Question Bank of Biological control

Q1/ - Define the following:

Polydnavirus parasitoid relations, Melanization, Superparasitism, *Hyssopus pallidus*, Heteronomous hyperparasitoids, facultative hyperparasitoids, Synovigenic parasitoids, Inoculative biological control, De Lury's method

- Q2/ Mention how the host immune systems can attack endoparasitoid immature stages as a defence mechanism against parasitoids?
- Q3/- Mention the response of host immune systems during the attack by endoparasitoids as a defence mechanism against the parasitoids?
- **Q4/-**Mention the main approaches to biological control?
- Q5-/Mention different methods to count the numbers of ladybird beetles on crops in the field?
- **Q6** Compare between the following:

koinobionts and idiobionts, microorganism and macroorganism mass production, classical and conservation biological control

Q7/-Mention the Economic-injury level and Economic threshold

Q8/- Explain the following?

- 1. Rodolia cardinalis was very successful as a classical biological control agent?
- 2. Live hosts better than artificial diets for macroorganism mass-production?
- 3. What kind of trap the larvae of ant lions *Cueta variegata* would usually use to capture their prey?
- 4. Females of parasitic Hymenoptera can control fertilization of their eggs and therefore determine the sex of their offspring?
- 5. Ectoparasitoids inject permanent toxin in to the host while endoparasitoids inject partial venom?
- 6. Parasitoids and predators are more effective against phloem-feeding insects such as aphids and scale insects?
- 7. Entomopathogenic fungi and bacteria must be deposited closer to the correct location of the pest?
- 8. Ectoparasitoids inject permanent toxin in to the host while endoparasitoids inject partial venom?
- 9. Members of ichneumonoid wasps have teamed up with polydnaviruses to help them survive within hosts?
- 10. The eggs of the predator Aphid lion will not deposit directly on the plant leaves but at the ends of small stalks