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9/16/2020

# National Testing Agency

Yes

Yes

Question Paper Name :Online Refresher Course in Cher Faculty 15th Sep 2020 Shift 2Subject Name :Online Refresher Course in Cher FacultyCreation Date :2020-09-15 21:02:52Duration :180Total Marks :100Display Marks:Yes

# Online Refresher Course in Chemistry for Higher Education

**Group Number:** Group Id: 89951430 0 **Group Maximum Duration: Group Minimum Duration:** 120 **Show Attended Group?:** No **Edit Attended Group?:** No **Break time:** 0 **Group Marks:** 100 Is this Group for Examiner?: No

# Online Refresher Course in Chemistry for Higher Education

Section Id: 89951430
Section Number: 1

Section type: Online



**Mandatory or Optional:** Mandatory **Number of Questions:** 100 **Number of Questions to be attempted:** 100 **Section Marks:** 100 **Display Number Panel:** Yes **Group All Questions:** Yes Mark As Answered Required?: Yes **Sub-Section Number: Sub-Section Id:** 89951443 **Question Shuffling Allowed:** Yes

**Question Number: 1 Question Id: 8995142550 Question Type: MCQ Option Shuffling: No Display Question Address**Mandatory: No Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 1 Wrong Marks: 0

Two of the three recipients, George P. Smith and Sir Gregory P. Winter were awar Nobel Prize 2018 in Chemistry

- for developing cryo-electron microscopy for the high resolution structure determination of biomolecules in solution
- For the phage display of peptides and antibodies
- c. For the design and synthesis of molecular machines
- d. For mechanistic studies of DNA Repair

### **Options:**

89951410155. 1

89951410156. 2

89951410157.3

89951410158.4

Question Number: 2 Question Id: 8995142551 Question Type: MCQ Option Shuffling: No Display Question

Mandatory: No Single Line Question Option: No Option Orientation: Vertical

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# UNESCO is celebrating the year 2019 as

- a. International year of Chemistry
- b. International year of Synthetic studies in Chemistry
- c. International year of Polymers
- d. International year of the Periodic Table of Chemical Elements

### **Options:**

89951410159.1

89951410160.2

89951410161.3

89951410162.4

Question Number: 3 Question Id: 8995142552 Question Type: MCQ Option Shuffling: No Display Quest Mandatory: No Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 1 Wrong Marks: 0

## The re-definition of the SI Base Unit - Kelvin is based on

- Speed of light
- b. Boltzmann Constant
- c. Cesium atom's natural microwave radiation
- d. Planck's Constant

#### **Options:**

89951410163.1

89951410164.2

89951410165.3

89951410166.4

Question Number: 4 Question Id: 8995142553 Question Type: MCQ Option Shuffling: No Display Question

Mandatory: No Single Line Question Option: No Option Orientation: Vertical

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The World Environment Day 2019 has the following theme.

- a. Environment Pollution
- b. Water Pollution
- c. Air Pollution
- d. Urban Pollution

## **Options:**

89951410167.1

89951410168.2

89951410169.3

89951410170.4

Question Number: 5 Question Id: 8995142554 Question Type: MCQ Option Shuffling: No Display Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 1 Wrong Marks: 0

# Sir Ernest Rutherford's atomic model was based on which experiment?

- a. Scattering of alpha rays
- b. Scattering of X-Rays
- c. Plum-pudding model
- d. Thermonuclear reactions

## **Options:**

89951410171.1

89951410172.2

89951410173.3

89951410174.4

Question Number: 6 Question Id: 8995142555 Question Type: MCQ Option Shuffling: No Display Question

Mandatory: No Single Line Question Option: No Option Orientation: Vertical

#### 9/16/2020

The element of periodic table with atomic number 104 is:

- a. Rutherfordium
- b. Ununtetrium
- c. Walton
- d. Rutherford

### **Options:**

89951410175.1

89951410176.2

89951410177.3

89951410178.4

Question Number: 7 Question Id: 8995142556 Question Type: MCQ Option Shuffling: No Display Quest Mandatory: No Single Line Question Option: No Option Orientation: Vertical

**Correct Marks: 1 Wrong Marks: 0** 

## The following chemical symbol represents



- a. Harmful nature of chemical
- b. Explosive nature of chemical
- c. Flammable when wet nature of chemical
- d. Lachrymatory nature of chemical

## **Options:**

89951410179.1

89951410180.2



89951410182.4

Question Number: 8 Question Id: 8995142557 Question Type: MCQ Option Shuffling: No Display Question

Mandatory: No Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 1 Wrong Marks: 0

The following chemical symbol represents



- a. Harmful nature of chemical
- b. Narcotic nature of chemical
- c. Low hazard nature of chemical
- d. Toxic nature of chemical

## **Options:**

89951410183.1

89951410184.2

89951410185.3

89951410186, 4

Question Number: 9 Question Id: 8995142558 Question Type: MCQ Option Shuffling: No Display Question

 ${\bf Mandatory: No\ Single\ Line\ Question\ Option: No\ Option\ Orientation: Vertical}$ 

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## MSDS stands for

- a. Material Safety Data System
- b. Material Safety Data Sheet
- c. Matter Safety Data Sheet
- d. Matter Safety Data System

## **Options:**

89951410187.1

89951410188.2

89951410189.3

89951410190.4

Question Number: 10 Question Id: 8995142559 Question Type: MCQ Option Shuffling: No Display Que Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 1 Wrong Marks: 0

# The following chemical symbol represents



- a. Carcinogenic nature of chemical
- b. Corrosive nature of chemical
- c. Narcotic nature of chemical
- d. Toxic nature of chemical

## **Options:**

89951410191.1

89951410192.2



89951410194.4

Question Number: 11 Question Id: 8995142560 Question Type: MCQ Option Shuffling: No Display Question Type: MCQ Option Shuffling: McQ Option Sh

Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 1 Wrong Marks: 0

The quantum of electromagnetic radiation is known as

- a. Electron
- b. Photon
- c. Neutron
- d. Proton

### **Options:**

89951410195.1

89951410196.2

89951410197.3

89951410198.4

Question Number: 12 Question Id: 8995142561 Question Type: MCQ Option Shuffling: No Display Que Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 1 Wrong Marks: 0

Which of the following rule/principle provides the interpretation that kinetic energy can never be zero?

