

**S.B.B. alias Appasaheb Jedhe Arts, Commerce & Science College
Pune-2**

**First Term Internal Assessment-2016-17
Subject: Physical & Analytical Chemistry (Paper-I)**

**Class:-S.Y.B.Sc
Date:-----**

**Marks:-10
Time: - 40 Min.**

Roll no..... Name of candidate..... sign of supervisor.....

Note: - 1) All questions are compulsory.

- 2) Each question carries half mark.
3) Negative marking for MCQ & True/False type of question.

-----Q.1 (A)

MCQ.

- 1) Insoluble phosphate can be removed by.....method.
a) Stannic Chloride b) Ferric Chloride
c) Zirconyl nitrate d) All of these

- 2) Accuracy usually expressed in terms of.....
a) Standard deviation b) Absolute error & Relative error
c) Replicate measurement d) Deviation

- 3) The unit of rate constant (k_2) of second order reaction is.....
a) $\text{Conc}^{-1}\text{time}^{-1}$ b) time^{-1}
c) Conc^{-1} d) Kg

- 4) If analyte constitute more than 1% of the sample then it is called as..... Constituent.
a) Minor b) Trace
c) Major d) Ultra-trace

- 5) The reading taken immediately after mixing reactants is called
a) Infinite reading b) Zero reading c) Finite reading d) Homogeneous reading.

- 6) Molecularity of reaction $2\text{HI} \rightarrow \text{H}_2 + \text{I}_2$ is
a) One b) Four
c) Three d) Two

Q.2 True/False:

- 1) Group IV are precipitated as their chlorides

- 2) Deviation has no sign.

- 3) $K = C_1/C_2$ indicates same molecular form of solute.

- 4) The extraction is efficient if carried out in a single lot

Q.3 Answer the following

1.State Nernst Distribution law.

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2.Define order of reaction.

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3.Define the term Precision.

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4.Define Half life period of reaction.

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5.Define group reagent.

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6.Determine correct number of Significant figures in 0.0058 Kg & 45600gm.

Q.4 Match the following:

A

- 1) Deviation (Δ)
- 2) Yellow Ammonium Sulphide
- 3) Interfering anions
- 4) Group reagent for V gr.

B

- a) Phosphate & borate
- b) Na_2HPO_4
- c) IX-XI
- d) Separation of II gr.

1)..... 2)..... 3)..... 4).....

S.B.B Alias AppasahebJedhe Arts, Commerce & Science College Pune-2

First term Internal Assessment 2016-17

Subject: Organic & Inorganic Chemistry (Paper-II)

Class: - S.Y.BSc.

Marks: - 10

Date: -

Time: - 40 Min

Roll No..... Name Candidate..... Sign of Supervisor.....

Note: - 1) All questions are compulsory.

- 2) Each question carries half mark.
- 3) Negative marking for MCQ & True/False type of questions.

Q1. MCQ

- 1) Which of the following has highest angle strain?
a) Cyclopentane b) Cyclohexane c) Cyclobutane d) Cyclopropane
- 2) When CH_3 group attach to axial position creates _____ gauche interactions.
a) One b) Two c) Three d) Five
- 3) Cyclohexanes have same molecular formula as _____
a) Alkanes b) Alkenes c) Alkynes d) Cycloalkanes
- 4) The bond angle between carbon atoms in cyclohexane is _____
a) $109^{\circ}28'$ b) 60° c) 90° d) 120°
- 5) Which of the following are Ferrous Metals?
a) Cu, Pb, Sn b) Al, Mg, Ca c) Mo, W, Th d) Fe, Mn
- 6) Which of the following metal occur in Free State?
a) Mg, Ca b) Fe, Al c) Ni, Zn d) Pt, Au

Q2. True or False.

- 1) All ores are minerals.
- 2) A mineral is a substance which can be artificially prepared in laboratory.
- 3) Chair confirmation is more stable than boat confirmation.
- 4) As the angle strain increases the stability of the ring increases.

Q3. Define the term.

1) Erythro isomer

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2) Meso compound.

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3) Metallurgy.

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4) Ore.

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5) Gangue.

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6) Absolute Configuration.

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Q4. Match the following.

Part A

- 1) Oxide Ore
- 2) Sulphide Ore
- 3) Sulphate Ore
- 4) Ferric Chloride

Part B

- a) BaSO_4
- b) FeCl_3
- c) ZnS
- d) Fe_2O_3

1.....

2.....

3.....

