

2.2.1- Institution assesses the learning levels of the students and organizes special programmes for advanced learners and slow learner

The different programmes such as conducting extra classes for the slow learners and providing assignments and seminars for inculcating the subjects which applied for all the students irrespective of their performance was made compulsory as part of their study.

ಗೋಖಲೆ ಸೆಂಟಿನರಿ ಕಾಲೇಜ್, ಅಂಕೋಲಾ
ವಸತಿ / 2024 / ದಿ. 16-05-2024

ಪರೀಕ್ಷೆ ನೋಟೀಸ್


ಬಿ.ಎ. / ಬಿ.ಎಸ್ಸಿ. / ಬಿ.ಕಾಂ 2, 4 & 6ನೇ ಸೆಮಿಸ್ಟರ್ ವಿದ್ಯಾರ್ಥಿಗಳು 1st Home Assignment ಗಳನ್ನು ದಿ. 24-05-2024ರ ಒಳಗಾಗಿ ಸಂಬಂಧಪಟ್ಟ ಅಧ್ಯಾಪಕರಿಗೆ ನೀಡಬೇಕು.

First Internal Test ದಿ. 30-05-2024 ರಿಂದ ಆರಂಭವಾಗುವುದು. ವೇಳಾಪತ್ರಿಕೆಯನ್ನು ಪ್ರತ್ಯೇಕವಾಗಿ ನೋಟೀಸ್ ಬೋರ್ಡ್‌ಗೆ ಲಗತ್ತಿಸಲಾಗಿದೆ.

ನೋಟೀಸ್ ಬೋರ್ಡ್
 ಕ್ಲಾಸ್ ಸರ್ಕ್ಯೂಲೇಶನ್
 ಆಫೀಸ್ ಕಡತ

R. G. M. II II

R. G. M.

 ಪ್ರಾಚಾರ್ಯರು

ತಯಾರಿಯೊಂದಿಗೆ ಪರೀಕ್ಷೆಗ ಕಡ್ಡಾಯವಾಗಿ ಹಾಜರಾಗಬೇಕು ಎಂದು ಸೂಚಿಸಲಾಗಿದೆ.

Assignments

CORPORATE ACCOUNTING-I ASSIGNMENT

Name : Devaraj. Manjunath Nayak,

Class : Bcom 2nd Year.

Roll.No. : 20

Submitted TO : Veda Mam

2015 Q.P

1] What do you mean by issue of shares at discount? (2018)

→ When shares are issued at price less than face value of share then it is called issue of shares at discount

2] Name the two important methods of public issue of shares.

→ 1] Fixed Price Offer method

2] Book building method.

3] What is call in arrears?

→ When share holders are not pay the call money within specified date such outstanding amount of money is known as call in arrears

4] What is underwriting of shares?

→ Underwriting is an agreement where by the underwriters insure the company that in case of shares and debentures offered to the public are not subscribed by the public

5] What is marked application? (2018)

→ Marked applications are those which bear the stamp with name address of the underwriter

6] What do you mean by Registered Debentures?

→ The Debentures which have been registered as to name, address etc. such Debenture holders in the register maintained by the company is called as registered Debentures

7] What are Divisible Profits? (2016, 2018)

→ Divisible Profits means those profits which are legally available for distribution as dividend to share holders

8] What is interim dividend? (2019)

Name : Akash Naik
Roll no. : 109
Class : Bcom III
Subject : Accounting Theory

1.

Trading A/c

Particulars	Amount	Particulars	Amount
To Opening stock	3,75,000	By Sales 10,37,500	
To Purchase 581250		less: return 37500	1,00,000
less: return 18750	5,62,500		
To freight	1,25,000	By closing stock	
		(Balance)	3,12,500
To Profit 25%	2,50,000		
	1312500		1312500

2.

