

**FE/F.Y.B.Tech. (All Branches) (Part-I) (Sem-I&II) Oct./Nov. 2021 Examination**  
**ENGINEERING CHEMISTRY (CBCS)**  
**Sub. Code: 72507/71817/59939**

**Day and Date: Tuesday, 22-03-2022**

**Total Marks: 50**

**Time: 02.00 pm to 03.00 pm**

### Answer Key

		Correct Option	
Q. 1)	What is Total hardness of water sample containing $\text{Ca}(\text{HCO}_3)_2=81\text{ppm}$ $\text{MgCO}_3=73\text{ppm}, \text{CaCl}_2=55.5\text{ppm}, \text{MgCl}_2=47.5\text{ppm}$	D	
	A)57.54ppm		B)58.11ppm
	C)60.20ppm		D)200ppm
Q. 2)	Precipitate formed inside the boiler is hard adherent coating it is known as	A	
	A) Scale		B) Foaming
	C) Sludge		D) Priming
Q.3)	The goal of Green Chemistry is to design process which result in.....of raw material so that it gets maximum desire product.	C	
	A)Minimum utilization		B) low utilization
	C) Maximum utilization		D) All of the above
Q. 4)	What is Non carbonate hardness of water sample containing $\text{Ca}(\text{HCO}_3)_2=41\text{ppm}$ $\text{MgCO}_3=44\text{ppm}, \text{CaCl}_2=27\text{ppm}, \text{CaSO}_4=26\text{ppm}.$	A	
	A)43.44ppm		B)125 ppm
	C)45.11ppm		D)200ppm
Q. 5)	Addition of 1% Carbon to Iron increases strength of Iron by	A	
	A) 10 times greater		B) 15 times greater
	C) 10 times less		D) None of the above
Q. 6)	Single beam spectrophotometer measures	C	
	A)absorbance		B)radiation
	C)light intensity		D)none of the above
Q. 7)	Styrene butadiene rubber is formed by .....	B	
	A)condensation polymerization		B)co-polymerization
	C) addition polymerization		D)None of these
Q. 8)	Paper chromatography is.....type of chromatography	B	
	A)solid-liquid		B)liquid-liquid
	C)solid - gas		D)Gas-liquid
Q. 9)	.....is the alloy of Aluminium	D	
	A)Nichrome		B)Iron

	C) Bronze	D) Duralumin	
Q. 10)	.....is the unit of hardness.		B
	A) Cal/gm	B) Clark degree	
	C) K cal/m <sup>3</sup>	D) British Thermal Unit.	
			Correct Option
Q. 11)	Thermo-softening plastics have following type of structure		D
	A) 2D	B) 3D	
	C) 2D & 3D	D) Linear	
Q. 12)	Styrene butadiene rubber is formed by .....		B
	A) condensation polymerization	B) co-polymerization	
	C) addition polymerization	D) none of the above	
Q.13)	Calorific Value of solid fuel is .....		C
	A) Highest	B) Medium	
	C) Lowest	D) None of these	
Q. 14)	The example of thermosetting plastic is...		B
	A) Polyethylene	B) Bakelite	
	C) Epoxy Resin	D) Polystyrene	
Q. 15)	Calorific Value of solid fuel is .....		C
	A) Highest	B) Medium	
	C) Lowest	D) None of these	
Q. 16)	Gross calorific value is measured by		A
	A) Collecting condensate	B) Allowing to escape water vapour	
	C) Cooling fuels	D) Mixing Fuel	
Q. 17)	The high carbon steel is used in making		A
	A) cutting tools	B) roofing sheets	
	C) structures	D) fans	
Q. 18)	Specific gravity of solid fuel is .....		A
	A) Highest	B) Medium	
	C) Lowest	D) None of these	
Q.19)	Green chemistry is called as ....		C
	A) Organic chemistry	B) Inorganic Chemistry	
	C) Sustainable Chemistry	D) None of the above	
Q. 20)	.....is the non ferrous alloy of copper with zinc		B
	A) Nichrome	B) Brasses	
	C) Bronze	D) Alnico	
			Correct Option
Q. 21)	The Hardness of water sample determined by.....method		A
	A) titration	B) chromatography	
	C) spectrophotometry	D) gravimetric	
Q. 22)	Corrosion occurs always at .....		B
	A) Cathode	B) Anode	
	C) Electrode	D) None of these	
Q.23)	The electrolyte used during electroplating is		B
	A) salt solution	B) salt solution of coating metal	

	C)water	D)acid	
Q. 24)	French degree is the unit of		C
	A) Total solids	B) Acidity	
	C) Hardness	D) Water	
Q. 25)	Absorption of O <sub>2</sub> mechanism is the type of		B
	A)atmospheric corrosion	B)immersed corrosion	
	C)oxidation corrosion	D)erosion	