

ACADEMIC READING PRACTICE TEST 8 Part 3

READING PASSAGE 3

Questions 27 - 40

You should spend about 20 minutes on **Questions 27 – 40** which are based on Reading Passage 3 on the following pages.

Malaria

A

Approximately 300 million people worldwide are affected by malaria and between 1 and 1.5 million people die from it every year. Previously extremely widespread, malaria is now mainly confined to Africa, Asia and Latin America. The problem of controlling malaria in these countries is aggravated by inadequate health structures and poor socio-economic conditions. The situation has become even more complex over the last few years with the increase in resistance to the drugs normally used to combat the parasite that causes the disease.

B

Malaria is caused by protozoan parasites of the genus Plasmodium. Four species of Plasmodium can produce the disease in its various forms: plasmodium falciparum, plasmodium vivax, plasmodium ovale and plasmodium malaria. Plasmodium falciparum is the most widespread and dangerous of the four: untreated it can lead to fatal cerebral malaria. Malaria parasites are transmitted from one person to another by the female anopheline mosquito. The males do not transmit the disease as they feed only on plant juices. There are about 380 species of anopheline mosquito, but only 60 or so are able to transmit the parasite. Their sensitivity to insecticides is also highly variable.

C

Plasmodium develops in the gut of the mosquito and is passed on in the saliva of an infected insect each time it takes a new blood meal. The parasites are then carried by the blood into the victim's liver where they invade the cells and multiply. After nine to sixteen days they return to the blood and penetrate the red cells where they multiply again, progressively breaking down the red cells. This induces bouts of fever and anaemia in the infected individual. In the case of cerebral malaria the infected red cells obstruct the blood vessels in the brain. Other vital organs can also be damaged often leading to the death of the patient.

D

Malaria is diagnosed by the clinical symptoms and microscopic examination of the blood. It can normally be cured by anti-malarial drugs. The symptoms - fever, shivering, pain in the joints and headache - quickly disappear once the parasite is killed. In certain regions, however, the parasites have developed resistance to certain anti-malarial drugs, particularly chloroquine. Patients in these areas require treatment with other more expensive drugs. In endemic regions where transmission rates are high, people are continually infected so that they gradually develop immunity to the disease. Until they have acquired such immunity, children remain highly vulnerable. Pregnant women are also highly susceptible since the natural defence mechanisms

are reduced during pregnancy.

E

Malaria has been known since time immemorial but it was centuries before the true causes were understood. Surprisingly in view of this some ancient treatments were remarkably effective. An infusion of qinghao containing artemisinin has been used for at least the last 2000 years in China and the antifebrile properties of the bitter bark of *Cinchona Ledgeriana* were known in Peru before the 15th century. Quinine, the active ingredient of this potion, was first isolated in 1820 by the pharmacists. Although people were unaware of the origin of malaria and the mode of transmission, protective measures against the mosquito have been used for many hundreds of years. The inhabitants of swampy regions in Egypt were recorded as sleeping in tower-like structures out of the reach of mosquitoes, whereas others slept under nets as early as 450 B.C.

F

Malaria has social consequences and is a heavy burden on economic development. It is estimated that a single bout of malaria costs a sum equivalent to over 10 working days in Africa. The cost of treatment is between \$US0.08 and \$US5.30 according to the type of drugs prescribed as determined by local drug resistance. In 1987 the total cost of malaria - health care, treatment, lost production, etc. - was estimated to be \$US800 million for tropical Africa and this figure is currently estimated to be more than \$US1800 million.

G

The significance of malaria as a health problem is increasing in many parts of the world. Epidemics are even occurring around traditionally endemic zones in areas where transmission had been eliminated. These outbreaks are generally associated with deteriorating social and economic conditions and the main victims are underprivileged rural populations. Economic and political pressures compel entire populations to leave malaria free areas and move into endemic zones. People who are non-immune are at high risk of severe disease. Unfortunately, these population movements and the intensive urbanisation are not always accompanied by adequate development of sanitation and health care. In many areas conflict, economic crises and administrative disorganization can result in the disruption of health services. The absence of adequate health services frequently results in recourse to self-administration of drugs often with incomplete treatment. This is a major factor in the increase in resistance of the parasites to previously effective drugs.

H

The hope of global eradication of malaria was finally abandoned in 1969 when it was recognised that this was unlikely ever to be achieved. Ongoing control programs remain essential in endemic areas. In all situations control programs should be based on half a dozen objectives: provision of early diagnosis, prompt treatment to all people at risk, selective application of sustainable preventive measures, vector control adapted to the local situations, the development of reliable information on infection risk and assessment of living conditions of concerned populations. Malaria is a complex disease but it is a curable and preventable one.

Questions 27 - 33

The reading passage on *Malaria* has 8 paragraphs (A – H).

From the list of headings below choose the most suitable headings for paragraphs B – H.

Write the appropriate number (i – xi) in boxes 27 – 33 on your answer sheet.

NB There are more headings than paragraphs, so you will not use them all.

- | | |
|------|--|
| i | Old Remedies |
| ii | Fatality Rates |
| iii | Shifting Demographics Cause Further Problems |
| iv | The Current Situation |
| v | The Bug and its Carriers |
| vi | Total Elimination of Malaria |
| vii | Tackling Malaria Today |
| viii | Transmission to Humans and Effects |
| ix | Local African Medicine |
| x | Malaria's Effect on the Community |
| xi | Identification |

<i>Example</i>	<i>Answer</i>
Paragraph A	iv

27 Paragraph B

28 Paragraph C

- 29 Paragraph D
- 30 Paragraph E
- 31 Paragraph F
- 32 Paragraph G
- 33 Paragraph H

Questions 34 - 36

Do the following statements agree with the views of the writer of Reading Passage 3 *Malaria*?

In Boxes 34 - 36 write:

- YES** *if the statement agrees with the writer*
- NO** *if the statement doesn't agree with the writer*
- NOT GIVEN** *if it is impossible to say what the writer thinks about this*

- 34 Ancient Peruvian doctors were famous for their malarial treatment.
- 35 Children are always under great threat from malaria.
- 36 Poorer people are usually more at risk from malaria.

Questions 37 - 40

Complete the following statements (Questions **37 - 40**) with the best ending from the box below (**A - H**) according to the information in the reading passage *Malaria*.

Write the appropriate letter (**A - H**) in boxes **37 - 40** on your answer sheet.

There are more sentence endings (**A - H**) than questions so you will not need to use them all.

- 37 Anopheline mosquitoes...
- 38 Parasites located in victims' livers...
- 39 Unfinished courses of anti-malarial drugs...
- 40 Control programs to protect people from malaria...

- | | |
|----------|--|
| A | ...have finally been eradicated. |
| B | ...are not always affected by insecticides. |
| C | ...are the results of incompetent doctors. |
| D | ...are always female. |
| E | ...have been taken for hundreds of years. |
| F | ...should be based on seven clear goals. |
| G | ...have resulted in parasitic resistance to treatment. |
| H | ...are later found again in the bloodstream. |