

EVERWIN MATRIC. HR. SEC. SCHOOL

07.08.19 T.T Biology Time: 45 Mins
 STD: XII (B,D,E) Bio-Botany Marks: 30

- I. Fill in the blanks: 2x1=2
 1. The cry toxins effect the _____ system of insect.
 2. Use of microbes to recover metal pollutants from contaminated sites is called _____.

- II. Answer any four of the following: 4x2=8
 3. List out the application of Biotechnology.
 4. What is RNA Interference?
 5. Write a note on CRISPR.
 6. Write the risk of Genetically modified foods.
 7. What are the advantages of Bt cotton?

- III. Answer any one in detail: 1x5=5
 8. Explain about the biodegradable plastics.
 (or)

What is the purpose of Green fluorescent protein.

Bio-Zoology

- I. Give the expansion of any three of the following: 3x1=3
 1. SNP - 2. VNTR - 3. YAC - 4. S-D sequence
 II. Answer any two of the following: 2x2=4
 5. Give the significance of Dystrophin.
 6. Give the significance of HGP and its goal. Write any two points.
 7. Write the application of HGP in future challenge.
 III. Answer any one of the following: 1x3=3
 8. What brings about the termination of proteinsynthesis.?
 9. Write a note on the structure of operon.
 IV. Answer any one of the following in detail: 1x5=5
 10. Write a note on T-RNA structure.
 11. Write a note on lac operon.

EVERWIN MATRIC. HR. SEC. SCHOOL

07.08.19 T.T Maths Time: 45 Mins
 STD: XII (A,C) Marks: 30

- I. Choose the correct answer: 5x1=5
 1. If $\sin^{-1}x + \sin^{-1}y = \frac{2\pi}{3}$, then $\cos^{-1}x + \cos^{-1}y =$ _____
 a) $\frac{2\pi}{3}$ b) $\frac{\pi}{3}$ c) $\frac{\pi}{6}$ d) π

2. $\sin^{-1}(\cos x) = \frac{\pi}{2} - x$ is valid for _____.
 a) $-\pi \leq x \leq 0$ b) $0 \leq x \leq \pi$ c) $\frac{-\pi}{2} \leq x \leq \frac{\pi}{2}$ d) $\frac{-\pi}{4} \leq x \leq \frac{\pi}{2}$
 3. The domain of the function defined by $f(x) = \sin^{-1}\sqrt{x-1}$ is _____.
 a) [1, 2] b) [-1, 1] c) [0, 1] d) [-1, 0]
 4. The domain of $\sin x$ is _____.
 a) $[\frac{-\pi}{2}, \frac{\pi}{2}]$ b) $(\frac{-\pi}{2}, \frac{\pi}{2})$ c) $(0, \pi)$ d) $[0, \pi]$

5. $\tan^{-1}(\frac{1}{4}) + \tan^{-1}(\frac{2}{9}) =$ _____
 a) $\frac{1}{2} \cos^{-1}(\frac{3}{5})$ b) $\frac{1}{2} \sin^{-1}(\frac{3}{5})$ c) $\frac{1}{2} \tan^{-1}(\frac{3}{5})$ d) $\tan^{-1}(\frac{1}{2})$

- II. Answer the following: 5x2=10
 6. Find the period and amplitude of $y = -5\sin(-2x)$
 7. For what value of x does $\sin x = \sin^{-1}x$?

8. Find the principal value of $\sin^{-1}(\frac{-1}{2})$
 9. Is $\cos^{-1}(-x) = \pi - \cos^{-1}(x)$ true? Justify your answer.
 10. Find the principal value of $\cos^{-1}(\frac{1}{2})$

- III. Answer the following: 5x3=15
 11. Find the value of $\cos^{-1}[\cos(\frac{4\pi}{3})] + \cos^{-1}[\cos(\frac{5\pi}{4})]$
 12. Find the value of $\cos^{-1}[\cos\frac{\pi}{7} \cos\frac{\pi}{17} - \sin\frac{\pi}{7} \cdot \sin\frac{\pi}{17}]$
 13. Find the domain of $\cos^{-1}(\frac{2+\sin x}{3})$
 14. Find the domain of $f(x) = \sin^{-1}(\frac{x^2+1}{2x})$
 15. Find the value of $\sin^{-1}[\sin\frac{5\pi}{9} \cdot \cos\frac{\pi}{9} + \cos\frac{5\pi}{9} \cdot \sin\frac{\pi}{9}]$

EVERWIN MATRIC. HR. SEC. SCHOOL

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

- I. Choose the correct answer: 5x1=5
- The New currency symbol designed by _____.
 a) Kiran Kumar b) Udaya Kumar c) Sathish
 - M₁ is _____.
 a) Savings deposits with post office saving banks
 b) Currency, coins and demand deposits
 c) Total deposits with post offices
 - M₄ is otherwise called as _____.
 a) narrow money b) broad money c) dear money
 - Irving Fisher's Quantity Theory of money was popularized in
 a) 1911 b) 1908 c) 1910
 - _____ is a decrease in the rate of inflation.
 a) Deflation b) Stagflation c) Disinflation

II. Answer any six of the following: 6x3=18
 (Q.No.9 is compulsory)

- What is barter?
- What is plastic money? Give example.
- Define Money.
- What is stagflation?
- What is gold standard?
- What is commodity money?
- Define inflation.

III. Answer the following: 7x1=7

- Illustrate Fisher's Quantity Theory of money.

EVERWIN MATRIC. HR. SEC. SCHOOL

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

- I. Answer the following: (Q.No.4 is compulsory) 5x2=10
- What is list in python? Give eg.
 - Write the syntax for creating list.
 - How will you access the list elements in reverse order?
 - How will you find the length of the list? Give eg.
 - Write a note on the following function in a list:
 i) append () ii) extend ()
- II. Answer the following: (Q.No.6 is compulsory) 5x3=15
- Write a program to find the even number less than 10 using list comprehension method.
 - How to delete and remove element in a list?
 - Write a note on range () function.
 - Explain the sort () function in list.
 - What will be the output from the following snippets?

```
Div By 4=[ ]
for i in range(21):
    if (i%4==0):
        div By 4.append(i)
print (divBy4).
```

III. Answer in detail: 1x5=5

- Explain any 5 list function with example.

EVERWIN MATRIC. HR. SEC. SCHOOL

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

- I. Answer the following:
- Discuss the operating function of HRM. (8 Marks)
 - Explain the managerial functions. (8 Marks)
 - Write any five features of HR. (5 Marks)
 - Mention the three characteristics of HR. (3 Marks)
 - Give the meaning of HR. (3 Marks)
 - What is meant by HRM. (3 Marks)