

~~MECH~~ AVENGER\$

Chemistry - II

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1. _____ temperature is maintained in drying zone during the manufacture of portland cement by rotary kiln : $\rightarrow 400^{\circ}\text{C}$
2. Calcining the argillaceous material alone produces : \rightarrow Natural cement
3. Oldest cement is _____ : \rightarrow Pozzulana cement
4. Blast furnace slag and hydrated lime gives _____ : \rightarrow Slag cement
5. Hydration of lime is called : \rightarrow Slaking
6. Lime sets in atmosphere to form : $\rightarrow \text{CaCO}_3$
7. Lime contains : $\rightarrow \text{CaO}$ @Examsadda.com
8. Which of the following country is the second largest producer of cement after China : \rightarrow India
9. Non hydraulic cement gains strength by absorption of _____ gas from atmosphere : $\rightarrow \text{CO}_2$
10. Lime can be prepared by heating : $\rightarrow \text{CaCO}_3$
11. Efflorescence to cement can be obtained by _____ : \rightarrow Alkali
12. Gypsum is added to cement in order reduce : \rightarrow Setting time
13. The heat of hydration of different constituents of port land cement follows _____ order : $\rightarrow \text{C}_3\text{A} > \text{C}_3\text{S} > \text{C}_4\text{AF} > \text{C}_2\text{S}$
14. Which of the following constituent releases high amount of energy on hydration : $\rightarrow \text{C}_3\text{A}$
15. Alumina in cement is used for : \rightarrow Quick setting
16. Soundness to the cement can be given by _____ : $\rightarrow \text{SO}_3$
17. Mixing and grinding of volcanic ash produces _____ : \rightarrow Pozzulana cement
18. Cement formed from calcareous and argillaceous materials _____ : \rightarrow Portland cement
19. Calcareous materials mainly contain _____ : $\rightarrow \text{CaO}$
20. Argillaceous materials contains _____ : \rightarrow Clay
21. Soundness of the cement is determined by : \rightarrow Le-chatlier method
22. Any material which can with stand high temperature without softening is called : \rightarrow Refractory
23. Thermal spalling of refractories can be reduced by : \rightarrow Avoiding sudden temperature changes
24. The main objective of refractory is : \rightarrow Withstand heat
25. Raw materials for manufacture of cement are _____ : \rightarrow Lime + Silica + Alumina
26. Slag cement is prepared from the slag of : \rightarrow Blast furnace
27. Initial flash set of cement is due to : \rightarrow Hydration of C_3A
28. With cement gypsum forms : \rightarrow Calcium sulpho aluminate
29. Of the general constituents present in white cement _____ is present to less than 0.5% : $\rightarrow \text{Fe}$
30. Water proof cement contain : \rightarrow Stearates
31. Which of the following is a non oxide refractory : \rightarrow Borides
32. Porosity of the refractory brick increases its _____ : \rightarrow Resistance to thermal spalling
33. High resistance to spalling is shown by _____ : \rightarrow Magnesite
34. Breaking of a refractory material under high temperature is called _____ : \rightarrow Spalling
35. A good refractory : \rightarrow Should have low electrical conductivity at high temperature
36. Peeling off of refractory is called : \rightarrow Spalling
37. Which of the following is an acidic refractory? : $\rightarrow \text{SiO}_2$
38. Which of the following is a basic refractory? : $\rightarrow \text{CaO}$
39. Which of the following is a neutral refractory? : \rightarrow Graphite
40. Pyrometric cone test is done for : \rightarrow Refractoriness
41. Which of the following ceramic material is used in liquid crystal calculator displays : \rightarrow Indium tin oxide
42. Which of the following possesses good strength, translucency and very low porosity? : \rightarrow White ware
43. Which of the following ceramic materials is good conductor of heat? : \rightarrow Cubic boran nitride
44. Which of the following ceramic materials works as a semi conductor at high temperature? : $\rightarrow \text{SiC}$
45. Ceramics obtained from China clay, feldspar, and flint are known as _____ : \rightarrow White ware
46. Clay mainly contains? : \rightarrow Silica and alumina @Examsadda.com
47. Spalling can be avoided by : \rightarrow Rapid change in temperature
48. Inorganic, non metallic materials that are processed and used at high temperature are called : \rightarrow Ceramics
49. Glass like materials used for wide range application to offer surface protection are called : \rightarrow Ceramics
50. Alumina content is minimum in _____ : \rightarrow secondary clay
51. The galvanic corrosion can not be minimized by : \rightarrow Introducing the acidic medium
52. In galvanization process, the metal used for coating iron is _____ : \rightarrow Zinc
53. Metals at the top of galvanic series are most : \rightarrow Reactive
54. During galvanic corrosion, the more noble metal acts as : \rightarrow A cathode
55. Volume of the oxide film should be larger than the volume of the metal. It is : \rightarrow Pilling Bedworth rule
56. Porous oxide film is formed by : $\rightarrow \text{Na}$
57. If the volume of metal oxide layer is less than the volume of metal consumed, then the layer is called : \rightarrow Porous oxide film
58. A stable oxide film is : \rightarrow Homogeneous and highly adhering oxide
59. The passivity of the metal in the environment is due to the formation of _____ film oxide : \rightarrow stable
60. Which of the following metals forms porous oxide films? : \rightarrow s-block elements
61. Which of the following is a dangerous form of corrosion and difficult to monitor? : \rightarrow Pitting
62. Chemical corrosion always takes place at : \rightarrow Anodic areas
63. The corrosion that occurs along grain boundaries is : \rightarrow Intergranular
64. In water line corrosion, the anode is : \rightarrow Just below the waterline
65. The corrosion that takes place due to varying oxygen concentration is _____ corrosion : \rightarrow Differential aeration