Balance sheet

Liability	Amount	Assets	Amount
Capital	20,00,000	Plant & Machinery	10,00,000
Creditors	2,00,000	furniture	50,000
		Bank	3,50,000
		Stock 6,00,000	
		Purchase 20,00,000	80,00,000
	22,00,000		22,00,000

ASSIGNMENT

BOTANY

Name: Vijay Shekar Gouda

Class: BSC III

Reg. No: 18S16477

Botany

NAME

CLASS

ROLL NO.

DATE

PAGE

RNA

RNA is a nucleic acid containing ribose sugar. It is found large amount in cytoplasm and less amount in nucleus. In cytoplasm it is mainly found in ribosomes and nucleus nucleolus also.

RNA is a single strand it consist of several units called ribose nucleotide and each nucleotide is made up of phosphoric acid, ribose sugar and nitrogenous bases - purines and pyrimidine.

Types of RNA

1. mRNA - messenger RNA

2. tRNA - transfer RNA

3. rRNA - ribosomal RNA

1. mRNA or messenger RNA

It carries the genetic information for protein synthesis from DNA to cytoplasm. It is about 3-5% of total cellular RNA.

mRNA synthesized complimentary strand is upon the chromosomal DNA.

mRNA carries genetic information in the form of triplet codon.

The hybrid mRNA inside the nucleus is called heterogenous nuclear RNA.

It is processed in the nucleus & enters the cytoplasm through the nuclear membrane.

In the cytoplasm mRNA is deposited on the ribosome & they acts as a template

MATHS PAPER I

ASSIGNMENT

Roll No : 55

Name : Sumangala Nayak.

sub : maths paper I

std : B.Sc Sem III

1. State and prove Fermat's theorem.

If p is a prime number and $(a, p) = 1$ then
 $a^{p-1} \equiv 1 \pmod{p}$

proof:-

Using binomial expansion

$$(x_1 + x_2)^p = x_1^p + pC_1 x_1^{p-1} x_2 + pC_2 x_1^{p-2} x_2^2 + \dots + pC_{p-1} x_1 x_2^{p-1} + x_2^p$$
$$= x_1^p + x_2^p + f(p)$$

where $f(p)$ contains those terms which are divisible by p

$$\therefore (x_1 + x_2)^p - (x_1^p + x_2^p) \equiv 0 \pmod{p}$$

$$\Rightarrow (x_1 + x_2)^p \equiv (x_1^p + x_2^p) \pmod{p}$$

Similarly we can prove that

$$(x_1 + x_2 + \dots + x_n)^p \equiv (x_1^p + x_2^p + \dots + x_n^p) \pmod{p}$$

$$\text{put } x_1 = x_2 = \dots = x_n = a = 1$$

$$a^p \equiv a \pmod{p}$$

$$\Rightarrow a^{p-1} \equiv 1 \pmod{p} \quad \because (a, p) = 1$$

$$p \mid (a^p - a)$$

$$p \mid (a^{p-1} - 1) a$$

$$p \mid (a^{p-1} - 1)$$

2. State and prove Wilson's theorem.

For the prime number p the set S of integers which less than and prime to p is $\{1, 2, 3, \dots, p-1\}$

Since $(a, p) = 1 \forall a \in S$ the congruence $ax \equiv 1 \pmod{p}$ has a unique solution

i.e. for $a \in S \exists$ unique $a' \in S$ s.t. $aa' \equiv 1 \pmod{p}$

If $a = a'$ then $a^2 \equiv 1 \pmod{p}$

$$\therefore a^2 - 1 \equiv 0 \pmod{p} \quad \therefore (a+1)(a-1) \equiv 0 \pmod{p}$$

then either $a+1 \equiv 0 \pmod{p}$ or $a-1 \equiv 0 \pmod{p}$

$$a+1 \equiv 0 \pmod{p} \Rightarrow a = p-1 \text{ and}$$

$$a-1 \equiv 0 \pmod{p} \Rightarrow a = 1$$

Now omitting 1 and $p-1$ from S , the remaining $p-3$ nos. can be paired of an $\frac{p-3}{2}$ pairs (aa')

