replaced and were banned in some paints?			
	A	Versatile Organic Chemicals	B	Versatile Odourless Components
	C	Volatile Organic Compounds	D	Volatile Odourless Components
28	The analytical methods which measure mass are known as			
	A	gravimetric methods	B	volumetric method
	C	Polarimetry	D	Titrimetry
29	Which of the following process gives demineralised water?			
	A	Zeolite process	B	ion exchange process
	C	lime soda process	D	all of these
30	1 mg/liter =_____ ppm			
	A	10	B	2
	C	1	D	100

SECTION (II) SUBJECTIVE SECTION [Attempt any five, Each question carries 07 marks]

Time:90 mins. Total marks:35

Q.1 Explain corrosion in detail.

Q.2 Discuss disadvantages of hardness in water.

Q.3 Give classification of fuel with examples.

Q.4 Give differences between Thermoplastic & Thermosetting polymer.

Q.5 Write a note on Fermentation.

Q.6 Differentiate between (i) Dry & wet corrosion.
(ii) Liquid fuel & solid fuel.

Q.7 What do you mean by Green chemistry? Explain role of reagents & solvents in green synthesis.