

EVERWIN MATRIC. HR. SEC. SCHOOL

16.10.19 T.T Computer Science Time: 45 Mins
 STD: XII (B,D,E) Marks: 30

I. Answer any 4 of the following: 4x2=8

1. What is the use of next() function?
2. How will you sort more than one column from a CSV file? Give an example statement.
3. What is the syntax for CSV writer ()?
4. Write the different types of writing Data in CSV files.
5. What is the difference between sort() and sorted () method?

II. Answer any 4 of the following: 4x3=12

6. Write a Python program to modify an existing file.
7. What is the difference between the write mode and append mode?
8. What is the difference between reader() and DictReader() function?
9. Give the program to add new row to the CSV file.
10. What is Line Terminator? Give example.

II. Answer any 2 of the following: 2x5=10

11. Write a python program to write a CSV file with custom quotes.
12. Write a python program to accept the name and five subjects marks of 5 students. Find the total and store all the details of the students in a CSV file.
13. How will you modify an existing file into a CSV file?

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16.10.19 T.T Economics Time: 45 Mins
 STD: XII (F,G) Marks: 30

I. Fill in the blanks: 6x1=6

1. The Modern state is also called as _____.
2. Taxes, Subsidies, Public debt are the instruments of _____.
3. The Welfare state is not just _____.
4. _____ is not levied as a fine or penalty for breaking law.
5. _____ refers to the claim of the state to the property of persons who die without legal heirs.
6. Expand – CBDT.

II. Answer the following:

7. Describe the various types of deficit in budget. (10)
8. Explain the methods of debt redemption (any 5). (7)
9. Explain the scope of public finance. (7)

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16.10.19 T.T Commerce Time: 45 Mins
 STD: XII (H,I,J) Marks: 30

I. Choose the correct answer: 4x1=4

1. Who is the father of Consumer Movement?
 a) Ralph Nader b) Jawaharlal Nehru c) John F Kennedy
2. The COPRA came into force with effect from _____.
 a) 15/4/1990 b) 1/1/1986 c) 15/4/1987
3. The term 'consumerism' came into existence in the year _____.
 a) 1960 b) 1954 c) 1958
4. The General Assembly of United Nations passed resolution of consumer protection guidelines on _____.
 a) 1986 b) 1958 c) 1985

II. Answer the following:

1. What are the important legislations related to consumerism in India? (10)
2. Write the importance of consumerism. (5)
3. Give 8 examples of adulteration. (5)
4. Define consumerism. (3)
5. Write short notes on COPRA 1986. (3)

16.10.19 T.T Biology Time: 45 Mins
 STD: XII (B,D,E) Bio-Botany Marks: 15
 I. Answer the following: 2x2=4

1. List out the Green house gases.
2. What is Dobson unit?
3. Mention the effects of global warming on plants.
4. What are the benefits of agroforestry?

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

5. List out the effects of deforestation.
6. Write a note on plant Indicators.
7. Explain the major activities of forestry extension centres.

III. Answer any 1 of the following: 1x5=5

8. Explain the sources of Green house gases emission (Natural and Anthropogenic)

(or)

Write in detail on Agroforestry.

Bio-Zoology

Marks: 15

I. Answer any 3 of the following: 3x1=3

1. What is the Natality formula?
2. What is the inactive state of winter called as?
3. What is the inactive state of summer called as?
4. Animals having camouflaging ability are called as _____?