66. Caustic embrittlement is a type of _____ corrosion: \rightarrow Wet
67. The deterioration of materials caused directly or indirectly by microbes is _____ corrosion: \rightarrow Microbiological
68. When a metal is bent and exposed in a corrosive environment, the corrosion that takes place is _____ corrosion: \rightarrow Stress
69. Season cracking is a type of _____ corrosion: \rightarrow Stress
70. Differential aeration corrosion is one form of _____ corrosion: \rightarrow Concentration cell
71. Spirit varnish is easily dried due to _____ of solvent: \rightarrow Low B.P.
72. Which of the following is laminar pigment? \rightarrow Mica
73. Pigment varnish is known as: \rightarrow Enamels
74. Which of the following is opaque pigment: \rightarrow Carbon black
75. Corrosion can be prevented by using: \rightarrow Pure metal
76. The component in paint that forms the continuous film is: \rightarrow Binders
77. Which of the following is not a method for controlling corrosion is: \rightarrow Introduction of active gases in atmosphere
78. Which of the following is not a case of metallic coating? \rightarrow Phosphate coating
79. Immersion plating is also called as: \rightarrow Electroless plating
80. Which one of the following features promotes corrosion least? \rightarrow Thickness of the metal or alloy used
81. Iron does not rust when exposed to: \rightarrow Wet air
82. Which of the following metals does not under go oxidative corrosion at high temperature? \rightarrow Ag
83. Which of the following metals forms volatile film oxide? \rightarrow Mo
84. When two dissimilar metals are electrically connected and exposed to some electrolyte, then the corrosion that takes place is called _____ corrosion: \rightarrow Galvanic
85. Stainless is corrosion resistant because of the presence of _____: \rightarrow Cr
86. Rusting of iron is catalyzed more readily by: \rightarrow H^+
87. Stable oxide film is present in: \rightarrow Al
88. Zinc chromate is _____ pigment: \rightarrow Metallic
89. Rusting of iron is not prevented: \rightarrow By enhanced by wet air
90. Passivity is not the reason for inertness of the following: \rightarrow Al
91. Following is not the main form of polymer deterioration: \rightarrow Corrosion
92. Corrosion is an example of: \rightarrow Oxidation
93. Non-uniform corrosion takes place in: \rightarrow Wet corrosion
94. If the corroding medium is conducting, then the corrosion be: \rightarrow More
95. Which of the following is used to remove O_2 from medium? \rightarrow Na_2SO_3
96. Passivity is due to: \rightarrow Oxide film
97. At low pH values, \rightarrow Absorption of H_2 takes place
98. At high pH values, \rightarrow Absorption of O_2 takes place
99. Which of the following is anodic inhibitor? \rightarrow Molybdates
100. Which of the following is cathodic inhibitor? \rightarrow Substituted urea
101. In which process low ash coal is used as a starting material for the synthesis of petrol: \rightarrow Bergius
102. Catalyst in Bergius process is: \rightarrow Nickel oleate
103. Octane number of n-hexa decane is: \rightarrow 0
104. Octane number of 2, 2, 3-trimethyl pentane is: \rightarrow 100
105. In which method, water gas is used for the preparation of petrol: \rightarrow Fischer-Tropsch
106. Which of the following theories can not explain the origin of petroleum? \rightarrow Arrhenius theory
107. Petrol gas is a mixture of _____: \rightarrow Air and petrol vapour
108. Crude oil is a: \rightarrow Primary fuel
109. Petrol is a: \rightarrow Secondary fuel
110. Petroleum mainly contains: \rightarrow Hydrocarbons
111. Octane number of n-heptane: \rightarrow 0
112. _____ is added to gasoline to prevent deposition of lead in the engine: \rightarrow Ethylene dibromide
113. Anti knocking compounds are added to gasoline to increase its _____: \rightarrow Octane number
114. Knocking order of various hydrocarbons is _____: \rightarrow Straight chain hydrocarbons > branched chain hydrocarbons > olefins > aromatic compounds
115. Cetane number of 2-methyl naphthalene: \rightarrow 0
116. Cetane number of n-hexadecane: \rightarrow 100
117. Tetra ethyl lead is: \rightarrow Anti knock for petrol
118. Octane number indicates the antiknock efficiency of: \rightarrow Petrol
119. Cetane number indicates the antiknock efficiency of: \rightarrow Diesel
120. Cetane is: \rightarrow n-hexadecane
121. Main function of a lubricant is: \rightarrow To reduce friction
122. Which of the following is true regarding lubricant? \rightarrow It reduces surface deformation
123. Hydrodynamic lubrication is also called as: \rightarrow Thick film lubrication
124. The thickness of the film in thick film lubrication is about: \rightarrow 1000 \AA
125. In catalytic cracking method _____ is used as catalyst: \rightarrow Aluminium silicate
126. Which of the following is not used as anti knocking agent? \rightarrow Graphite
127. The concept of octane number was developed in _____ year: \rightarrow 1927
128. Cetane number of diesel fuel can be improved by adding small quantity of _____: \rightarrow Ethyl nitrate
129. The temperature used in Fischer-Tropsch process for the production of synthetic petrol: \rightarrow $200-300^\circ\text{C}$

