
UNIVERSITI SAINS MALAYSIA

First Semester Examination
2013/2014 Academic Session

December 2013 / January 2014

BVT 311/4 – Medical and Urban Entomology
[Entomologi Perubatan & Bandar]

Duration: 3 hours
[Masa : 3 jam]

Please ensure that this examination paper contains FOUR printed pages before you begin the examination.

[Sila pastikan bahawa kertas peperiksaan ini mengandungi EMPAT muka surat yang bercetak sebelum anda memulakan peperiksaan ini.]

Instructions: Answer **FIVE** (5) out of **SIX** (6) questions, in English or Bahasa Malaysia. Each question carries 20 marks.

Arahan: *Jawab **LIMA** (5) daripada **ENAM** (6) soalan yang diberikan dalam Bahasa Inggeris atau Bahasa Malaysia. Tiap-tiap soalan bernilai 20 markah.]*

In the event of any discrepancies, the English version shall be used.

[Sekiranya terdapat sebarang percanggahan pada soalan peperiksaan, versi Bahasa Inggeris hendaklah diguna pakai].

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1. Describe sporogony and schizogony, and the roles they play in the life cycle of *Plasmodium falciparum*.

[Huraikan sporogoni dan skizogoni, dan peranan yang dimainkannya dalam kitar hidup Plasmodium falciparum.]

(20 marks / 20 markah)

2. Discuss the importance of host-pest relationship in the management of vectors and parasites.

[Bincangkan kepentingan hubungan perumah-makhluk perosak dalam pengurusan vektor dan parasit.]

(20 marks / 20 markah)

3. [a] Differentiate between *Aedes* and *Anopheles* mosquitoes based on the stages of their life cycles.

[Bezakan antara nyamuk Aedes dan Anopheles berdasarkan peringkat dalam kitar hidup mereka.]

(10 marks / 10 markah)

- [b] Write short notes on flea and their importance in the field of medicine and veterinary.

[Tulis nota ringkas mengenai fli serta kepentingan dalam bidang perubatan dan veterinar.]

(10 marks / 10 markah)

4. [a] List **FIVE** (5) important species of subterranean termites that could be found in- and around buildings and structures in Malaysia.

*[Senaraikan **LIMA** (5) spesies anai-anai tanah yang penting yang boleh dijumpai di dalam dan keliling bangunan dan struktur di Malaysia.]*

(5 marks / 5 markah)

- [b] Using a table, compare and differentiate the **THREE** (3) methods of termite treatment (repellent termiticide, nonrepellent termiticide and termite bait).

*[Dengan menggunakan suatu jadual, banding dan bezakan **TIGA** (3) kaedah kawalan anai-anai (termisid menolak, termisit tak menolak dan umpan anai-anai).]*

(15 marks / 15 markah)

5. [a] Describe **FIVE** (5) hypotheses for the resurgence of bed bugs over the past 10 years.

*[Huraikan **LIMA** (5) hipotesis untuk kebangkitan semula pepijat di seluruh dunia dalam masa 10 tahun kebelakangan ini.]*

(10 marks / 10 markah)

- [b] Using a table, compare and differentiate the various treatment methods available against bed bugs.

[Dengan menggunakan suatu jadual, banding dan bezakan pelbagai kaedah kawalan terhadap pepijat.]

(10 marks / 10 markah)

6. Write short notes for the following :

[Tulis nota ringkas untuk berikut :]

- [a] Emetophagy
[Emetofagi]
- [b] Bait aversion
[Aversi umpan]
- [c] Polygyny
[Poligini]
- [d] Delusional parasitosis
[Parasitosis delusi]
- [e] Traumatic insemination
[Inseminasi traumatic]

(20 marks / 20 markah)