satisfying $aa' \equiv 1 \pmod{p}$

$$a \neq a' \quad 1 < a' < p-1$$

~~Seen~~

Assignment

Chemistry

Paper-1

Name : Deepa G

Class : B.Sc V sem

Roll no. : 61

1] Define transport number

→ It is defined as fraction of the total current carried by the cation or anion

t_+ is denoted by t_c for cation and t_a for anion

$$t_c = \frac{\text{Current carried by cation}}{\text{Total current passed}}$$

$$t_a = \frac{\text{Current carried by anion}}{\text{Total current passed}}$$

2] What is relaxation effect?

→ The ionic atmosphere is re-established by building a set of new ions in front of the central ion and dropping some of the ions behind it. This effect is called Relaxation effect

3] Define ionic mobility

→ Ionic mobility is defined as the distance travelled by an ion per second, under a potential gradient of 1 volt per meter.

$$\text{i.e. } \mu = \frac{\text{speed}}{\text{potential gradient}}$$

4] What is ionic strength of electrolyte in solution? write its mathematical expression

→ It is the measure of electrical intensity due to the presence of ions in the solution

$$I = \frac{1}{2} [m_1 z_1^2 + m_2 z_2^2 + m_3 z_3^2 + \dots]$$

Where m_1, m_2, m_3, \dots are molecules

z_1, z_2, z_3, \dots Valency of the various ions present in the solution

$$\text{OR } I = \frac{1}{2} \sum_{i=1}^n m_i z_i^2$$

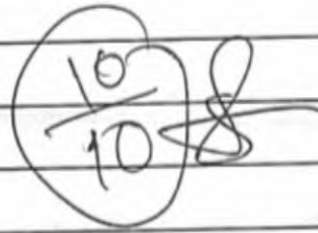
PHYSICS

ASSIGNMENT

Name : Charan Naik

class : B.Sc II year

Roll No : 17



i) a) Explain the terms "atomic polarisability" & "electric susceptibility"

⇒ Atomic polarisability: An atom consists a positively charged nucleus surrounded by negatively charged electrons, but an atom as a whole is electrically neutral. When such a neutral atom is placed in an electric field E , the positive & negative charges within the atom are influenced. The positively charged nucleus is pushed to one side & negatively charged electrons to the opposite side. In other words, the centre of gravity of -ve charge is separated from the centre of gravity of +ve charge.

Now the atom acts as a tiny dipole with moment \vec{P} which points in the same direction as E . This induced dipole moment is proportional to the field E .

$$P \propto E$$

$$P = \alpha E$$

where α is the proportionality constant known as atomic polarisability.

Electric Susceptibility:

A dielectric material when placed in a uniform electric field becomes electrically polarized. The dielectric polarization P is directly proportional to the electric field E .

$$P \propto E$$

$P = \chi_e E$, where $\chi_e \rightarrow$ Proportionality constant known as electric susceptibility.

Electric susceptibility may be defined as the ratio of polarization to the electric intensity in the dielectric.

Since P is equal to the surface density of induced charge (σ'), the electric susceptibility may be defined as the ratio of induced charge density to the electric density.

$$\chi_e = \frac{\sigma'}{E}$$

GOKHALE CENTENARY COLLEGE ANKOLA

Chemistry Assignment

Name : Bhagyashree. Shreenivas. Nayak
Subject : Chemistry
Roll No : 06
Submitted To : Hanuprasad Sir.

4) Spin Quantum Numbers (s) :

- * It represents the direction of spin of the electron. The electrons present in an orbital spin about their own axis.
- * Thus each orbital may contain a maximum of 2 electrons. One with $s = +1/2$ and the other with $s = -1/2$.
- * There are 2 types of spin are possible, whereas clockwise and anticlockwise.

