



FAKULTI PERUBATAN DAN SAINS KESIHATAN
DIPLOMA TEKNOLOGI MAKMAL PERUBATAN
PARASITOLOGI 2 (HLS 1232)

TAJUK AMALI 2:

MALARIA I - *Plasmodium malariae* & *Plasmodium ovale*

NAMA PENUH:	
NO. MATRIKS:	
TARIKH HANTAR:	
DISEMAK OLEH (TARIKH SEMAKAN):	

AMALI 2: Malaria 2 - *Plasmodium malariae* & *Plasmodium ovale*

Alatan/Radas/Bahan Kimia diperlukan:

- Mikroskop cahaya
- Minyak Imersi
- Slaid pengajaran

Rujukan:

- Buku Parasitologi
- Atlas Parasitologi
- Manual Amali

Arahan Amali (SOP):

1. Dengan menggunakan mikroskop dan slaid pengajaran yang disediakan, perhatikan:
 - teknik sebaran filem darah nipis yang baik berserta teknik pewarnaan yang digunakan (semua slaid telah diwarnakan dengan pewarnaan Giemsa).
 - kenalpasti morfologi schizont, gametocyte, trophozoite dan peringkat cecincin bagi *Plasmodium malariae* & *Plasmodium ovale* (jika ada).
2. Lukiskan perbandingan morfologi peringkat - peringkat *Plasmodium malariae* & *Plasmodium ovale* [sepertimana slaid yang telah diperhatikan - sila Guna Ruang Di Bahagian 3.1 (c)].
3. Lengkapkan soalan - soalan amali seperti dilampirkan.

Arahan:

Jawab SEMUA soalan - soalan di dalam ruang yang disediakan. (Sila gunakan kertas tambahan sekiranya perlu).

3.1 CASE STUDY:

As he munched yet another piece of pudding Farhan glanced about the gaily decorated room at his family. His brother's children were busily, excitedly comparing the presents they had pulled from underneath their pillows earlier in this Raya celebratory. Family, food, music, and the smell of cake and rendang smoldering on the table and sending small fragrant wisps throughout the house made everyone happy. Not everyone, Farhan thought as he noticed his father staring out the kitchen window, a deep sadness on his face.

"What is it Dad? Why aren't you happy?" Farhan inquired, approaching his father and pulling back the curtain so he could look out at what his father saw.

"I'm OK," he said. "I was just recalling that when you were just a small niño, twenty years ago on this day, we lost Aunt Halimah. It's the rendang smell, I guess, that does it, that makes me remember that sad, sad day. I loved my sister and I miss her deeply."

"You never talked about what happened to her," Farhan said, putting his arm around his father's shoulder. "What did happen?"

Mr. Farouk pulled his son toward the table where they would soon enjoy the feast of Aidilfitri. They sat down.

"In a word, 'malaria.'" Farouk told his son.

"Malaria?" Farhan repeated.

"It could have been anything. It happened, it took her from us and that was all that mattered. Still, I never really understood that disease."

Talking seemed to brighten Mr. Farouk. He enjoyed talking to his son who had flown home to their family from his university in the United States to share the Aidilfitri holidays. Farhan was a man now, a man a father could talk with.

“We hadn’t had malaria here for over twenty years when your Aunt Halimah died of it.” He went on, “She was using her teaching skills to educate children in the Hulu Terengganu forest. Evidently she became infected on that trip and came home with the parasite already in her body.”

Farhan’s mother, Hasmah sat down beside her husband. She knew precisely what he would be talking about so seriously on this day, but she pretended ignorance.

“So, what are we discussing here?”

“Aunt Halimah,” Farhan answered.

“I should have known. Your father always, as I do, remembers your aunt’s passing on this day. Was he finally discussing it with you?”

“Yes, he told me about her teaching work in Hulu Terengganu.”

Farouk continued. “She took her antimalarial drug **Chloroquine** as a preventative, but it didn’t help. I just don’t understand.”

“When she returned, she told us that she had had a fever the day before. The second day home here she had it again. Then she had it again in two days after that. Your aunt insisted that the fever cycles were not, absolutely not, malaria because: ‘I took the drugs as required by the regimen exactly as I was supposed to.’” Hasmah continued her husband’s story.

“I believed her. I still do.” Farouk said.

There was a brief silence, then Hasmah, her hands moving across her chest, said what she didn’t want Farouk to have to say again. “She died a few days later.”

Questions:

i) What is the exact cause of death? (1 M)

ii) Explain briefly the entire mechanism of this parasitic infection which can cause fatality in human. (19 M)

iii) In your opinion, why there's a resistant of Chloroquine in malaria treatment. (5 M)

iv) Based on the case study, what are your advices to stop/reduce the number of malaria infection in your area? List FIVE suggestions. (5 M)

3.1 (b) Berdasarkan pemerhatian anda, lukiskan perbandingan morfologi diantara Plasmodium falciparum & Plasmodium vivax. (10 M)

Morphology Differentiation	<i>Plasmodium malariae</i>	<i>Plasmodium ovale</i>
Trophozoite		
Schizont		
Gametocyte (male / female)		

~ SOALAN AMALI TAMAT ~