- a. Pauli's principle
- b. Hund's rule
- c. Aufbau's principle
- d. Heisenberg's uncertainity principle

### **Options:**

89951410199.1

89951410200.2

89951410201.3



Question Number: 13 Question Id: 8995142562 Question Type: MCQ Option Shuffling: No Display Que

**Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical** 

Correct Marks: 1 Wrong Marks: 0

What is the unit of Hamiltonian?

- a. Kg
- b. K cal mol-1
- c. No units
- d. Same as that of energy

#### **Options:**

89951410203.1

89951410204.2

89951410205.3

89951410206.4

Question Number: 14 Question Id: 8995142563 Question Type: MCQ Option Shuffling: No Display Que Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 1 Wrong Marks: 0

Which of the following is most likely to undergo substitution by SN1 mechanism?

- a. PhCH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>Br
- b. PhCH(CH<sub>3</sub>)CH<sub>2</sub>Br
- c. PhCMe<sub>2</sub>Br
- d. PhCH<sub>2</sub>CH(Me)Br

### **Options:**

89951410207.1

89951410208.2

89951410209.3

89951410210.4

Question Number: 15 Question Id: 8995142564 Question Type: MCQ Option Shuffling: No Display Que

**Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0** 

A solution of conc. alcoholic KOH will preferentially promote which of the follow reactions in 2-bromohexane?

- a. Substitution
- b. Elimination
- c. Addition
- d. Ionization

## **Options:**

89951410211. 1 89951410212. 2 89951410213. 3

89951410214.4

Question Number: 16 Question Id: 8995142565 Question Type: MCQ Option Shuffling: No Display Que Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 1 Wrong Marks: 0

What should one do in case of irritation in eyes while working in laboratory?

- a. Wash with water and apply Savlon
- b. Wash with water and apply Chloromycetin capsules and consult doctor
- c. Wash with water and cover with cloth
- d. Wash with water, close eye and apply pressure

## **Options:**

89951410215.1

89951410216.2

89951410217.3

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Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical **Correct Marks: 1 Wrong Marks: 0** 

If someone has accidently swallowed an acidic poison, he/she can be provided first aid by giving:

- a. plenty of water to drink followed by milk of magnesia or antacid
- b. plenty of water followed by lemon juice to drink
- c. plenty of water followed by 1 % acetic acid to drink
- d. plenty of water followed by dilute NaOH to drink

#### **Options:**

89951410219.1

89951410220.2

89951410221.3

89951410222.4

Question Number: 18 Question Id: 8995142567 Question Type: MCQ Option Shuffling: No Display Que Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 1 Wrong Marks: 0

Select the one which is not a component of universal antidote for treating any pois ingestion?

- Common salt
- b. Active charcoal
- c. Tannic acid
- d. Magnesium oxide

#### **Options:**

89951410223.1

89951410224. 2

89951410225.3



Question Number: 19 Question Id: 8995142568 Question Type: MCQ Option Shuffling: No Display Que Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 1 Wrong Marks: 0

Which of the following practices must not be followed in case of poisonous gas inhalation?

- a. Move victim to open space
- b. Tighten clothing at the neck
- c. Do not crowd around the victim
- d. Inhale dilute vapors of ammonia

## **Options:**

89951410227.1

89951410228.2

89951410229.3

89951410230.4

**Question Number : 20 Question Id : 8995142569 Question Type : MCQ Option Shuffling : No Display Que Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical** 

Correct Marks: 1 Wrong Marks: 0

# The number of terms in the Hamiltonian for methane is

- a. 5
- b. 50
- c. 120
- d. 1

## **Options:**

89951410231.1

89951410232.2

89951410233.3



**Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical** Correct Marks: 1 Wrong Marks: 0

The Laplacian operator is represented as

a. 
$$\left(\frac{\partial^2}{\partial x^2} + \frac{\partial^2}{\partial y^2} + \frac{\partial^2}{\partial z^2}\right) = \nabla^2$$

b. 
$$\left(\frac{\partial^2}{\partial x^2} + \frac{\partial^2}{\partial y^2} + \frac{\partial^2}{\partial xy^2}\right) = \nabla^2$$
  
c.  $\left(\frac{\partial^2}{\partial x^2} + \frac{\partial^2}{\partial xy^2} + \frac{\partial^2}{\partial z^2}\right) = \nabla^2$ 

c. 
$$\left(\frac{\partial^2}{\partial x^2} + \frac{\partial^2}{\partial xy^2} + \frac{\partial^2}{\partial z^2}\right) = \nabla^2$$

d. 
$$\left(\frac{\partial^2}{\partial x^2} + \frac{\partial^2}{\partial y^2} + \frac{\partial^2}{\partial yz^2}\right) = \nabla^2$$

**Options:** 

89951410235. 1

89951410236.2

89951410237.3

89951410238.4

Question Number: 22 Question Id: 8995142571 Question Type: MCQ Option Shuffling: No Display Que Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 1 Wrong Marks: 0