4.....

S.B.B. alias Appasaheb Jedhe Arts, Commerce & Science College, Pune-2

Second Term Internal Assessment-2016-17

Subject: Physical & Analytical Chemistry (Paper-I)

Class:-S.Y.B.Sc

Marks:-10

Date:-.....

Time: - 40 Min.

Roll No..... Name of candidate..... sign of supervisor

Note: - 1) All questions are compulsory.

2) Each question carries half mark.

3) Negative marking for MCQ & True/False type of question.

Q.1

MCQ.

- 1) The constant boiling mixtures are called as
a) Miscible mixture b) Azeotrops
c) Solvents d) Immiscible mixture

- 2) A standard solution means a solution of.....
a) Known concentration b) Which is 1N
c) Which is 1M d) Known volume

- 3) The temperature at which two partially miscible liquids becomes completely miscible is called..... temperature.
a) Constant b) Boiling
c) Solution d) Critical

- 4) The best indicator for the titration of NaOH & CH₃COOH is
a) Methyl Red b) Phenolphthalein
c) Bromothymol Blue d) Methyl Orange

- 5) The solution in which activity of each constituent is equal to its mole fraction is called.....solution.
a) Non-ideal b) Complex
c) Ideal d) Immiscible

- 6) In spontaneous process, the Gibbs free energy of the system
a) Decreases b) Increases
c) Remains constant d) Becomes zero

Q.2 True/False:

- 1) At neutralization point PH of the solution becomes zero.
- 2) Maxima in vapour pressure diagram will be minima in boiling point diagram.
- 3) Triethyl amine – water system shows upper critical solution temperature.

- 4) In steam distillation one component is always water

Q.3 Answer the following

1) Write relation between K_p & K_c

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2) Define the term oxidising agent.

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3) What is a primary standard substance?

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4) For which metal ion EDTA can be used as a titrant?

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5) Define the term equivalence point.

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6) Draw (T-N) diagram for non ideal solution with positive deviation.

Q.4 Match the following:**A**

- 1) Critical composition of phenol
- 2) Strong acid- Strong base
- 3) Redox Indicator
- 4) Fractional distillation

B

- a) HCl-NaOH
- b) Benzene - Toulene
- c) 33%
- d) Ferroin

Ans.: - 1)..... 2)..... 3)..... 4).....

S.B.B Alias AppasahebJedhe Arts, Commerce & Science College Pune-2

Second Term Internal Assessment 2016-17

Subject: Organic & Inorganic Chemistry (Paper-II)

Class: - S.Y.BSc.

Marks: - 10

Date: -

Time: - 40 Min

Roll No..... Name Candidate..... Sign of Supervisor.....

Note: - 1) All questions are compulsory.

- 2) Each question carries half mark.
 - 3) Negative marking for MCQ & True/False type of questions.
-

Q1. MCQ

- 1) The reagent used to convert primary alcohol into aldehyde only is _____
a) PCC b) $K_2Cr_2O_7/H_2SO_4$ c) OsO_4 d) Na/C_2H_5OH
- 2) 2-butyne on reduction with Lindlar Catalyst gives _____
d) n-butane b) cis2-butenec) trans 2-betene d) acetic acid
- 3) Which of the following heterocyclic compounds is not aromatic
a) Pyridine b) Pyrrole c) Piperidine d) furan
- 4) The elements of the d-block are _____
a) Metals b) Non-metals c) Metalloids d) Artificially prepared
- 5) The compound which contains a metal-carbon bond is called _____
a) Metal Cluster b) Bioinorganic compound c) Feed Stockd) Organometallic compound
- 6) Toxic chemicals occurring in environment are added by _____
a) Nature b) Manmade industries c) Animals d) None of these

Q2. True or False.

- 1) Bromination of Pyridine take place at 2 poistion.
- 2) Minamata disease is occurred due to Hg poisoning.
- 3) Hydroformylation is a reaction between metane and a formyl group.
- 4) The element of the d-block does not show variable oxidation state

Q3. Answer the following.

1) What is Jone's reagent?

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2) Write resonance structure of furan.

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3) What is the Itai-Itai or ouch-ouch disease?

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4) What are the transition element?

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5) Calculate magnetic moment of Mn^{2+} ion by spin only formula (Atomic No. 25).

6) Which catalyst is used in hydroformylation reaction?

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.....

Q4 Match the following.

