This question paper contains 2 printed pages Your Roll No

7151

M. Sc. / II

AGROCHEMICALS AND PEST MANAGEMENT

Paper XI Pesticide Formulations Quality Control and Development Protocol

J

Time 3 hours Maximum Marks 38

(Write your Roll No on the top of immediately on receipt of this question paper)
Attempt five questions in all, including Question no 1 which is compulsory

1. Attempt any ten:

(i) Particle size of dust formulations is more than WP. Why? Give reasons

(ii) Give two examples of commonly used wetting and dispersing agents used in SC formulations

(iii) Define wettability What is its importance in pesticide formulations?

(iv) Why acetone being a good solvent for dissolving pesticide cannot be used as a solvent in pesticide formulation?

(v) Why phorate cannot be granulated as WP?

(vi) How the rate of release of a.i. can be controlled in CS formulations?

(vii) Chlorpyriphos is generally formulated as EC and not EW. Why?

(viii) What is cloud point? Mention its importance.

(ix) Granular formulations are considered as much safer formulations than EC and dust. Give two reasons.

(x) Define flash point. How much of this temperature is required for pesticide formulations?

(xi) What are adjuvants? Give one example of antisettling agent and antifreeze. 10

2 (a) What are the quality control parameters for WDG formulations? 3

(b) Describe briefly the preparations of WDG formulations and their advantages and disadvantages. 4

3 (a) What do you mean by SC formulations? Describe their method of preparation? 4

(b) What are the advantages of SC formulations over EC and WP formulations? 3

4 (a) Describe interfacial polymerization? 3

(b) Why controlled release formulations are called environment and user friendly pesticide formulations? 2

(c) Mention their advantages over conventional formulations. 2

5 (a) What is the function of registration committee? 3

(b) Describe briefly the composition of allied data required for registration of pesticides. 4

6 Give differences between the following. 7
Attempt any three.

(i) Carriers and Diluents
(ii) Flowables and dry flowables.
(iii) Granules and wettable granules.
(iv) Suspensions and Emulsions.