Which expression can correctly calculate the total number of terms in Hamiltonian a chemical system where n = no. of nuclei and e = no. of electrons

a. 
$$\widehat{H} = \frac{(n+e)(n+e+2)}{2}$$
  
b.  $\widehat{H} = \frac{(n+e)(n+e+1)}{2}$   
c.  $\widehat{H} = \frac{(n+e)(e+1)}{2}$   
d.  $\widehat{H} = \frac{(n+e)(n+1)}{2}$ 

b. 
$$\widehat{H} = \frac{(n+e)(n+e+1)}{2}$$

c. 
$$\widehat{H} = \frac{(n+e)(e+1)}{e}$$

d. 
$$\hat{H} = \frac{(n+e)(n+1)}{2}$$



89951410239.1

89951410240.2

89951410241.3

89951410242.4

Question Number: 23 Question Id: 8995142572 Question Type: MCQ Option Shuffling: No Display Que

**Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical** 

Correct Marks: 1 Wrong Marks: 0

A mixture contains fluoride ion. Which cation should be avoided?

- Cu<sup>2+</sup>
- b. Co2+
- c. Ca2+
- d. Zn2+

## **Options:**

89951410243.1

89951410244. 2

89951410245.3

89951410246.4

Question Number: 24 Question Id: 8995142573 Question Type: MCQ Option Shuffling: No Display Que

Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 1 Wrong Marks: 0

Which of these ions will be indicated if addition of ammonia solution produces a oblue colour?

- a. Cu2+
- b. Cd2+
- c. Zn2+
- d. Mn<sup>2+</sup>

#### **Options:**



89951410248. 2 89951410249. 3 89951410250. 4

Question Number: 25 Question Id: 8995142574 Question Type: MCQ Option Shuffling: No Display Que

**Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical** 

Correct Marks: 1 Wrong Marks: 0

What species is responsible for the reddish brown colour obtained when a drop of borate in HCl is placed on a turmeric paper

- a. Curumin
- b. Rosocyanine
- c. Xanthoproteic
- d. Boracumine

## **Options:**

89951410251.1

89951410252.2

89951410253.3

89951410254.4

Question Number: 26 Question Id: 8995142575 Question Type: MCQ Option Shuffling: No Display Que Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 1 Wrong Marks: 0

What difficulty will you face in the analysis of the mixture SrCl<sub>2</sub> + MnSO<sub>4</sub>?

- a. Chloride will be missed
- b. Sulphate will be missed
- c. Mn2+ will not be precipitated in Group IV
- d. Sr<sup>2+</sup> will not be precipitated in Group V

### **Options:**

89951410255 1



89951410257. 3 89951410258.4

Question Number: 27 Question Id: 8995142576 Question Type: MCQ Option Shuffling: No Display Que

Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 1 Wrong Marks: 0

What is the starting point for drug discovery?

- a. Study of properties
- b. Interactions of compound with target
- c. Recognizing virus
- d. Structure

### **Options:**

89951410259. 1

89951410260.2

89951410261.3

89951410262.4

Question Number: 28 Question Id: 8995142577 Question Type: MCQ Option Shuffling: No Display Que

Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 1 Wrong Marks: 0

Which software has been described in the module on Drug Designing for deducing 3D structure from protein sequence?

- Gaussian
- b. GAMESS
- c. Bhageerath
- d. UniProt.

### **Options:**

89951410263.1



89951410266.4

Question Number: 29 Question Id: 8995142578 Question Type: MCQ Option Shuffling: No Display Que

Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

**Correct Marks: 1 Wrong Marks: 0** 

Which of the following is not a suitable solvent for oils and fats?

- Water
- Toluene
- c. n-Hexane
- d. Chloroform

### **Options:**

89951410267. 1

89951410268.2

89951410269.3

89951410270.4

Question Number: 30 Question Id: 8995142579 Question Type: MCQ Option Shuffling: No Display Que

Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 1 Wrong Marks: 0

# Saponification is hydrolysis of triglyceride esters

- a. By alkalis
- b. In digestive tracts of human beings
- c. By acids
- d. By salts

### **Options:**

89951410271.1

89951410272. 2



Question Number: 31 Question Id: 8995142580 Question Type: MCQ Option Shuffling: No Display Question Type: MCQ Option Shuffling: McQ Option Sh

**Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical** 

Correct Marks: 1 Wrong Marks: 0

Consider the following statements

Assertion: Over boiling of trans fats converts them into cis fats.

Reason: Cis fats are beneficial and can promote good cholesterol.

Select the correct option:

- a. Assertion is correct and Reason is correct reasoning.
- b. Assertion is correct, but Reason is incorrect.
- c. Assertion is incorrect and Reason is a correct statement.
- d. Both Assertion and Reason are incorrect.

## **Options:**

89951410275.1

89951410276. 2

89951410277.3

89951410278.4

Question Number: 32 Question Id: 8995142581 Question Type: MCQ Option Shuffling: No Display Que

Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

**Correct Marks: 1 Wrong Marks: 0** 

# Vanaspati ghee is manufactured from natural oils by their

- a. Saponification
- b. Hydrogenation
- c. Oxidation
- d. Hydrogenation

## **Options**:



89951410281. 3 89951410282. 4

Question Number: 33 Question Id: 8995142582 Question Type: MCQ Option Shuffling: No Display Que

Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 1 Wrong Marks: 0

## Element Phosphorus was discovered by

- Newlands
- b. Moseley
- c. Mendeleev
- Henning Brand

## **Options:**

89951410283.1

89951410284. 2

89951410285.3

89951410286.4

Question Number: 34 Question Id: 8995142583 Question Type: MCQ Option Shuffling: No Display Que

Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 1 Wrong Marks: 0

## Who discovered the Nobel Gases?

- Moseley
- b. Ramsay and Travers
- c. Meyer and Mendeleev
- d. Lavoisier

#### **Options:**

89951410287.1

89951410288.2



89951410290.4

Question Number: 35 Question Id: 8995142584 Question Type: MCQ Option Shuffling: No Display Que

Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 1 Wrong Marks: 0

Who proposed the Modern periodic table by modifying the Mendeleev's table?