Part A

- 1) Oxidant
- 2) Reductant
- 3) Quinoline
- 4) Azabenzene

Part B

- a) C_9H_7N
- b) C_5H_5N
- c) PCC
- d) Pt Catalyst

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SHREE SHIVAJI MARATHA SOCIETY'S
 SAMAJBHUSHAN BABURAO ALIAS APPASAHEB JEDHE COLLEGE, PUNE
 First Term Internal Assessment (Botany II)
 2016-2017

Class: S.Y.B.Sc.

Total Marks: 10

Date: /09/2016

Time: 40 minutes

Roll no.Name of StudentSign of Supervisor.....

Note: THERE IS NEGATIVE MARKING

Q. 1) Multiple choice questions.

2^{1/2} Marks

1) A thin film of water is held by the soil particle under the influence of internal attractive force called.....

A) Capillary water B) combined water C) hygroscopic water D) gravitational water

2) The water readily available to plants for absorption by roots is.....

A) Gravitational water B) capillary water C) Rain water D) hygroscopic water

3)..... Fluid of life

A) Water B) ethanol C) butanol D) none

4) Loss of water from the stomata of leaves is known as.....

A) Gattaiion B) exudation C) transpiration D) evaporation

5) Active uptake of minerals by roots mainly depends on the.....

A) Availability of oxygen B) temperature C) light D) availability of Co₂

Q. 2. State True/False

2^{1/2} Marks

- a) Capillary water is necessary for plant
- b) The water potential of pure water at atmospheric pressure is -2.3
- c) The water molecule form a special kind of bond knows as covalent bond
- d) Water absorption takes place through root hairs
- e) Strong force to pull water up xylem and into leaf is called transpiration full

2 $\frac{1}{2}$ Marks

Q. 3) Define

- a) Plant physiology

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- b) Capillary water

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- c) Permeability

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- d) Hypertonic solution

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- e) Turgor pressure

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Q. 4) short notes

2 $\frac{1}{2}$ Marks

- a) Role of water

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- b) Water potential

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- c) Types of membranes

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- d) Osmosis

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- e) Properties of water

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SHREE SHIVAJI MARATHA SOCIETY'S
SAMAJBHUSHAN BABURAO ALIAS APPASAHEB JEDHE COLLEGE, PUNE
Second Term Internal Assessment (Botany-II)
2016-2017

Class: S.Y.B.Sc.

Date: /02/2017

Roll no.Name of Student

Total Marks: 10

Time: 40 minutes

Sign of Supervisor.....

Note: THERE IS NEGATIVE MARKING

Q. 1) Multiple choice questions.

2 $\frac{1}{2}$ Marks

1) is the use of plants to convert toxic metals to less toxic forms while not removing them from soils

A) Phytovolatilisation B) Phytostabilization

C) Environmental sustainability D) None of these

2) Amylase Enzyme is used in.....

A) Starch and fuel B) Detergent C) Baking D) All the above

3) In which fermentation process sterile nutrient solution is add to the bioreactor continuously.....

A) Solid state fermentation B) Batch-fed fermentation

C) Continuous fermentation D) All the above

4) Single cell protein is.....

A) Dried microbial cells of microorganism B) Both A and B

C) Extraction from pure of algae D) none of these

5) In which of the following process, complex organic pollutants are degraded into simple molecules.....

A) Phytovolatilization B) Phytodegradation C) Phytostabilization D) Phytoextraction

Q. 2. State True/False

2 $\frac{1}{2}$ Marks

a) Process of remove of organic and inorganic contaminants from soil, water and air using plants is called as Phytodegradation

b) An enzyme are colloidal, amphoteric, highly, but sensitive to Ph and temperature

c) Solid state fermentation, substrates are soluble in water

d) Protease is an enzyme that breaks starch into sugar

e) In the lag phase the organism not adapts to the new Environmental condition

2 $\frac{1}{2}$ Marks

Q. 3) Define

a) Biotechnology?

b) Batch culture?

c) Enzyme Immobilization?

d) Phytovolatilization?

e) Environmental sustainability?

2 $\frac{1}{2}$ Marks

Q. 4) short notes

a) Scope of Biotechnology

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b) Production of lipase

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c) Significance of solid state fermenter

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d) Phytoextraction

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e) Draw the diagram of Bubble column fermenter

S.Y. B.Sc. Microbiology Internal examination 2016 -17
 Term - II
AIR AND WATER MICROBIOLOGY

Name of the Candidate: Roll No. :

Max. Marks: 10 Time: 40 Min.

