S.P.U.(P.G.) College, Falna

(Affiliated to JaiNarain Vyas University, Jodhpur)

Mid Term Examination–2024

Assignment for Semester - I

Programme:-B.Sc.   Subject:-Zoology

Course Name & Code :-   Animal Diversity & Evolution (ZOO 5001T)   MaxMarks–20

Note : The Question paper is divided into Two Parts A&B. Write Answer as per given instructions.

Part - A (भागअ)

(Very Short Answer type Questions)

Note: Answer all questions. Give answer in maximum upto 30 words. Each question carries marks.(4x2=8)

Q.1(A) Define Bilateral Symmetry.

द्विपार्श्व सममिति को परिभाषित कीजिए।

 (B) What is the simle definition of species?
जति की सरल परिभाषा क्या है।

(C) Give an examples of phylurm Arthropoda?
संघ आर्लोपोडा के उदाहरण लिखिए।

(D) Write the name of Lamark's book?

लैमार्क की पुस्तक का नाम लिखिए।?

Part - B (भाग – ब)

(Long Answer type Questions)

Answer any One question selecting from the pair given below (AorB). Give answer maximum upto 500 words. This question carries 12marks.(12x1=12)

Q.2. (A) Explain phylum porifera

संघ पॉरीफेरा का वर्णन कीजिए।

OR (अथवा)

(B) Explain phylum protozoa.
संघ प्रोटोजोआ का वर्णन कीजए।

S .P.U. (P.G.) College, Falna

(Affiliated to Jai Narain Vyas University, Jodhpur)

Mid Term Examination – 2024

Assignment for Semester-I

Programme   : B. Sc. Three Year Degree

Subject   : BOTANY

Course Name & Code   : DCCBOT5001T (Algae, Fungi, Microbes and Plant

Pathology)

Max Marks – 20

Note : The Question paper is divided into Two Parts A & B. Write Answer as per given instructions.

Part - A (भाग अ)

(Very Short Answer type Questions)

Note : Answer all questions. Give answer in maximum upto 30 words. Each question carries 2 marks. (4 x2 = 8)

Q.1 (A) Draw labeled diagram of Male reproductive structure of *Chara* . करा के नर जननांग का चित्र बनाएं

(B) Write names of two edible mushrooms. दो खाने योग्य मशरूम का नाम बताएं

(C) What are Prions ? प्रियोंस क्या होते हैं

(D) Draw a labeled diagram of Black Heart Disease of Potato. आलू के ब्लैक हार्ट रोग का चित्र बनाएं
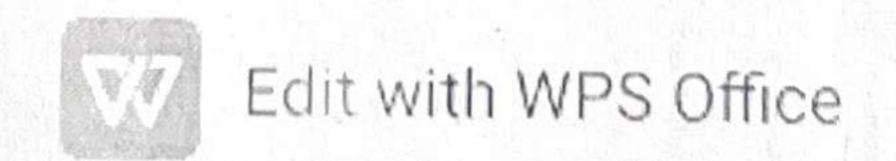
Part - B (भाग - ब)
(Long Answer type Questions)

Answer any One question selecting from the pair given below (A or B). Give answer maximum upto 500 words. This question carries 12 marks. (12 x1 = 12)

Unit - I

Q. 2. (A) What is 'Rolling Alga'? Describe its habit and vegetative structure with diagram.

लुढ़कती शैवाल क्या है? इस शैवाल के आवास तथा कायिक संरचना का सचित्र वर्णन कीजिए

(B) Describe the internal and external structure of thallus of *Marchantia* with diagram

मार्केन्शिया के थैलस की आंतरिक एवं बाह्य संरचना का सचित्र वर्णन कीजिए

S.P.U.(P.G.) COllege, Falna
Assignment 2024
Program Name: Bsc.-I Semester
Subject: Mathematics
Course Name:-Calculus
Course Code:-MAT5001T

Total marks: 20

Note : The Question paper is divided into Two parts A and B .Write Answer as per given instuction

Section –A

(Short Answer type Question)

Note: Answer all question .Give answer in maximum upto 30 words .Each carries 2 marks(4x2=8)

Q.1 (a) Write the formula in Cartesian form of derivate of length of an Arc?

एक चाप की लंबाई निकालने का सूत्र कार्तीय रूप में लिखिए?

(b)Calculate $(ds/d\theta)$ for the curve $r=ae^{e\cot\alpha}$?

वक्र $r=$ $e^{\theta\cot\alpha}$ के लिए $(ds/d\theta)$ की गणना करें?