- Lavoisier
- b. Meyer
- c. Moseley
- d. Broek

## **Options:**

89951410291.1

89951410292.2

89951410293.3

89951410294.4

Question Number: 36 Question Id: 8995142585 Question Type: MCQ Option Shuffling: No Display Que

Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 1 Wrong Marks: 0

# CFSE for d<sup>3</sup> octahedral configuration is found to be

- a.  $-1.5 \Delta_0$
- b.  $-3 \Delta_0$
- c.  $-2\Delta_0$
- d.  $-1.2 \Delta_0$

### **Options:**

89951410295.1

89951410296.2

89951410297.3



Question Number: 37 Question Id: 8995142586 Question Type: MCQ Option Shuffling: No Display Que

**Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical** 

Correct Marks: 1 Wrong Marks: 0

Which of the following will favour tetrahedral geometry

- a. Strong field ligands
- b. Weak Field ligands
- c. Positively charged ligands
- d. All ligands

## **Options:**

89951410299.1

89951410300.2

89951410301.3

89951410302.4

Question Number: 38 Question Id: 8995142587 Question Type: MCQ Option Shuffling: No Display Que

Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 1 Wrong Marks: 0

## Which of the following is a correct representation of SI Unit for length?

- a. 279 mtr
- b. 279 Mtr
- c. 279 m
- d. 279 M

#### **Options:**

89951410303.1

89951410304.2

89951410305.3

89951410306 4



Question Number: 39 Question Id: 8995142588 Question Type: MCQ Option Shuffling: No Display Que Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 1 Wrong Marks: 0

Which of the following is a correct way of using SI units?

- a. Unit symbols must be written always in capital letters.
- b. A space is required between the magnitude and the unit
- When there is a combination of units, there should be no space between the symbols
- d. Unit symbols are always followed by a full stop

## **Options:**

89951410307. 1 89951410308. 2

89951410309.3

89951410310.4

Question Number : 40 Question Id : 8995142589 Question Type : MCQ Option Shuffling : No Display Que Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 1 Wrong Marks: 0

SI unit for mass "kilogram" has recently been defined in terms of which physical constant?

- Elementary charge
- Avogadro's constant
- c. Planck's Constant
- Boltzmann constant

## **Options:**

89951410311.1

89951410312. 2

89951410313.3



Question Number: 41 Question Id: 8995142590 Question Type: MCQ Option Shuffling: No Display Que

Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 1 Wrong Marks: 0

The Firefly emits light due to which possible phenomenon?

- Bioluminescence
- b. Delayed fluorescence
- c. Fluorescence
- d. Phosphoresence

## **Options:**

89951410315.1

89951410316.2

89951410317.3

89951410318.4

Question Number: 42 Question Id: 8995142591 Question Type: MCQ Option Shuffling: No Display Que Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

**Correct Marks: 1 Wrong Marks: 0** 

## In photochemistry, benzophenone is commonly used as a

- bioluminescent substance.
- b. photosensitizer.
- c. photoluminescent substance.
- d. all of these

#### **Options:**

89951410319.1

89951410320.2

89951410321.3

89951410322, 4

Question Number: 43 Question Id: 8995142592 Question Type: MCQ Option Shuffling: No Display Que www.FirstRanker.com



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**Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0** 

The difference in wavelength of absorption and fluorescence is known as-

- a. Low extinction coefficients
- b. vertical transitions
- c. high ISC rates
- d. Stokes Shift

## **Options:**

89951410323. 1 89951410324. 2

89951410325.3

89951410326.4

Question Number: 44 Question Id: 8995142593 Question Type: MCQ Option Shuffling: No Display Que Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 1 Wrong Marks: 0

According to the second law of photochemistry, how many molecules are activate for each photon of light absorbed by a chemical system in a photochemical reaction

- a. only one molecule
- b. all the molecules of same substance
- c. all the molecules of reactants
- d. only those molecules which are having outer most shell unfilled

#### **Options:**

89951410327. 1

89951410328.2

89951410329.3



**Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0** 

The following reaction is not an example of photochemical reaction.

- a. Photosynthesis
- b. Retinal isomerization
- c. Norrish reactions
- d. Diels Alder reaction

## **Options:**

89951410331. 1 89951410332. 2 89951410333. 3 89951410334. 4

Question Number: 46 Question Id: 8995142595 Question Type: MCQ Option Shuffling: No Display Que Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 1 Wrong Marks: 0

# Who received the Nobel Prize for the theory of Quantum Mechanics?

- a. Thomson
- b. Schrödinger
- c. Bohr
- Rutherford

## **Options:**

89951410335.1

89951410336, 2

89951410337.3

89951410338.4

Question Number: 47 Question Id: 8995142596 Question Type: MCQ Option Shuffling: No Display Que Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

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Which of the following is false about Valence Bond theory?