Date: Sign of Junior Supervisor:

Q. 1. Choose the Correct Alternative (2^{1/2})

1. is causative agent of diphtheria.
 a) *Corynebacterium diphtheriae* b) Influenza virus
 c) *Streptococcus pneumoniae* d) *Neisseria meningitidis*
2. is released from air conditioning system and refrigerators.
 a) Chlorofluorocarbon b) Nitrogen dioxide
 c) Sulfur dioxide d) none of above
3. are responsible for acid rain.
 a) CO₂ d) none of above
 c) SO₂
4. is the fungal air borne infection
 a) Common cold b) Tuberculosis
 c) Aspergillosis d) Diphtheria
5. is the viral air borne infection.
 a) Tuberculosis b) Common cold
 c) Aspergillosis d) None of above

Q.2. Match the following (2^{1/2})

- | | |
|-------------------|--------------------------------------|
| 1. Tuberculosis | a. <i>Aspergillus fumigatus</i> |
| 2. Whooping cough | b. <i>Varicella zoster virus</i> |
| 3. Chicken pox | c. <i>Mycobacterium tuberculosis</i> |
| 4. Influenza | d. <i>Bordetella pertussis</i> |
| 5. Apergillosis | e. <i>Influenza Virus</i> |

Ans: 1..... 2..... 3..... 4..... 5.....

Q.3. Answer the following (2^{1/2})

1. Define droplet nuclei-

2. Define aerosols-

3. What is air flora –

4. Give any two examples of fungal air borne infections-

5. Describe air sampling by centrifugation process –

Q. 4. Answer the following

(2^{1/2})

1. What are HEPA filters?

2. Enlist examples of chemical pollutants.

3. Give any two physical methods of air sanitization.

4. Enlist the examples of bacterial air borne infections.

Shri Shivaji Maratha Society's
 S.B.B Alias Appasaheb Jedhe College of Arts, Commerce and Science
 Shukrawar Peth Pune- 02
 S.Y. B.Sc. Microbiology Internal examination 2016 -17
 Term - 1
 MB-212 Industrial and Soil Microbiology

Name of the Candidate:

Roll No. :

Max. Marks: 10

Time: 40 Min.

Date:

Sign of Junior Supervisor:

Q. 1. Choose the Correct Alternative

(2^{1/2})

1. Antifoam agent is.....

a) Silicon compound

b) Soyabean oil

c) Corn oil

d) all of above

2. If more than one organism is used to obtain the required product that type of fermentation is called

a) Batch fermentation

b) Continuous fermentation

c) Dual fermentation

d) Fed batch fermentation

3. Batch fermentation is..... system.

a) Closed

b) a and c

c) Open

d) none of the above

4. Low dissolved oxygen leads to

a) Low biomass yield

b) No effect o biomass yield

c) High biomass yield

d) None of the above

5. Over heating of fermenter during fermentation is controlled by

a) Cooling jacket

b) steam

c) Cool air

d) none

Q.2. Match the following

(2^{1/2})

1. Chelator

a. Crowded plate technique

2. Agitation

b. Cumulative inhibition

3. Aeration

c. corn oil

4. Antifoam Agent

d. EDTA

5. Primary Screening

e. Sparger

f. Impeller

Ans: 1..... 2..... 3..... 4..... 5.....

Q.3. Define the following terms

(2^{1/2})

1. Primary Screening -

2. Secondary Screening -

3. Enlist functions of inducer

4. Enlist types of fermentation process-

5. Enlist methods of control of foam -

Q. 4. Answer the following

(2^{1/2})

1. Give the full form and role of ATCC

2. Lyophilization

3. Give the full form of NCIM.

4. What are precursors in fermentation

5. Enlist nitrogen sources in fermentation.

(90)

Shree Shivaji Maratha Society's
Appasaheb Jedhe College of Arts, Commerce and Science
 First Term Internal Assessment (2016-17)
 MB: 211- Bacterial Systematics & Physiology

Class: S.Y.B.Sc

Roll No.:

Name of the Student:

Supervisor:

Date:

Marks: 10

Sign of

Q1 Attempt the following(2^{1/2})