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

5. What is meant by Amensalism?
6. What is meant by commensalism?
7. What is meant by mutualism?

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

8. Write a note on r selected species.
9. Write a note on k selected species.

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

10. Write a note on Desert Biome and adaptations.
11. Write a note on aquatic animals and their adaptations.

16.10.19 T.T 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. If \vec{a} and \vec{b} are unit vectors such that $[\vec{a}, \vec{b}, \vec{a} \times \vec{b}] = \frac{\pi}{4}$ then the angle between \vec{a} and \vec{b} is _____.
 a) $\frac{\pi}{6}$ b) $\frac{\pi}{4}$ c) $\frac{\pi}{3}$ d) $\frac{\pi}{2}$
3. If $\vec{a}, \vec{b}, \vec{c}$ are 3 unit vectors such that $\vec{a} \perp \vec{b}$ and is parallel to \vec{c} then $\vec{a} \times (\vec{b} \times \vec{c}) =$ _____.
 a) \vec{a} b) \vec{b} c) \vec{c} d) 0
4. If $\vec{a}, \vec{b}, \vec{c}$ are 3 non-coplanar vectors such that $\vec{a} \times (\vec{b} \times \vec{c}) = \frac{\vec{b} + \vec{c}}{\sqrt{2}}$ then the angle between \vec{a} and \vec{b} is _____.
 a) $\frac{\pi}{2}$ b) $\frac{3\pi}{4}$ c) $\frac{\pi}{4}$ d) π
5. In dot product, if \vec{a} is perpendicular to \vec{c} then _____.
 a) $\vec{a} \times \vec{c} = 0$ b) $\vec{a} \cdot \vec{c} = 0$ c) $\vec{a} = \lambda \vec{c}$ d) $\vec{a} \cdot \vec{c} = \lambda$

II. Answer any 5 of the following: 5x3=15

6. The volume of the parallelepiped whose co-terminus edges are $7\hat{i} + \lambda\hat{j} - 3\hat{k}$, $\hat{i} + 2\hat{j} - \hat{k}$, $-3\hat{i} + 7\hat{j} + 5\hat{k}$ is 90 cu.units. Find λ .
7. If $\vec{a} = \hat{i} - \hat{k}$, $\vec{b} = x\hat{i} + \hat{j} + (1-x)\hat{k}$, $\vec{c} = y\hat{i} + x\hat{j} + (1+x-y)\hat{k}$, show that $[\vec{a}, \vec{b}, \vec{c}]$ depends on neither x nor y.
8. Let $\vec{a}, \vec{b}, \vec{c}$ be 3 non-zero vectors such that \vec{c} is a unit vector perpendicular to both \vec{a} and \vec{b} . If the angle between \vec{a} and \vec{b} is $\frac{\pi}{6}$, show that $[\vec{a}, \vec{b}, \vec{c}]^2 = \frac{1}{4} |\vec{a}|^2 |\vec{b}|^2$
9. For any vector \vec{a} , prove that $\hat{i} \times (\vec{a} \times \hat{i}) + \hat{j} \times (\vec{a} \times \hat{j}) + \hat{k} \times (\vec{a} \times \hat{k}) = 2\vec{a}$
10. If $\vec{a}, \vec{b}, \vec{c}, \vec{d}$ are coplanar vectors, show that $(\vec{a} \times \vec{b}) \times (\vec{c} \times \vec{d}) = 0$
11. Prove that $[\vec{a} - \vec{b}, \vec{b} - \vec{c}, \vec{c} - \vec{a}] = 0$

III. Answer the following: 2x5=10

12. If $\vec{a} = 2\hat{i} + 3\hat{j} - \hat{k}$, $\vec{b} = 3\hat{i} + 5\hat{j} + 2\hat{k}$, $\vec{c} = -\hat{i} - 2\hat{j} + 3\hat{k}$, verify that $\vec{a} \times (\vec{b} \times \vec{c}) = (\vec{a} \cdot \vec{c})\vec{b} - (\vec{a} \cdot \vec{b})\vec{c}$
13. a) Show that the four points (6, -7, 0), (16, -19, -4), (0, 3, -6), (2, -5, 10) lie on a same plane.
 b) Find the altitude of a parallelepiped determined by the vectors $\vec{a} = -2\hat{i} + 5\hat{j} + 3\hat{k}$, $\vec{b} = \hat{i} + 3\hat{j} - 2\hat{k}$, $\vec{c} = -3\hat{i} + \hat{j} + 4\hat{k}$ if the base is taken as the parallelogram determined by \vec{b} and \vec{c} .