- Atomic orbitals are preserved
- b. Does not explain Hydridization
- Overlapping of atomic orbitals take place
- d. Proposed by Heitler & London

## **Options:**

89951410339.1

89951410340.2

89951410341.3

89951410342.4

Question Number: 48 Question Id: 8995142597 Question Type: MCQ Option Shuffling: No Display Que Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 1 Wrong Marks: 0

# $2p_x$ Orbital corresponds to what values of n, l and m?

a. 
$$n=2; l=1; m=0$$

b. 
$$n = 2; l = 1; m = +1$$

c. 
$$n=2; l=1; m=-1$$

d. 
$$n = 2; l = 1; m = +1 \& -1$$
 (*Linear Combination*)

#### **Options:**

89951410343.1

89951410344.2

89951410345.3

89951410346.4

Question Number: 49 Question Id: 8995142598 Question Type: MCQ Option Shuffling: No Display Que

Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical



## Nuclear Magnetic Moment was discovered by

- a. Stern-Gerlach Experiment
- Molecular Beam Experiment
- c. Pudding Model
- d. Cathode Ray experiment

## **Options:**

89951410347.1

89951410348.2

89951410349.3

89951410350, 4

Question Number: 50 Question Id: 8995142599 Question Type: MCQ Option Shuffling: No Display Question Mandatawa No Single Line Question of Property Option of Property

Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

**Correct Marks: 1 Wrong Marks: 0** 

# In context of the module on NMR spectroscopy, S/N is proportional to

- a.  $\sqrt{Separation\ between\ energy\ levels}$
- b.  $\sqrt{Population\ difference}$
- c.  $\sqrt{Number\ of\ Sweeps\ Coadded}$
- d.  $\sqrt{mass\ of\ entity}$

### **Options:**

89951410351.1

89951410352. 2

89951410353.3

89951410354.4

**Question Number : 51 Question Id : 8995142600 Question Type : MCQ Option Shuffling : No Display Que Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical** 

#### 9/16/2020

## TOCSY Stands for

- a. Total Correlation Spectroscopy
- Timed Correlation Spectroscopy
- c. Timed Corrected Spectroscopy
- d. Total Corrected Spectroscopy

## **Options:**

89951410355.1

89951410356. 2

89951410357.3

89951410358.4

Question Number: 52 Question Id: 8995142601 Question Type: MCQ Option Shuffling: No Display Que Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 1 Wrong Marks: 0

## The microcrystals in carbon fibres are composed of-

- Tetrahedral rings
- b. Square planar rings
- c. Pentagonal rings
- d. Hexagonal rings

### **Options:**

89951410359.1

89951410360.2

89951410361.3

89951410362.4

Question Number: 53 Question Id: 8995142602 Question Type: MCQ Option Shuffling: No Display Que

**Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical** 

#### 9/16/2020

Which statement concerning properties of carbon fibers is not correct?

- a. High strength to weight ratio
- b. Low density
- c. Low tensile strength
- d. Corrosion resistance

### **Options:**

89951410363.1

89951410364. 2

89951410365.3

89951410366.4

Question Number: 54 Question Id: 8995142603 Question Type: MCQ Option Shuffling: No Display Que Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

**Correct Marks: 1 Wrong Marks: 0** 

# In carbonization step, the semi-finished carbon fibers are heated-

- a. In presence of oxygen
- b. In absence of oxygen
- c. In presence of hydrogen
- d. In presence of nitrogen

## **Options:**

89951410367.1

89951410368.2

89951410369.3

89951410370.4

Question Number: 55 Question Id: 8995142604 Question Type: MCQ Option Shuffling: No Display Que

Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

In Phase 1 Trial, the safety and pharmacology of a drug is tested on a group of:

- a. Healthy volunteers
- b. Unhealthy volunteers
- c. Patients having condition for that particular drug
- d. Patients having communicable disease

## **Options:**

89951410371.1

89951410372.2

89951410373.3

89951410374.4

Question Number : 56 Question Id : 8995142605 Question Type : MCQ Option Shuffling : No Display Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 1 Wrong Marks: 0

# In 1826, Merck marketed the first commercial natural product for therapeutic use v

- a. Aspirin
- b. Salicylic acid
- c. Codeine
- d. Morphine

## **Options:**

89951410375.1

89951410376. 2

89951410377.3

89951410378.4

Question Number: 57 Question Id: 8995142606 Question Type: MCQ Option Shuffling: No Display Que

Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

#### 9/16/2020

## What is the full form of CTA?

- a. Clinical Trial Appeal
- b. Clinical Testing Application
- c. Clinical Trial Application
- d. Clinical Testing Apprehension

### **Options:**

89951410379.1

89951410380.2

89951410381.3

89951410382.4

Question Number: 58 Question Id: 8995142607 Question Type: MCQ Option Shuffling: No Display Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 1 Wrong Marks: 0

## What does QBD stands for?

- a. Quantity Before Demand
- b. Quality Before Demand
- c. Quality By Design
- d. Quantity By Demand

## **Options:**

89951410383. 1

89951410384.2

89951410385.3

89951410386, 4

Question Number: 59 Question Id: 8995142608 Question Type: MCQ Option Shuffling: No Display Que

**Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical** 

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Syllabus is	while Curriculum is	
a.	descriptive, prescriptive	
b.	prescriptive, descriptive	
c.	both are prescriptive	
d.	both are descriptive	

## **Options:**

89951410387. 1

89951410388. 2

89951410389.3

89951410390.4

**Question Number : 60 Question Id : 8995142609 Question Type : MCQ Option Shuffling : No Display Que Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical** 

Correct Marks: 1 Wrong Marks: 0

In which year Kothari Commission was established to bring reforms in education system of the country?

a. 1952

b. 1966

c. 1959

d. 1964

## **Options:**

89951410391.1

89951410392.2

89951410393.3

89951410394.4

**Question Number : 61 Question Id : 8995142610 Question Type : MCQ Option Shuffling : No Display Que Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical** 

## Choose the correct statement

- a. We can inculcate the values through physical education only.
- b. Values cannot be inculcated by education system.
- c. Values can be inculcated through curriculum having physical sciences, social sciences and soft skills.
- d. Values are not the part of curriculum.