- What is being compared during DNA hybridization studies of two bacteria? _____
 a. ratio of nitrogenous base to all other bases. b. similarities of base sequence.
 c. mechanism of RNA synthesis from DNA. d. rate of DNA replication.
- Organism A has 65 % G+C and organism B has 35 % G+C. Which of the following can be concluded from these data?
 a. the two organisms are related. b. the two organisms are unrelated.
 c. nothing can be concluded from G+C information. d. their nucleic acids will not hybridize.
- The complete oxidation of glucose typically involves which three stages _____.
 a. photosynthesis, fermentation, and oxidation.
 b. chemiosmosis, photophosphorylation, and reduction.
 c. substrate level phosphorylation, pentose phosphate shunt, and kelvin cycle.
 d. glycolysis, the Krebs cycle and electron transport chain.
- Fermentation differs from anaerobic respiration in all of the following ways except which one? Fermentation doesn't _____.
 a. use an electron transport chain. b. require molecular oxygen.
 c. oxidize NADH. d. oxidized glucose.
- Which of these processes occurs in the cytosol?
 a. The citric acid cycle b. Glycolysis c. The electron transport system. d. Chemiosmosis.

Q.2 State true or false(2^{1/2})

- Homofermentative bacteria produce twice as much as energy than heterofermentative bacteria. _____
- ATP formation by glycolysis involves substrate level phosphorylation. _____
- Proteins produced during the pulse phase experiment are labeled with radioactive material. _____
- The Nerst equation relates the effective concentrations of the components of a cell reaction to the standard cell potential. _____
- All electron carrying proteins are water insoluble and are embedded in the inner mitochondrial membrane. _____

Q3 Answer the following.(2^{1/2})

i. Define standard redox potential.

ii. Define substrate level phosphorylation.

iii. Define evolutionary species concept

iv. Define systematics

v. Define melting temperature

Q4 Answer the following. (2^{1/2})

i. What is Autoradiography?

ii. Enlist the types of isoprenoid quinones..

iii. What is phosphor imaging?

iv. What are high energy compounds?

v. Give any two examples of heterofermentative bacteria.

**SHREE SHIVAJI MARATHA SOCIETY'S
SAMAJBHUSHAN BABURAO ALIAS APPASAHEB JEDHE COLLEGE, PUNE
Second Term Internal Assessment (Zoology) I
2016-2017
ZY-221: ANIMAL SYSTEMATICS AND DIVERSITY- IV**

Class : S.Y.B.Sc.

Date : /02/2017

Roll no.Name of Student
.....Sign of Supervisor.....

Total Marks : 10

Time : 40 minutes

.....Sign of Supervisor.....

Note: There is negative marking system.

Q. 1) Multiple choice questions.

2 1/2 Marks

1) is the example of poisonous snake..

- A) *Bungarus (krait)* B) *Naja naja* C) *Vipera ruselli* D) All of the above

2) In aquatic birds like Duck, Geese, The beak is flat, broad and edges are modified into horny serrations/ lamellae/ sieve of the type.....

- A) Tearing and piercing B) Mud probing C) Water and mud straining D) Fish catching

3) *Scoliodon* includes in series.....

- A) Reptilia B) Aves C) Pisces D) Amphibia

4) When birds needs to occupy some special region for the purpose of the reproductive process, the migration is called as.....

- A) Climatic B) Altitudinal C) gametic D) Longitudinal

5) In arterial system of *Scoliodon*, ventral aorta arises from heart and forward it divides/ bifurcated into two short branches called as the.....

- A) Innominate B) Commissural C) afferent artery D) None of these

Q. 2. State True/False

2 1/2 Marks

a) In brain of *Scoliodon*, cerebellum is the site of regulation of balance and equilibrium of the body :

b) *Scoliodon* is fresh water animal found in rivers, ponds and lakes :

- c) In a snake, If the third supra labial shield touches the nostrils and eye then it is a poisonous snake *Naja naja* (cobra) :
- d) In *Scoliodon* 10 pairs of cranial nerves are present. :.....
- e) Duck billed Platypus is the example of egg laying mammal :.....

Q. 3. Match the following:

2.5 Marks

Receptor (sense) organ	Function
a) Olfactoreceptor	1) Sense of change in water temperature
b) Photoreceptor	2) Sense of smell
c) Ampullae of Lorenzini	3) Hearing, Detects acceleration of speed
d) Membranous labyrinth	4) Sense of light
e) Neuromast organ	5) Detects the any vibration in water

Ans: a)..... b)..... c)..... d)..... e).....

Q. 4) Answer the following.

2.5 Marks

a) What is scroll valve?

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b) Enlist the female reproductive organs in *Scoliodon*.

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.....

c) What is Altitudinal migration? Give examples.

