

Govt. Rewati Raman Mishra PG College Surajpur (C.G.)

Botany B.Sc.-I Practical Exam 2022-2023

Maximum mark -50

Date 25-02-2023

Time-4 Hrs.

Attempt all Question

Q. 1- To prepare temporary slide and Describe the Structure and Asexual Reproduction of given algal material. (*Vaucheria*) **10 marks**

Or

To prepare temporary slide and Describe the Structure and Asexual Reproduction of given fungal material. (*Puccinia*)

Or

Write the procedure of Gram's staining of bacteria and identify the bacteria from given sample.

Q. 2- To prepare temporary slide and Describe the Structure and Asexual Reproduction of given bryophyte material. (*Machantia*) **10 marks**

Or

To prepare temporary slide and Describe the Structure and Asexual Reproduction of given pteridophyte material. (*Equisetum*)

Q. 3- Describe the T.S. of coralloid root of *Cycas* and *Pinus* needle. **10 marks**

Q. 4- Spotting **10 marks**

Write 2 to 5 comments on given spots from 1 to 5

1. Volvox 2. Uredospore 3. Riccia 4. Selaginella 5. *Cycas* Megasporophyll

Q. 5- Viva **05 marks**

Q. 6- Sessional **05 marks**

GOVT. REWATI RAMAN MISHRA PG COLLEGE SURAJPUR

Main Practical Exam 2023

B.Sc.-II

Time: 5 Hours

Subject- Chemistry

Total marks- 50

Inorganic

Question 1- To detect two cations and two anions in the given salt. **12 Marks**

OR

To estimate hardness of water by EDTA complexometric titration.

Organic

Question 2- (A) To Identify the functional group and specific group present in given organic compounds. **6 Marks**

(B) To separate leucine and glycine by paper chromatography.

6 Marks

Physical

Question 3- To determine transition temperature of the given $\text{MnCl}_2 \cdot 4\text{H}_2\text{O}$ by thermometric method. **12 Marks**

Viva

10 Marks

Sessional

4 Marks

GOVT. REWATI RAMAN MISHRA PG COLLEGE SURAJPUR

Main Practical Exam 2023

B.Sc.-III

Time: 8 Hours

Subject- Chemistry

Total marks- 50

Inorganic

Question 1- To Prepare the Nickel DMG complex .

8 Marks

OR

To estimate barium as barium Sulphate.

Question 2- To prepare sodium tris(oxalate) Ferrate[III] ion.

4 Marks

Organic

Question 1- To identification of functional group and specific group in given binary organic mixture

8 Marks

Question 2- To prepare m-dinitrobenzene by Nitration reaction.

4 Marks

OR

To prepare Benzoic acid from toluene.

Physical

Question 1- To verify beer lamber's law for KMnO_4 and to determine the concentration of solution.

12 Marks

Viva

10 Mark

Sessional

4Marks

GOVT REWATI RAMAN MISHRA P.G. COLLEGE, SURAJPUR C.G.

PRACTICAL EXAM (SESSION -2022-2023)

B.Sc. Part- II (ZOOLOGY)

Date: 25/02/2023

TIME: 09:00AM

M.M-50

Q.1 Draw a well labeled diagram of Efferent and Afferent arteries of scoliodon. 10 marks.

स्कोलियोडॉन की इफरेंट एवं एफरेंट वाहिका का नामांकित चित्र बनाइए

Q.2 Write about Homologous organ with example. 05 marks.

होमोलॉगस अंग के बारे में उदाहरण सहित लिखिए।

Q.3 Write about life cycle of honey bee with example 05 marks.

मधुमक्खी के जीवन चक्र को उदाहरण सहित लिखिए

Q.4 Write about different types of animal behaviour. 04 marks

जन्तुओं के विभिन्न प्रकार के व्यवहार के बारे में लिखिए।

Q.5 SPOTTING. 2 x 08 = 16 marks

1. T.G. Thyroid gland (थाइरॉयड ग्रंथि), 2. T.S. of Testis (वृषण का अनुप्रस्थ खंड), 3. Placoid scale (प्लेकोइड स्केल), 4. Frog-gastrula (मेंढक गैस्टुला) 5. ~~Box~~ (चमगाइड़) 6. Naja (बाग)

Bones: -1. Pectoral girdle of frog, 2. Pelvic of varanus

Q.7 Sessional 05 marks

Q.8 Viva- Voce 05 marks

Q.1 Write about the blood group detection method 08 marks.

रक्त समूह ज्ञात करने की विधि लिखिए।

Q.2 Write about Grassland ecosystem 06 marks.

घास के मैदान की परिस्थिकी तंत्र का वर्णन करें।

Q.3 Write about bacterial staining method 05 marks.

जीवाणु अभिरंजन के विधि को लिखिए।

Q.4 Write about carbohydrate test in any sample. 06 marks

किसी नमूने में कार्बोहाइड्रेट परीक्षण के बारे में लिखिए।

Q.5 Describe method of paper chromatography. 05 marks

पेपर क्रोमैटोग्राफी की विधि का वर्णन कीजिए।

Q.6 SPOTTING. 2 x 05 = 10 marks

1. Ascaris T.S. (एस्केरिस का अनुप्रस्थ काट)

2. Haemocytometer (हेमोसाइटोमीटर)

3. Compound microscope (कॉम्पाउंड माइक्रोस्कोप)

4. Centrifuge (सेंट्रीफ्यूज)

5. Metaphase (मेटाफेज)

Q.7 Sessional 05 marks

Q.8 Viva- Voce 05 marks