EVERWIN MATRIC. HR. SEC. SCHOOL

31.10.19 TT Biology Time: 45 Mins
STD: XII (B,D,E) Bio-Botany Marks: 30

I. Answer any 2 of the following: 2x2=4

1. i) A strict isolation imposes to prevent the spread of disease is

_____.

ii) _____ made an inventory of centres of origin of plant species.

2. Differentiate Natural selection and Artificial selection.

3. List out the objectives of Plant Breeding.

II. Answer any 2 of the following: 2x3=6

4. Write a note on sea weed fertilizer.

5. List out the possible changes in the plant species due to domestication.

6. Draw the flow chart of steps in plant breeding.

III. Answer any 1 in detail: 1x5=5

7. Describe in detail about selection and its types.

8. How are microbial inoculants used to increase soil fertility?

Bio-Zoology

I. Give the correct answer in a word or two: 5x1=5

1. What is the medicinal ingredient that is found in Rouwalfia vomitaria?

2. How many mega biodiversities are found in the world?

3. Give the number of biogeographical regions or zones of India.

4. What is the decrease in temperature for every 1 kilometer (km) rise above mean sea level?

5. What is the optimum temperature for metabolic activity?

II. Answer any one of the following: 1x2=2

6. What is Betabiodiversity? Explain.

7. Name any four bio geographical regions of India.

III. Answer any one of the following: 1x3=3

8. Explain about Genetic diversity. Give example.

9. What are the three types of species, diversity?

IV. Answer any one of the following in detail: 1x5=5

10. What are the important aspects of Biodiversity?

11. Explain on Western Ghats and Himalayan Regions of Biogeographical regions of India.

EVERWIN MATRIC. HR. SEC. SCHOOL

31.10.19 TT Commerce Time: 45 Mins
STD: XII (H-J) Marks: 30

I. Answer the following:

1. Write a note on the voluntary consumer organisation. (5)

2. How to register the complaints? (5)

3. Who are the members of the National Commission? (5)

4. Is consumer protection necessary? (5)

5. What is the pecuniary jurisdiction of the state commission? (3)

6. What are the functions of the National Commission? (7)

EVERWIN MATRIC. HR. SEC. SCHOOL

31.10.19 TT Economics Time: 45 Mins
STD: XII (F,G) Marks: 30

I. Choose the correct answer: 6x1=6

1. Sarvodaya plan was advocated by _____.
a) M.N.Roy b) J.P.Narayan c) S.N.Agarwal

2. The Chair person of NITI Aayog is _____.
a) Prime Minister b) President c) Vice-President

3. Planning Commission was setup in the year _____.
a) 1951 b) 1947 c) 1950

4. Which is not the feature of economic growth?
a) Wider concept b) Gradual change
c) Concerned with developed nations

5. Short-term plan is also known as _____.
a) Rolling plans b) Controlling plans c) De-rolling plans

6. Who wrote the book 'The Road to Sergdom'?
a) H.R.Hicks b) David Ricardo c) Friedrich Hayek

II. Answer any 8 of the following: 8x3=24

7. What is meant by underdevelopment?

8. Differences between Economic growth and Economic development.

9. What are the economic factors determining development?

10. Draw the flow chart of the vicious circle of poverty.

11. What are the types of planning?

12. What is meant by Totalitarianism?

13. What is GNP?

14. Write a short note on NITI Aayog.

15. Define economic development.

31.10.19 TT Mathematics Time: 45 Mins
STD: XII (A,C) Marks: 30

I. Choose the correct answer: 5x1=5

1. If a vector $\vec{\alpha}$ lies in the plane of $\vec{\beta}$ and $\vec{\gamma}$ then _____
   a) $[\vec{\alpha},\vec{\beta},\vec{\gamma}]=1$ b) $[\vec{\alpha},\vec{\beta},\vec{\gamma}]=-1$ c) $[\vec{\alpha},\vec{\beta},\vec{\gamma}]=0$ d) $[\vec{\alpha},\vec{\beta},\vec{\gamma}]=2$

2. The volume of the parallelopiped with its edges represented by the vectors $\vec{i} + \vec{j}$, $\vec{i} + 2\vec{j}$, $\vec{i} + \vec{j} + \pi\vec{k}$ is _____.
   a) $\frac{\pi}{2}$ b) $\frac{\pi}{3}$ c) π d) $\frac{\pi}{4}$

3. Distance from the origin to the plane 3x-6y+2z+7=0 is _____
   a) 0 b) 1 c) 2 d) 3

4. The direction cosines of a line are $\frac{1}{c}$, $\frac{1}{c}$, $\frac{1}{c}$ then _____
   a) c=±3 b) c=±√3 c) c>0 d) 0 < c < 1

5. If the length of the perpendicular from the origin to the plane 2x+3y+λz=1, λ>0 is $\frac{1}{5}$, then the value of λ is _____.
   a) $2\sqrt{3}$ b) $3\sqrt{2}$ c) 0 d) 1

II. Answer any 5 of the following: 5x5=25

6. If a plane meets the coordinate axes at A, B, C such that the centroid of the triangle ABC is the point (u, v, w), find the equation of the plane.

7. Find the direction cosines of the normal to the plane 12x+3y-4z=65. Also, find the non-parametric form of vector equation of a plane and the length of the perpendicular to the plane from the origin.

8. Find the vector and cartesian form of the equation of a plane which is at a distance of 12 units from the origin and perpendicular to $6\vec{i} + 2\vec{j}-3\vec{k}$

9. Find the non-parametric form of vector equation and cartesian equation of the point $\vec{r}=(6\vec{i} -\vec{j}+\vec{k}) + s(-\vec{i} + 2\vec{j}+\vec{k}) + t(-5\vec{i} -4\vec{j} - 5\vec{k})$

10. Find the parametric form of vector equation and cartesian equation of the plane passing through the points (2, 2, 1) , (9, 3, 6) and perpendicular to the plane 2x+6y+6z=9.

11. Find the non-parametric form of vector equation and cartesian equation of the plane passing through the point (0, 1, -5) and parallel to the straight lines
   $\vec{r}=(\vec{i} +2\vec{j}-4\vec{k}) + s(2\vec{i} + 3\vec{j}+6\vec{k})$ and $\vec{r}=(\vec{i} -3\vec{j}+5\vec{k}) + t(\vec{i} +\vec{j}-\vec{k})$

31.10.19 TT Computer Science Time: 45 Mins
STD: XII (B,D,E) Marks: 30

I. Answer the following: 6x2=12

1. Differentiate PYTHON and C++.
2. Why Python language is called as glue language?
3. How will you access the module function?
4. What is the use of modules?
5. Differentiate compiler and interpreter.
6. What is the use of cd command? Give an example.

II. Answer the following: 6x3=18

7. What is MinGw? What is its use?
8. What is sys.argv? What does it contain?
9. Write a note on _name_variable.
10. Write a c++ program to check the given number is palindrome or not.
11. Write any 3 features of Python.
12. Write the syntax of getopt ( ).