09.08.19   T.T Computer Application   Time: 45 Mins

STD: XII (F,G,H)   Marks: 30

I. Answer any 5 of the following questions in short: 5x2=10

1. What is MySQL function?

2. What is Web Database?

3. Give few examples of MySQL queries.

4. What are the types of MySQL function available in PHP?

5. Define MySqlifetch_assoc( ) function.

6. Define MySqli_affected_rows( ) function.

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

7. Write the syntax of MySQLi Queries.

8. Differentiate mysqli_affected_rows( ) function and
   mysqli_fetch_assoc ( ) function.

9. Write a note on PHP MySQL database connection.

10. Write MySQL connection syntax with example.

11. Write a note on closing connection in PHP.

12. What is the purpose of MySqLi function available?

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

13. Explain the Database error handling and management
    process in PHP.

14. Explain MySQLi queries with examples.

09.08.19   T.T Biology   Time: 45 Mins

STD: XII (A,C)   Bio-Botany   Marks: 30

I. Fill in the blanks: 2x1=2

1. Trade name "Basta" refers to a non-selective herbicide
   containing the chemical compound _____.

2. _____ is the addition of selected microbes to speedup
   degradation process.

II. Answer any 4 of the following questions: 4x2=8

3. What is the use of GFP?

4. Write notes on Flavr savr tomato.

5. Define Biopharming. Give its uses.

6. Write the protocol for glyphorate tolerant potato plant.

7. What is CRISPR-cas 9?

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

8. Explain about the biodegradable plastics.

(or)

Define Biopiracy. Explain with Neem as an example.

Bio-Zoology

I. Give the expansion of any three of the following: 3x1=3

1. SNP -   2. VNTR -   3. UTR -   4. OFR

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. What is the role of GTP give one example.

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

8. What brings about the termination of proteinsynthesis.?

9. Draw and label T-RNA structure.

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

10. Write a note on initiation and elongation process of
    Translation.

11. Write a note on lac operon.

I. Read the set of poetic lines given below and answer the

questions that follow: 22x1=22

> Jealous in honour, sudden and quick in quarrel
>
> Seeking the bubble reputation
>
> Even in the cannon's mouth.

1. Explain 'Jealous in honour'.

2. Which stage of life is explained here?

3. Bring out the meaning of 'oaths'.

4. Explain 'Bubble reputation'.

5. Explain the phrase 'sudden' and 'quick' in quarrel.

6. What is the figure of speech in the second line.

7. What is the soldier ready to do?

8. What are the distinguishing features of this stage?

> His youthful hose, well sav'd , a world too wide
>
> For his shrunk shank; and his big manly voice,
>
> Turning again toward childish treble, pipes
>
> And whistles in his sound.

9. What does the word 'hose' mean?

10. What happens to his voice?

11. What is a 'treble'?

12. What is the figure of speech in the second and third line?

> And then the justice
>
> In fair round belly with good capon lin'd
>
> With eyes severe and beard of formal cut,
>
> Full of wise saws and modern instances.

13. Whom does justice refer to?

14. Describe his appearance.

15. How does he behave with the people around him?

16. What does he do to show his wisdom?

> And then the lover,
>
> Sighing like furnace with a woeful ballad
>
> Made to his mistress eyebrow

17. Which stage of man's life is depicted in these lines?

18. What is a 'ballad'?

19. What does the word 'woeful' mean?

20. Identify the figure of speech in the second line.

21. How does the lover express his unhappiness?

22. What is a furnace?

II. Explain the following lines with reference to the context: 1x3=3

23. Mewling and puking in the nurse's arms.

09.08.19   T.T Accountancy   Time: 45 Mins

STD: XII (I,J)   Marks: 30

I. Answer the following questions: 1x10=10

1. Raghu and Sam are partners in a firm sharing profit and losses in the ratio of 3:2. Their balance sheet as on 31st March, 2017 is as follows:

Liabilities	₹	₹	Assets	₹	₹
Capital			Machinery		30,000
Accounts:	40,000		Furniture		10,000
Raghu	30,000	70,000	Stock		10,000
Sam		30,000	Debtors	21,000	
Sundry creditors			(-) Provision for doubtful debts	1,000	20,000
			Bank		30,000
		1,00,000			1,00,000

Prakash is admitted on 1.4.2017 subject to the following conditions:

a) He has to bring a capital of ₹10,000

b) Machinery is valued at ₹ 24,000

c) Furniture to be depreciated by ₹ 3,000

d) Provision for doubtful debts should be increased to ₹ 3,000

e) Unrecorded trade receivables of ₹ 1,000 would be brought into books now.

Pass necessary Journal entries and prepare revaluation account and capital account of partners after admission.

II. Answer the following questions: 4x5=20

2. Ambika, Dharani and Padma are partners in a firm sharing profits in the ratio of 5:3:2. They admit Ramya for 25% profit. Calculate the New profit sharing ratio and sacrificing ratio.

3. Praveena and Dhanya are partners sharing profits in the ratio of 7:3. They admit Malini into the firm. The new ratio among Praveena, Dhanya, Malini is 5:2:3. Calculate the sacrificing ratio.

4. Govind and Gopal are partners in a firm sharing profits in the ratio of 5:4. They admit Rahim as a partner. Govind surrenders $\frac{2}{9}$ of his share in favour of Rahim. Gopal surrenders $\frac{1}{9}$ of his share in favour of Rahim. Calculate the new profit sharing ratio and sacrificing ratio.

5. Selvam and Senthil are partners sharing profit in the ratio of 2:3. Siva is admitted into the firm with $\frac{1}{5}$ share of profit. Siva acquires equally from Selvam and Senthil. Calculate the new profit sharing ratio and sacrificing ratio.

