

# September

39th Week 2023

| September 2023 |    |    |    |    |    |    |    |    |    |    |    |    |    |
|----------------|----|----|----|----|----|----|----|----|----|----|----|----|----|
| M              | T  | W  | T  | F  | S  | S  | M  | T  | W  | T  | F  | S  | S  |
|                |    |    |    |    | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  |
| 11             | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 25             | 26 | 27 | 28 | 29 | 30 |    |    |    |    |    |    |    |    |

29 Friday pesticide, insecticide, weevil  
killers, pharmaceutical compounds  
like drugs etc.

30 Saturday

01 Sunday

October 2023

| M  | T  | W  | T  | F  | S  | S  | M  | T  | W  | T  | F  | S  | S  |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
|    |    |    |    |    | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  |    |
| 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |    |    |    |    |    |

September

2023 39th Week

Mixed inhibition.

Wednesday 27

Need for ~~staying~~ studying enzyme inhibition mechanism. They are

(i) Exploring potential mechanism in multi substrate reactions

(ii) Studying the relative binding affinity of competitive inhibitors

to the enzyme active site,

Thursday 28

in the absence of 3D structure information.

(iii) For understanding various controls mechanism - how the balance of

protease enzymes and their inhibitors in the tissues achieve homeo-

stable.

(iv) For various commercial applications like

Teamwork; Simply stated, it is less me and more we



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| M              | T  | W  | T  | F  | S  | S  | M  | T  | W  | T  | F  | S  | S  |
|                |    |    |    |    | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  |
| 11             | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 25             | 26 | 27 | 28 | 29 | 30 |    |    |    |    |    |    |    |    |

25 Monday (2) Reversible, where the loss of activity can be restored by the removal of the inhibiting compounds. It's temporary.

(i) Irreversible, where the loss of activity cannot be recovered within the stipulated time of ~~interest~~ interest.

26 Tuesday Irreversible inhibition behaves as time dependent loss of enzyme concentration with lowered  $V_{max}$  or incomplete activation with time dependent ~~loss~~ change in both  $K_m$  and  $V_{max}$ . Heavy metal ions like Hg, Pb etc. cause irreversible inhibition which bind strongly to the amino acid backbone termed as

The nature of strategy is to have more forces at the point of attack than the enemy



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P.G. Sem III CC-XII

UNIT-I

Topic - Reversible and Irreversible Inhibition of Enzyme.

Enzyme Inhibition - An enzyme catalysed reaction can be hindered or reduced by a number of ~~substrate~~ substances. Some others like Urea are known as denaturants being non specific in their mode of action. But if any compound act as fairly specific way in inhibiting the catalysts of a particular enzyme they are called inhibitors. The loss of activity can either be of two types.

Saturday 23

Sunday 24