## **Options:**

89951410395. 1

89951410396.2

89951410397.3

89951410398.4

Question Number: 62 Question Id: 8995142611 Question Type: MCQ Option Shuffling: No Display Que Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

**Correct Marks: 1 Wrong Marks: 0** 

# The crystal structures can be studied using

- a. X-rays
- b. Gamma rays
- c. UV-rays
- d. Radio waves

## **Options:**

89951410399.1

89951410400.2

89951410401.3

89951410402.4

Question Number: 63 Question Id: 8995142612 Question Type: MCQ Option Shuffling: No Display Que

Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical



## Which of the following is correctly matched?

- Monoatomic gases: short range order
- b. Amorphous material: long range order
- Liquid crystals: short range order
- d. Crystalline material: Long range order

### **Options:**

89951410403.1

89951410404.2

89951410405.3

89951410406, 4

Question Number: 64 Question Id: 8995142613 Question Type: MCQ Option Shuffling: No Display Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 1 Wrong Marks: 0

## Which of the following statements is false?

- X-rays are produced when high energy charged particles collide with matter
- X-ray spectra consists of a broad spectrum of wavelengths known as black radiation
- c. Filters are used to decrease the spread of wavelengths in the X-ray.
- Beam from an X-ray tube contains large proportion of convergent and divergent radiation.

## **Options:**

89951410407. 1

89951410408.2

89951410409.3

89951410410, 4

Question Number: 65 Question Id: 8995142614 Question Type: MCQ Option Shuffling: No Display Que



**Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0** 

Lorentz factor is correctly represented by the equation

- a. Lorentz factor =  $(1/\sin 2\theta)$ .  $\cos \theta$ .  $(1/\sin 2\theta)$
- b. Lorentz factor =  $(1/\sin 2\theta)$ .  $\cos \theta$
- c. Lorentz factor =  $(1/\sin 2\theta)$
- d. Lorentz factor =  $(1/\sin 2\theta)$ .  $(1/\sin 2\theta)$

## **Options:**

89951410411.1

89951410412.2

89951410413.3

89951410414.4

**Question Number:** 66 Question Id: 8995142615 Question Type: MCQ Option Shuffling: No Display Que Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 1 Wrong Marks: 0

## Which of the following is not an electrophile?

- K<sup>+</sup>
- b. H<sup>+</sup>
- c. Cl<sup>+</sup>
- d. Br<sup>+</sup>

#### **Options:**

89951410415. 1

89951410416.2

89951410417.3

89951410418.4

**Question Number: 67 Question Id: 8995142616 Question Type: MCQ Option Shuffling: No Display Que Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical** 



CCl4 acts as an electrophile due to

- a. -I effect of Cl atoms
- b. +I effect of Cl atoms
- c. Incomplete octet
- d. Vacant p orbital of carbon

## **Options:**

89951410419.1

89951410420.2

89951410421.3

89951410422.4

Question Number: 68 Question Id: 8995142617 Question Type: MCQ Option Shuffling: No Display Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

**Correct Marks: 1 Wrong Marks: 0** 

Which of the following radioactive isotope is used most widely in the clinical image work?

- a. I-131
- b. Tc-99
- c. Ra-223
- d. P-32

## **Options:**

89951410423.1

89951410424. 2

89951410425.3

89951410426.4

**Question Number : 69 Question Id : 8995142618 Question Type : MCQ Option Shuffling : No Display Que Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical** 

Predict the correct order of stability of carbocations?

- a.  $3^{\circ} > 2^{\circ} > 1^{\circ}$
- b.  $2^{\circ} > 3^{\circ} > 1^{\circ}$
- c.  $1^{\circ} > 2^{\circ} > 3^{\circ}$
- d.  $1^{\circ} > 3^{\circ} > 2^{\circ}$

### **Options:**

89951410427.1

89951410428.2

89951410429.3

89951410430.4

Question Number: 70 Question Id: 8995142619 Question Type: MCQ Option Shuffling: No Display Que

Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

**Correct Marks: 1 Wrong Marks: 0** 

# The bond angle in case of sp hybridization is

- a. 30°
- b. 120°
- c. 90°
- d. 180°

### **Options:**

89951410431.1

89951410432.2

89951410433.3

89951410434.4

Question Number: 71 Question Id: 8995142620 Question Type: MCQ Option Shuffling: No Display Que

Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

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The relative overlap of orbitals decreases in the order

a. 
$$sp > sp^2 > sp^3 > p$$

b. 
$$sp^2 > sp > sp^3 > p$$

c. 
$$sp^2 > sp^3 > sp > p$$

d. 
$$p > sp > sp^2 > sp^3$$

## **Options:**

89951410435.1

89951410436, 2

89951410437.3

89951410438.4

Question Number: 72 Question Id: 8995142621 Question Type: MCQ Option Shuffling: No Display Que

Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

**Correct Marks: 1 Wrong Marks: 0** 

# How many axial bonds are present in PCl<sub>5</sub>?

a. 5

b. 2

c. 3

d. 1

## **Options:**

89951410439.1

89951410440.2

89951410441.3

89951410442.4

Question Number: 73 Question Id: 8995142622 Question Type: MCQ Option Shuffling: No Display Que

Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

Which of the following is not true about hybridization?