09.08.19   T.T Maths   Time: 45 Mins

STD: XII (B)   Marks: 30

I. Choose the correct answer: 5x1=5

1. The value of $\sin^{-1}(\cos x)$, $0 \le x \le \pi$ is _____.

   1) π-x   2) $x-\frac{\pi}{2}$ 3) $\frac{\pi}{2}$-x   4) x- π

2. $\sin^{-1}\frac{3}{5} - \cos^{-1}\frac{12}{13} + \sec^{-1}\frac{5}{3} - \cos^{-1}\frac{13}{12}$ =_____.

   1) 2π 2) π 3) 0   4) $\tan^{-1}\frac{12}{65}$

3. $\sin^{-1}(\cos x)=\frac{\pi}{2}$-x is valid for

   1) $-\pi \le x \le 0$ 2) $0 \le x \le \pi$ 3) $\frac{-\pi}{2} \le x \le \frac{\pi}{2}$ 4) $\frac{-\pi}{4} \le x \le \frac{3\pi}{4}$

4. If $x=\frac{1}{5}$, the value of $\cos(\cos^{-1}x + 2\sin^{-1}x)=$_____

   1) $-\sqrt{\frac{24}{25}}$ 2) $\sqrt{\frac{24}{25}}$ 3) $\frac{1}{5}$ 4) $\frac{-1}{5}$

5. If $\cot^{-1}x=\frac{2\pi}{5}$ for some $x \in R$, the value of $\tan^{-1}x$ is _____.

   1) $\frac{-\pi}{10}$ 2) $\frac{\pi}{5}$ 3) $\frac{\pi}{10}$ 4) $\frac{-\pi}{5}$

II. Answer for any 5 of the following questions: 5x2=10

6. Find all the values of x such that $-10\pi \le x \le 10\pi$ and sin x=0.

7. Find all the values of x such that $-5\pi \le x \le 5\pi$ and cos x=1.

8. Is $\cos^{-1}(-x)=\pi - \cos^{-1}(x)$ true? Justify your answer.

9. For what value of x does $\sin x=\sin^{-1} x$?

10. Find the value of $\sin^{-1}\left(\sin\left(\frac{2\pi}{3}\right)\right)$

11. Find the value of $\cos-1\left(\frac{1}{2}\right)+\sin^{-1}(-1)$.

III. Answer for any 5 of the following questions: 5x3=15

12. Find the value of $\cos\left(\cos^{-1}\left(\frac{4}{5}\right) + \sin^{-1}\left(\frac{4}{5}\right)\right)$

13. Find the value of $\sin^{-1}\left(\sin\frac{5\pi}{9}\cos\frac{\pi}{9} + \cos\frac{5\pi}{9}\sin\frac{\pi}{9}\right)$

14. Find the domain of the following $f(x)=\sin^{-1}\left(\frac{x^2+1}{2x}\right)$

15. Find the domain of $f(x)=\sin^{-1}\left(\frac{|x|-2}{3}\right)+\cos^{-1}\left(\frac{1-|x|}{4}\right)$

16. Find the value of $\cos^{-1}\left(\cos\frac{\pi}{7}\cos\frac{\pi}{17} - \sin\frac{\pi}{7}\sin\frac{\pi}{17}\right)$

17. Find the value of $\cos^{-1}\left(\cos\left(\frac{4\pi}{3}\right) + \cos^{-1}\left(\cos\left(\frac{5\pi}{4}\right)\right)\right)$

EVERWIN MATRIC. HR. SEC. SCHOOL

09.08.19　　　　　T.T Computer Science　　　　Time: 45 Mins

STD: XII (A,C)　　　　　　　　　　　　　　Marks: 30

I. Answer the following:　　　　　　　　　5x2=10

　(Q.No.5 is compulsory)

1. What is list in python?

2. Write the syntax for accessing the elements in a list.

3. What is meant by nested list? Give example.

4. What is meant by reverse indexing?

5. Write a note on list length.

II. Answer the following:　　　　　　　　5x3=15

　(Q.No.8 is compulsory)

6. Difference between del( ) and remove( ) function in a list.

7. Write the output for the following:

　for x in range (2, 11, 2):

　　print(x)

8. What is list comprehension? Write the syntax and example.

9. Write a note on sort ( ) function in a list.

10. Write the syntax of range ( ) function and explain.

III. Answer in detail:　　　　　　　　　1x5=5

11. What are the different ways to insert an element in a list?

　Explain with example.

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09.08.19　　　　　T.T Business Maths　　　　Time: 45 Mins

STD: XII (F,G,H)　　　　　　　　　　　　Marks: 30

I. Answer any 6 from the following:　　　　6x5=30

1. Solve $(3D^2+D-14)y=13e^{2x}$

2. a) $\frac{d^2y}{dx^2}+16y=0$　　　b) $(D^2-4D-1)y=e^{-3x}$

3. $(3D^2+D-14)y=13e^{\frac{-7}{3x}}$

4. $(D^2-2D+1)y=e^{2x}+e^x$

5. a) $(D^2+2D+3)y=0$　　b) $\frac{d^2y}{dx^2}-4\frac{dy}{dx}+4y=0$

6. Suppose that the quantity demanded $Q_d=13-6P+2.\frac{dP}{dt}+\frac{d^2P}{dt^2}$

　and quantity supplied $Q_s=3+2P$ where P is the price. Find the equilibrium price for market clearance.

7. Solve $(D^2-2D-15)y=0$ given that $\frac{dy}{dx}=0$ and $\frac{d^2y}{dx^2}=2$ when x=0