

VINAYAKA MISSION'S RESEARCH FOUNDATIONS, SALEM
(Deemed to be University)

Pharm.D DEGREE EXAMINATION - February 2020
Third Year

PHARMACEUTICAL ANALYSIS

Time: Three hours

Maximum: 70 marks

I. Write essays on any **TWO** questions: (2 x 15 = 30)

1. a) Explain the different types of electronic transitions. (10)
b) Describe the working of photomultiplier tube. (5)
2. a) Write the preparation of TLC plate and development techniques in TLC. (5)
b) Explain the theory of gel electrophoresis. (5)
3. a) Write the different types of conductometric titration and its applications. (10)
b) Describe the AES. (5)

II. Write short answers on any **SIX** questions: (6 x 5 = 30)

4. What is luminescence and its types?
5. Explain principle and factors affecting polarography.
6. Give an account of stationary phase and mobile phase used in GC.
7. Validation technique of analytical procedure.
8. Explain fragmentation technique procedure.
9. Define the type of column used in HPLC.
10. What is group frequency and finger print region in IR?
11. Explain chemical shift.

III. Write short notes on any **FIVE** question: (5 x 2 = 10)

12. Batchochromic shift.
13. Beer- Lambert's law.
14. Polarographic maxima.
15. Dead stop end point.
16. Limit quantitation.
17. Coupling constant.