- a. Hybridization is a physical phenomena
- b. There can be infinite number of different hybrids (mixtures)
- c. Hybrid orbitals are abstractions that describe reality fairly well
- d. The hybrids cab be defined by p to s ratio of the contributing orbitals

#### **Options:**

89951410443.1

89951410444.2

89951410445.3

89951410446.4

Question Number: 74 Question Id: 8995142623 Question Type: MCQ Option Shuffling: No Display Que Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

Question Mandatory. No Single Line Question Option . No Option Orientation. Ver

Correct Marks: 1 Wrong Marks: 0

## Who gave the rule of eight?

- Einstein
- b. Abegg
- c. Thompson
- d. Kossel

## **Options:**

89951410447.1

89951410448.2

89951410449.3

89951410450.4

Question Number: 75 Question Id: 8995142624 Question Type: MCQ Option Shuffling: No Display Que

**Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical** 

Which of the following is not true about Hamiltonian?

- Hamiltonian is an energy operator
- Hamiltonian is taken as sum of kinetic energy operator and potential energy operator
- c. Different chemical systems can have same Hamiltonian
- d. Hamiltonian is defined for every system quantum mechanically

## **Options:**

89951410451. 1 89951410452. 2

89951410453.3

89951410454.4

**Question Number : 76 Question Id : 8995142625 Question Type : MCQ Option Shuffling : No Display Que Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical** 

Correct Marks: 1 Wrong Marks: 0

## Which of the following is monoatomic at room temperature?

- a. Hydrogen
- b. Helium
- c. Oxygen
- d. Bromine

### **Options:**

89951410455.1

89951410456.2

89951410457.3

89951410458.4

Question Number: 77 Question Id: 8995142626 Question Type: MCQ Option Shuffling: No Display Que

**Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical** 



What is the store house of information quantum mechanically?

- a. Wave-function
- Hamiltonian
- c. Energy
- d. Radius of atom

#### **Options:**

89951410459. 1

89951410460.2

89951410461.3

89951410462.4

Question Number: 78 Question Id: 8995142627 Question Type: MCQ Option Shuffling: No Display Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 1 Wrong Marks: 0

From a pedagogical point of view, which of the following is important advantage Computational chemistry?

- a. To investigate unusual temperatures/pressures.
- b. To simulate dangerous experiments, hazardous chemicals.
- c. To gain an atomistic description of a reaction.
- d. To save lab costs.

### **Options:**

89951410463.1

89951410464. 2

89951410465.3

89951410466.4

**Question Number : 79 Question Id : 8995142628 Question Type : MCQ Option Shuffling : No Display Que Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical** 

ArgusLab reads which of the following file formats:

- a. XML
- b. docx
- c. pdf
- d. jpeg

#### **Options:**

89951410467.1

89951410468.2

89951410469.3

89951410470.4

Question Number: 80 Question Id: 8995142629 Question Type: MCQ Option Shuffling: No Display Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 1 Wrong Marks: 0

Which of the following Open source software for chemistry has been discussed in module for this ARPIT course?.

- a. Calibre
- b. CrystalMol
- c. ArgusLab
- d. ChemDraw

## **Options:**

89951410471.1

89951410472.2

89951410473.3

89951410474.4

Question Number: 81 Question Id: 8995142630 Question Type: MCQ Option Shuffling: No Display Que

**Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical** 



As teachers while framing good questions which category as per Bloom's taxonon should be avoided for decreasing the rote learning?

- a. Remember
- b. Apply
- c. Analyze
- d. Evaluate

## **Options:**

89951410475.1

89951410476. 2

89951410477.3

89951410478.4

Question Number: 82 Question Id: 8995142631 Question Type: MCQ Option Shuffling: No Display Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 1 Wrong Marks: 0

How many marks questions in a 50 marks paper should be taken ideally from a uni which is assigned 6 hrs teaching whereas the total syllabus is to be covered in 60 hr

- a. 3 marks
- b. 5 marks
- c. 6 marks
- d. 10 marks

### **Options:**

89951410479.1

89951410480.2

89951410481.3

89951410482.4

**Question Number: 83 Question Id: 8995142632 Question Type: MCQ Option Shuffling: No Display Que Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical** 

#### 9/16/2020

What is the red coloured ruby gemstone composed of chemically?

- a. Chromium oxide
- b. Aluminum oxide with Chromium
- c. Aluminum oxide
- d. Potassium permanganate

### **Options:**

89951410483.1

89951410484.2

89951410485.3

89951410486.4

Question Number: 84 Question Id: 8995142633 Question Type: MCQ Option Shuffling: No Display Que

Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

**Correct Marks: 1 Wrong Marks: 0** 

## One Dalton is approximately equal to

- a. Mass of one proton
- b. Mass of one neutron.
- c. Mass of one nucleon
- d. Mass of proton + Mass of electron

### **Options:**

89951410487.1

89951410488.2

89951410489.3

89951410490.4

Question Number: 85 Question Id: 8995142634 Question Type: MCQ Option Shuffling: No Display Que

Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

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The detector in mass spectrometry detects .

- a. Neutral molecules
- b. Ions
- c. Electrons
- d. Radicals

## **Options:**

89951410491.1

89951410492. 2

89951410493.3

89951410494.4

Question Number: 86 Question Id: 8995142635 Question Type: MCQ Option Shuffling: No Display Que Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

**Correct Marks: 1 Wrong Marks: 0** 

# The best method to detect the presence of isotopes of an element is

- a. Microwave spectroscopy
- b. Mass Spectrometry
- c. Vis spectroscopy
- d. UV Spectroscopy

### **Options:**

89951410495.1

89951410496. 2

89951410497.3

89951410498.4

Question Number: 87 Question Id: 8995142636 Question Type: MCQ Option Shuffling: No Display Que

Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

The phenomena of scientific study at a very low temperature is known as

- a. Ornithology
- b. Selenography
- c. Cryogenics
- d. Petrology

### **Options:**

89951410499.1

89951410500. 2

89951410501.3

89951410502.4

Question Number: 88 Question Id: 8995142637 Question Type: MCQ Option Shuffling: No Display Que Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

**Correct Marks: 1 Wrong Marks: 0** 

## Which is the lightest solid known?

- a. Calcium carbonate
- b. Aluminum metal.
- c. Aerogel
- d. Soap Stone

### **Options:**

89951410503.1

89951410504. 2

89951410505.3

89951410506.4

Question Number: 89 Question Id: 8995142638 Question Type: MCQ Option Shuffling: No Display Que

Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical



Name the substance having a characteristic smell and is produced when lightning strikes.