Ex/ - In $2p^3$
 $n=2, l=1, m=0, s=-1/2$

In $3d^3$
 $n=3, l=2, m=0, s=+1/2$

3) The K.E of sub-atomic particle of mass $9.0 \times 10^{-31} \text{ kg}$ is $4.5 \times 10^{-25} \text{ J}$. Calculate the wavelength associated with its motion.

⇒ Given/ - mass, $m = 9.0 \times 10^{-31} \text{ kg}$
K.E (kinetic energy) = $4.5 \times 10^{-25} \text{ J}$
wavelength $\lambda = ?$

$$K.E = \frac{1}{2} mv^2$$

$$v^2 = \frac{2K.E}{m} \Rightarrow \frac{2 \times 4.5 \times 10^{-25}}{9.0 \times 10^{-31}}$$

1) Give the Schrodinger wave equation for one electron system in three dimension and explain the terms.

- ⇒
- Keeping in view, the wave and the particle nature of electrons, a new model known as wave mechanical model was developed by Schrodinger.
 - He considered the electron as three-dimensional wave in electric field of the positively charged nucleus.
 - To describe the behaviour of electron waves, Schrodinger developed a mathematical equation that is

$$\frac{d^2\psi}{dx^2} + \frac{d^2\psi}{dy^2} + \frac{d^2\psi}{dz^2} + \frac{8\pi^2m^2}{h^2}(E-V)\psi = 0$$

where,

- m → mass of the electron
- h → Planck's constant
- E → Total energy
- V → Potential energy
- x, y, z → Cartesian Co-ordinates
- ψ → Amplitude of electron wave and is called wave function.

is

$$= \frac{9 \times 10^{-25}}{9 \times 10^{-31}}$$

$$V^2 = 1 \times 10^6 \Rightarrow V = \sqrt{1 \times 10^6} \Rightarrow 1 \times 10^3 \text{ m/s}.$$

The wave length $\Rightarrow \lambda = \frac{h}{m v}$

$$= \frac{6.627 \times 10^{-34}}{9.0 \times 10^{-31} \times 1 \times 10^3}$$

$$\lambda = 0.7363 \times 10^{-6} \text{ m}$$

\therefore wave length $\lambda = \underline{\underline{0.736 \times 10^{-6} \text{ m}}}$

Done

Seminars Report;

Gokhale Centenary College, Ankola Chemistry REPORT

Name :- Harshita. Shantaram.

Roll No :- V02JJ2350016 ^{Nayat.}

Class :- BSC II 3rd Sem.

Topic :- Ferrous Alloy Steels.

Harshita

Ferrous Alloy Steels.

Ferrous Alloy Steels

Ferrous Alloy Steels are iron based alloy containing carbon and other elements like Manganese, Chromium, Molybdenum, Nickel, Vanadium and Silicon. It has properties like strength, hardness, ductility, toughness, corrosion, resistance and heat resistance.

Specific effect of alloy elements

- 1] Carbon - Increase hardness & strength, resistance & decrease ductility.
→ So high carbon steels are used in cutting tools.
- 2] Copper - Improves corrosion resistance especially in atmospheric condition.
→ Used in weather resistant steel.
- 3] Manganese - Improves strength, toughness and hardens ability.
→ and so are used widely in structural and wear resistant steel.

5) Molybdenum

- Increase strength at high temperature harden ability and corrosion resistance reduce brittleness
- So it is used in high speed tool steel and pressure vessel steel

6) Nickel.

- Increase toughness, corrosion resistance, impact strength
- Retain ductility at room temperature
- Used in stainless steel.

Applications of Ferrous Steels

- 1) Infrastructure & Construction
- 2) Automobile industry
- 3) Aerospace industry
- 4) Tool & die industry
- 5) Power Generation
- 6) kitchen appliances
- 7) oil & gas industry
- 8) marine Applications
- 9) Railways.

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