130. In liquid phase thermal cracking the cracking of heavy oil is carried out at a temperature of :>475-530°C
131. Lubricant molecule for boundary lubrication should have:>Polar groups
132. Which of the following are extreme pressure additives?>Tricresyl phosphate
133. Which of the following lubricants can persist under drastic conditions?>Lubrication with extreme pressure additives
134. Four ball extreme pressure test is for _____ of lubricant:>Mechanical stability
135. Boundary lubrication takes place when:>Shaft moves often from rest
136. A lubricating oil having high molecular weight possesses:>High viscosity, high boiling point
137. The lubrication in delicate instruments is generally _____ lubrication:>Thick film
138. Which of the following is added to mineral oils to increase its oiliness for lubrication. :>Stearic acid
139. Which of the following is suitable for thick film lubrication?>Hydrocarbon oils
140. Boundary lubrication is also called as:>Thin film lubrication
141. Which type of molecules have good Viscosity index:>High molecular weight
142. A good lubricant should have:>High flash point @Examsadda.com
143. Percentage of Asphalt in lubricants can be known from:>precipitation
144. Which of the following is not used as lubricant? :>Diamond
145. Oil dag is:>Graphite + oil
146. The minimum equilibrium solution temperature for a equal volumes of aniline and oil sample is called as _____ point :>Aniline
147. Cup-greases are also called as:>Calcium based greases
148. Graphite acts as a lubricant due to:>Layered structure
149. Molybdenum sulphide acts as a lubricant due to:>Sandwich like structure
150. Which of the following oil is not saponifiable?>Mineral oils
151. Which of the following is NOT related to Green Chemistry?>Deforestation
152. Expand EPA? :>Environmental Protection Agency
153. World Earth Day is celebrated on _____ of April every year:>22
154. Environmental Protection Agency is formed in the year _____:>1970
155. Which of the following branches of chemists plays a key role to develop Green Chemistry? :>Synthetic chemists
156. Risk associated with toxic waste effluents is a function of _____ :>Hazard, Exposure
157. Bhopal gas tragedy happened in December of _____ :>1984
158. Poisonous gas released from union carbide plant is:>Methyl Isocyanate
159. The publication of the book _____ by Rachel Carson led to public outcry for regulating pesticides. :>silent spring
160. The key challenge of the millennium is :>To combine the technological progress with environmental safety.
161. Which of the following is NOT the postulate of principles of Green Chemistry?>Better to clean up waste after it is formed
162. The best form of avoiding waste is :>Not to create waste in the first place
163. Pick out the main concept involved in principles of green chemistry:>Use of safe environment benign substances
164. The Knoevenagel reaction is _____ reaction:>Condensation
165. The principles of Green Chemistry were proposed by:>Paul T Anastas and John Warner
166. Paul T Anastas and John Warner proposed _____ principles of Green Chemistry?>12
167. Which of the following is NOT an environmental problem?>Biological pesticides
168. Which of the following DOES NOT come under program to protect human health and Environment? :>Use of stoichiometric reagents rather than catalysts
169. Which of the following is NOT one of the main objectives of Green Chemistry?>Less processing cost and more yield