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.....

d) Which are the water getting adaptations in desert animals?

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.....
.....

e) Name the second cranial nerve in *Scoliodon*.

.....

SHREE SHIVAJI MARATHA SOCIETY'S
SAMAJBHUSHAN BABURAO ALIAS APPASAHEB JEDHE COLLEGE, PUNE
Second Term Internal Assessment (Zoology-2)
2016-2017
ZY-222: APPLIED ZOOLOGY-2

Class: S.Y.B.Sc.

Date: /02/2017

Total Marks: 10

Roll no.Name of Student

Time: 40 minutes

Note: THERE IS NEGATIVE MARKING

Sign of Supervisor.....

Q. 1) Multiple choice questions.

2 1/2 Marks

1) *Apis dorsata* is commonly called as

- A) Rock bee B) Little bee C) Indian bee D) none of these.

2) When the egg laying capacity of old queen is lost or is suddenly dies, a new young & vigorous queen takes the position of old queen is called.....

- A) Swarming B) Supersedure C) Absconding D) Nuptial flight.

3)is used in manufacture of cosmetics.

- A) Propolis B) Pollen C) Bee wax D) Bee venom

4) Eggs are deposited in spring which undergo diapause & hatch out only in next spring is called as.....

- A) non-hibernating eggs B) Hibernating eggs C) both A&B D) none of these

5) Removal of undesirable branches of mulberry plant is called.....

- A) manuring B) nursery C) pruning D) none of these.

Q. 2. State True/False

2 1/2 Marks

- a) Drones are the fertile female.
- b) Cultivation and harvesting of mulberry plant is called moriculture.
- c) Absconding and swarming are similar behaviour.
- d) Honey extractor functions on the principle of centrifugal force.
- e) Bee wax is the sticky substance collected from young buds of the plants by worker bees.

Q.3 Match the Following.

2^{1/2}Marks.

Bee Disease

- 1) Nosema
- 2) American foul brood
- 3) Chalk brood
- 4) Acarine disease
- 5) Septicaemia

Causative agent

- A) internal parasite
- B) Fungus
- C) Protozoan
- D) *Bacillus larva white*
- E) *Bacillus apiscepticus*

Ans. A)..... B)..... C)..... D)..... E).....

Q.4 Answer the following

2^{1/2}Marks.

A) Nuptial flight.

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B) Define Sericulture.

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C) What is bee bread and mention its use.

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D) Tail-wagging Dance.

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E) Any two symptoms of American foul brood disease.

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**Shri Shivaji Maratha Society's
S.B.B. Alias Appasaheb Jedhe College, Pune-411002.**

INTERNAL ASSESSMENT EXAMINATION - 1(2016-17)

Class : S.Y.B.Sc.

Subject : Botany Paper-1

Supervisors sign:

Date:

Name-

Roll no :

N.B.1. All questions are compulsory.

2. There shall be negative marking system for Q.1 and Q.2

3. Each question carries ½ marks.

Q.1 Multiple Choice Questions.

1. Natural classification system is proposed by -----.

- | | |
|---------------------|--------------|
| a) Bentham & Hooker | b) Whittakar |
| c) Engler & Prantle | d) None |

2. The term taxonomy is coined by -----.

- | | |
|--------------------|-------------|
| a) Kashyap | b) Linneous |
| c) A.P. De Candole | d) None |

3. ----- is father of embryology.

- | | |
|---------------|-----------|
| a) Maheshwari | b) Darwin |
| c) Fritch | d) None |

4. ----- is study of identification, classification, description, nomenclature.

- | | |
|---------------|---------------|
| a) Morphology | b) Embryology |
| c) Taxonomy | d) None |

5. Gymnosperms & Angiosperms are belongs to -----.

- | | |
|----------------|----------------------|
| a) Cryptogams | b) Higher cryptogams |
| c) Phanerogams | d) None |

Q.2. Match the following

1. Asclepediaceae ----- a) *Datura*
2. Euphorbiaceae ----- b) *Azadiractha*

3. Solanaceae ----- c) *Spirogyra*

4. Amarlydiaceae ----- d) *Calotropies*

5. Meliaceae ----- e) *Polyanthus tuberosa*

Q.3. Define.

1. Ecology:-

2 Phytochemistry:-

3. Food chain:-

4. Autecology:-

5. Monograph:-

Q.5. Short note.

1. Morphology

2. Ecological pyramid

3. Flora

4. ICBN

5. Enlist ecological group with examples