(c) Define Centre of curvature?

वक्रता केंद्र को परिभाषित करें?

(d) If $z=\tan^{-1}(y/x)$ then prove that $\partial^2z/\partial x^2 +\partial^2z/\partial y^2 =0$

Section –B

(Long Answer type question)

Answer any one Question selecting from the pair given below (A or B) .Given answer maximum upto 500 words. This question carries 12 marks(12X1=12)

Unit –I

Q,2 (A) Show that in the parabola $y^2=4ax$,the radius of curvature at any point P is $2(SP)^{3/2}/\sqrt{a}$,where S is the Focus of parabola ?

दिखाएँ कि परवलय y2=4ax में, किसी भी बिंदु P पर वक्रता की त्रिज्या $2(SP)^{3/2}/\sqrt{a}$ है, जहाँ S परवलय का फोकस है?   or

(B) If $u=\log(x^2+y^2+z^2)$ then prove that $x\partial^2u/\partial y\partial z= y\partial^2u/\partial z\partial x= z\partial^2u/\partial x\partial y$

यदि $u= \log(x^2+y^2+z^2)$ तो साबित करें कि $x\partial^2u/\partial y\partial z= y\partial^2u/\partial z\partial x= z\partial^2u/\partial x\partial y$

S .P.U. (P.G.) College, Falna

(Affiliated to Jai Narain Vyas University, Jodhpur)

Mid Term Examination – 2024

Assignment for Semester-I

Programme :- B. Sc.   Subject :- Physics

Course Name & Code :- Mechanics (PHY5001T)   Max Marks – 20

Note : The Question paper is divided into Two Parts A & B. Write Answer as per given instructions

Part - A (भाग अ)

(Very Short Answer type Questions)

Note : Answer all questions. Give answer in maximum upto 30 words. Each question carries 2 marks.

(4 x2 = 8)

Q.1 (A) define frame of reference.

निर्देश तंत्र को परिभाषित कीजिए।

(B) What are galilean transformation?

गैलीलियन रूपांतरण क्या है?

(C) What is coriolis force?

कोरिओलिस बल किसे कहते हैं?

(D) What is faucalt pendulum?

फोको लोलक क्या है?

Part - B (भाग - ब(

(Long Answer type Questions)

Answer any One question selecting from the pair given below (A or B). Give answer maximum upto 500 words. This question carries 12 marks.   (12 x1 = 12)

Q. 2. (A) What are non inertial frames? prove that distance between two remains invariant in Galilean transformation.

अजड़त्विय निर्देश तंत्र क्या होते हैं ? सिद्ध कीजिए कि गैलीलियन रूपांतरण में किन्हीं दो बिंदुओं के मध्य की दूरी निशचर रहती है।

OR (अथवा)

(B) Discuss the effect of centrifugal force due to Earth rotation.

पृथ्वी के घूर्णन के कारण अपकेंद्रीय बल के प्रभाव की विवेचना कीजिए।

Programme :- B. Sc.   Subject :- Chemistry

Course Name & Code :- Fundamentals of chemistry (CHE5001T)

Max Marks – 20

Note : The Question paper is divided into Two Parts A & B. Write Answer as per given instructions

Part - A (भाग अ)
(Very Short Answer type Questions)

Note : Answer all questions. Give answer in maximum upto 30 words. Each question carries 2 marks. (4 x2 = 8)

Q.1 (A) Write any two limitation of VB theory.

VB सिद्धांत की कोई दो कमियां लिखिए।

(B) The structure of ClF_3 is T- shape. why?

ClF_3 की संरचना T - आकार की होती है। क्यों?

(C) The bond angle of ammonia is 107^0. Why?

अमोनिया का बंधकोण 107^0 का होता है। क्यों?

(D) Write two difference between VBT and MOT?

VBT तथा MOT में दो अन्तर लिखिए?

Part - B (भाग - ब)
(Long Answer type Questions)

Answer any One question selecting from the pair given below (A or B). Give answer maximum upto 500 words. This question carries 12 marks. (12 x1 = 12)

Unit - I

Q. 2. (A) Explain the given hybridization with an example.

निम्न संकरण को एक उदाहरण सहित समझाइए।

(i) sp^3 (ii) sp^3d (iii) sp^3d^2 (iv) sp

OR (अथवा)

(B) What is hydrogen bond ? How many types of its. Write the application of hydrogen bond.

हाइड्रोजन बंध क्या है? यह कितने प्रकार का होता है? हाइड्रोजन बंध के अनुप्रयोग लिखिए।