- a. Nitrous oxide
- b. Sulfur dioxide
- c. Carbon monoxide
- d. Ozone

## **Options:**

89951410507. 1 89951410508. 2

89951410509. 3

89951410510.4

Question Number: 90 Question Id: 8995142639 Question Type: MCQ Option Shuffling: No Display Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 1 Wrong Marks: 0

## Which colour in flame is produced by barium ions?

- a. Orange
- b. Apple green
- c. Crimson red
- d. Bluish Green

#### **Options:**

89951410511.1

89951410512.2

89951410513.3

89951410514.4

Question Number: 91 Question Id: 8995142640 Question Type: MCQ Option Shuffling: No Display Que Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

#### 9/16/2020

What is the unit to measure purity of gold?

- Carat
- b. Karat
- c. Clarity
- d. Cut

### **Options:**

89951410515.1

89951410516. 2

89951410517.3

89951410518.4

Question Number: 92 Question Id: 8995142641 Question Type: MCQ Option Shuffling: No Display Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 1 Wrong Marks: 0

Flame is initiated by rubbing on a rough surface which of the following component present on tip of a match stick

- a. Phosphorus Sesquisulfide
- b. Lead oxide
- c. Antimony trisulphide
- d. Phosphorus oxide

### **Options:**

89951410519.1

89951410520. 2

89951410521.3

89951410522.4

Question Number: 93 Question Id: 8995142642 Question Type: MCQ Option Shuffling: No Display Que

**Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical** 

#### 9/16/2020

# The commercial production of vanadium is mainly as

- a. Ferrovanadium
- b. Iron vanadium tetraoxide
- c. Vanadium Oxide
- d. Vanadium Nitride

## **Options:**

89951410523.1

89951410524. 2

89951410525.3

89951410526, 4

Question Number: 94 Question Id: 8995142643 Question Type: MCQ Option Shuffling: No Display Que Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

**Correct Marks: 1 Wrong Marks: 0** 

## When mercury is rubbed over an aluminium sheet, it leads to production of

- a. Aluminium Oxide
- b. Aluminium Amalgam
- c. Fibrous Alumina
- d. Aluminium Nitride

### **Options:**

89951410527.1

89951410528.2

89951410529.3

89951410530, 4

Question Number: 95 Question Id: 8995142644 Question Type: MCQ Option Shuffling: No Display Que

Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

Gold can be made to appear of white colour by addition of which of the following gold during the alloy formation?

- a. Nickel
- b. Copper
- c. Zinc
- d. Silver

#### **Options:**

89951410531.1

89951410532.2

89951410533.3

89951410534.4

Question Number: 96 Question Id: 8995142645 Question Type: MCQ Option Shuffling: No Display Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

**Correct Marks: 1 Wrong Marks: 0** 

## The surface of mars is red due to?

- a. Traces of water on rocks
- b. Rust or Iron Oxide
- c. Iron Chloride
- d. Haemoglobin

### **Options:**

89951410535.1

89951410536. 2

89951410537.3

89951410538.4

Question Number: 97 Question Id: 8995142646 Question Type: MCQ Option Shuffling: No Display Que Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical



Who have been awarded Nobel prize in chemistry for the year 2019?

- a. Frances H. Arnold, George P. Smith and Sir Gregory P. Winter
- b. Akira Yoshino, M. Stanley Whittingham, John B. Goodenough
- c. Jacques Dubochet, Joachim Frank and Richard Henderson
- d. Jean-Pierre Sauvage, Sir J. Fraser Stoddart and Bernard L. Feringa

### **Options:**

89951410539. 1 89951410540.2 89951410541.3

89951410542.4

Question Number: 98 Question Id: 8995142647 Question Type: MCQ Option Shuffling: No Display Que Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 1 Wrong Marks: 0

Rule of 13 for deducing structural formula from given mass spectrum assumes that molecule is made up of

- a. Carbon and Hydrogen
- b. Carbon and Oxygen
- c. Carbon, Oxygen and Hydrogen
- d. Carbon, Oxygen and Halogen

#### **Options:**

89951410543.1

89951410544. 2

89951410545.3

89951410546.4

Question Number: 99 Question Id: 8995142648 Question Type: MCQ Option Shuffling: No Display Que Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

9/16/2020

According to Stevenson rule, when cleaving a bond, the charge preferentially remains on the fragment with the

- a. Highest ionization energy
- b. Lowest ionization energy
- c. Maximum number of Oxygen atoms
- d. Maximum number of vacant d orbitals

#### **Options:**

89951410547. 1

89951410548.2

89951410549.3

89951410550.4

Question Number: 100 Question Id: 8995142649 Question Type: MCQ Option Shuffling: No Display Qu Question Mandatory: No Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 1 Wrong Marks: 0

If the parent ion mass number is odd, it indicates presence of in the comport

- a. Odd number of Nitrogen atoms
- Even number of Nitrogen atoms
- c. Odd number of H atoms
- d. Even number of Nitrogen atoms and odd number of H atoms

### **Options:**

89951410551.1

89951410552. 2

89951410553.3

89951410554.4