

Shivaji University, Kolhapur
Summer Examination 2020

Course Name : 65831-Chemistry Paper XIV

Subject Name : (65831)Chemistry Paper XIV

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Date : 31/10/2020

Time : 11:00AM - 12:00PM

Paper Code :

65831

Max. Marks :

50

महत्वाची सूचना : विद्यार्थ्यांनी 30 पैकी 25 प्रश्न सोडवावेत (प्रत्येकी 2 मार्कस) अथवा 60 पैकी 50 प्रश्न सोडवावेत (प्रत्येकी 1 मार्क)

Q.1

According to Taube, complexes which undergo rapid substitution of ligands within 1 minute at 25 degree celsius is called

- (1)stable (3)inert
(2)unstable (4)labile

Q.2

The stability which deals with metal-ligand bond energies is called as-----

- (1)thermodynamic stability (3)kinetic stability
(2)resonance stability (4)thermodynamic or resonance stability

Q.3

Present position of actinides is in -----group andperiod of the periodic table.

- (1)3,4 (3)4,7
(2)3,7 (4)3,6

Q.4

..... is the purest form of iron.

- (1)wrought iron (3)steel
(2)pig iron (4)cast iron

Q.5

Deoxyhemoglobin has.....geometry in high spin state.

- (1)octahedral (3)square planar
(2)tetrahedral (4)square pyramidal

Q.6

The rate of the reaction depends on the concentration of one species then the mechanism is called as -----

- (1)SN1 (3)dissociation mechanism
(2)SN2 (4)SN1 or SN2

Q.7

In the thermodynamic sense complexes are called as-----

- (1)inert and labile (3)inert and unstable
(2)labile and unstable (4)stable and unstable

Q.8

Highest oxidation state in actinides is -----

- (1)+6 (3)+4
(2)+7 (4)+3

Q.9

Most important ore of iron is -----

- (1)haematite
- (2)limonite
- (3)siderite
- (4)limestone

Q.10

There areheme groups in hemoglobin

- (1)2
- (2)3
- (3)4
- (4)1

Q.11

Tetrammine platinum (II) ion on treatment with chloride ion gives a product of a complex Triammine dichloro Platinum (II).It is a --- isomer.

- (1)cis
- (2)trans
- (3)cis or trans
- (4)mixture of cis and trans

Q.12

All actinides including Actinium have atomic numbers from ----- .

- (1)89-103
- (2)90-103
- (3)92-103
- (4)92-104

Q.13

IUPAC name of element having atomic number 198 is

- (1)un-oct-enium
- (2)un-en-octium
- (3)oct-en-unium
- (4)un-oct-octium

Q.14

----- ore is called ferrosferric oxide.

- (1)haematite
- (2)limonite
- (3)Magnetite
- (4)Siderite

Q.15

Sodium pump transportions into cell

- (1)Na
- (2)K
- (3)Ca
- (4)Mg

Q.16

Intermediate formed in bimolecular nucleophilic substitution mechanism hasgeometry

- (1)octahedral
- (2)octahedral wedge
- (3)square planar
- (4)square pyramidal

Q.17

The complexes from which ligand present in co-ordination sphere can be easily replaced by another ligand are called as -----complexes.

- (1)labile
- (2)inert
- (3)stable
- (4)unstable

Q.18

In nuclear reactor graphite is used as -----

- (1)catalyst
- (2)moderator
- (3)coolant
- (4)fuel

Q.19

The principle of atom bomb is -----

- (1)nuclear fission
- (2)natural radioactivity
- (3)uncontrolled fission and chain reaction
- (4)controlled fission chain reaction

Q.20
Zone of heat absorption has temperature range -----

- (1) 300-800 degree celcius
- (2) 800-1200 degree celcius
- (3) 1200-1500 degree celcius
- (4) 1500-1800 degree celcius

Q.21
The function of haemoglobin is to

- (1) store Oxygen
- (2) transport oxygen
- (3) transport nitrogen
- (4) store nitrogen

Q.22
In some reactions , central metal ion is replaced by other metal ion is known as _____.

- (1) electrophilic substitution
- (2) nucleophilic substitution
- (3) both a and b
- (4) none of these

Q.23
The co-ordination number of intermediate in , unimolecular nucleophilic substitution mechanism is

- (1) 4
- (2) 6
- (3) 7
- (4) 5

Q.24
Which one of the following is fissile mass _____.

- (1) U-238
- (2) Th-231
- (3) Pu-239
- (4) C-14

Q.25
In age determination by tracer technique the isotope used is _____.

- (1) C-14
- (2) P-31
- (3) N-14
- (4) O-16

Q.26
Chief product of blast furnace is ----

- (1) slag
- (2) cementite
- (3) flue gases
- (4) pig iron

Q.27
Iron becomes impure in the zone of _____.

- (1) fusion
- (2) reduction
- (3) heat absorption
- (4) molten

Q.28
_____ is central metal ion of chlorophyll pigment .

- (1) Na
- (2) Ca
- (3) Mg
- (4) Fe

Q.29
Actinides have _____ incomplete outermost shells.

- (1) three
- (2) five
- (3) two
- (4) four

Q.30
The process of heating steel to bright red hot and then cooling it slowly in air is known

- (1) annealing
- (2) hardening
- (3) tempering
- (4) nitriding