170. The pollution caused by chemical process is mainly due to the effects of :>by products
171. In heterogeneous alkaline aqueous phase, salicylaldehyde reacts with malonitrile under room temperature to give _____ hydroxy benzylidenemalonitrile :>Ortho
172. The condensation of substituted acetonitrile with salicylaldehyde requires presence of catalytic amount of _____ :>CTABr
173. Solvent extraction process which does NOT cause pollution of land, air and water is :>super critical fluid extraction
174. The transducers used for producing ultrasounds work on _____ effect:> piezo electric
175. Condensation of an aromatic aldehyde with active methylene compounds in presence of _____ is known as Knoevenagel reaction. :>weak base @Examsadda.com
176. Dobner modification of Knoevenagel reaction is a condensation reaction carried out in presence of _____ as a base :>pyridine
177. Which of the following is NOT the characteristic of eco friendly reactions?>organic solvent reactions
178. Which of the following is NOT an appropriate solvent character for green synthesis?>combining with other constituents
179. To avoid the organic solvents the best alternative for green chemists is to use a method involving _____ phase. :>aqueous
180. Which of the following is NOT an advantage when water is used as a solvent?> low specific heat resistance
181. Most of the antibiotics have been prepared using _____ :>enzyme fermentation
182. Enzymatic conversion of ethanol to acetic acid is _____ step process? :>2
183. Ligases are enzymes which can catalyze formation and cleavage of _____ hybridized carbons:>sp3
184. Lyases are enzymes that can catalyze addition to _____ bonded atoms:>double
185. Which of the following properties is NOT exhibited by super critical fluids?>Difficult to separate
186. Which of the following is the most commonly used super critical fluid?>CO₂
187. Super critical fluid is _____ :>combination of gas and liquid
188. Which of the following is the way to produce super critical fluid?>Heating the gas above its critical temperature
189. How many phases can exist in super critical fluids?>1
190. Which of the following liquid property is exhibited by super critical fluids?>solubility
191. Bio catalysis is _____ catalysis:>Simple and heterogeneous
192. Progestrone can be converted to _____ -hydroxy progesterone by micro organism such as Aspergillus Ochractus. :>11 α
193. Which of the following is NOT correct?>Non polar molecules are inert to microwaves.

194. Which of the following is a limitation for microwave induced methods?:->boiling points of solvents are reached in shorter time
195. What is the phase transfer catalyst suitable for reaction between aqueous sodium cyanide and ethereal 1-bromo octane? :-
>Phosphonium salts.
196. Select the advantages of bio catalytic conversion:->Protection and deprotection of functional groups is necessary.
197. Phase transfer catalyst :->Is used to solubilize salts which are insoluble in organic phase.
198. The main function of phase transfer catalyst is to transfer the _____ from reagent in _____ Phase to substrate in _____ phase. :-
>Anion, aqueous, organic
199. Which of the following is NOT the characteristic of phase transfer catalysis?:->Can achieve slow reactions
200. Which of the following is NOT a phase transfer catalyst?:->Benzyl di ethyl ammonium bromide

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