



**GANDHI INSTITUTE OF ENGINEERING AND TECHNOLOGY, ODISHA, GUNUPUR  
(GIET UNIVERSITY)**

**M. Sc. (Hort.)(First Semester - Regular) Examinations, February – 2025**

**FSC 507 - Growth and Development of Fruit Crops**

(Fruit Science)

Time: 2 hrs

Maximum: 50 Marks

**Answer ALL questions**

(The figures in the right hand margin indicate marks)

**PART – A**

**(2 x 5 = 10 Marks)**

Q.1. Answer **ALL** the questions

	CO #	Blooms Level
a. Explain the differences between lag phase and Log phase in growth of fruits.	CO1	K2
b. Explain the differences between Source and Sink in fruit plants	CO1	K2
c. List out any 4 new generation plant growth regulators	CO3	K1
d. Role of endogenous hormones in seed dormancy	CO5	K3
e. Differentiate between Orthodox and Recalcitrant seeds	CO2	K5

**PART – B**

**(6 x 5 = 30 Marks)**

Answer **ANY SIX** questions

	CO #	Blooms Level
2. Explain different types of seed dormancy, the factors affecting dormancy	CO1	K4
3. Factors affecting fruit set in fruit crops	CO2	K2
4. Physiological basis of training and pruning and its role in deciding the optimum training and pruning methods	CO4	K3
5. Explain molecular mechanisms involved in growth and development of plants	CO1	K1
6. Horticulture techniques that you recommend to induce flowering and fruiting in guava	CO4	K3
7. Application of GA in fruit cultivation citing examples in different fruits	CO3	K4
8. Differentiate between the Heat Units and Chilling requirements related to fruit crops	CO5	K2
9. Explain the kinetics of growth in fruits	CO1	K1

**PART – C**

**(10 x 1 = 10 Marks)**

Answer **ANY ONE** question

	CO #	Blooms Level
10. Explain different abiotic stress factors affecting fruits; and mitigation measures to tide over heat stress.	CO5	K2
11. Explain the post-harvest behaviour of fruits during storage. Give an account of physiological and biochemical changes taking place from maturity to senescence	CO1	K2
12. Write an essay on Assimilate partitioning at different growth stages from germination	CO4	K3

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