Part 6

You are going to read an article about the way crocodiles sleep. Six sentences have been removed from the article. Choose from the sentences **A–G** the one which fits each gap (**37–42**). There is one extra sentence which you do not need to use.

Mark your answers on the separate answer sheet.

Crocodiles sleep with one eye open

Just in case any of you ever thought you could safely tiptoe past a sleeping crocodile, please reconsider – scientists have confirmed that the fearsome reptiles sleep with one eye open. Researchers in Australia and Germany have recently discovered that crocodiles, while dozing, can deploy what is called 'unilateral eye closure' to keep a lookout for potential threats, or spot animals they can hunt.

It is already known that birds, other reptiles and aquatic animals such as dolphins, seals and walruses have evolved 'unihemispheric' sleep, which is when one half of the brain stays awake while the other shuts down. This allows the animals to keep one eye open to monitor events around them. Researchers had believed for some time that crocodiles might be able to do so too. 37 ____ Now they have, and it lends significant weight to their theory.

Three juvenile saltwater crocodiles were taken from northern Queensland, Australia, to a large university aquarium and filmed 24 hours a day. Scientists confirmed that the crocodiles opened one eye during sleep in response to a mild stimulus. They asked a volunteer to stand still next to the aquarium for 10 minutes. 38 ____ Dr John Lesku, who led the study, said that after the volunteer had left the room they kept looking, through that one eye, at the place where he had last been standing.

A further experiment involved the researchers putting a new young crocodile in with the group. 39 ____ This was possibly because younger crocodiles are less able to defend themselves and need to be protected by the older members of the group.

Lesku said some of his colleagues in Germany had been doing similar experiments. 40 ____ 'It suggests that the crocodilian characteristic we have identified is not specific to one species,' he said. 'It persists into adulthood, meaning that an animal lying in wait to catch food could be perfectly still, yet at the same time be on the lookout for prey. If an animal went to the bank of a river, the crocodile could fully wake up and attack it. I would certainly never approach a crocodile whether its eyes are open or closed. A good rule is never to go anywhere near them.'

Further research is now being planned to monitor crocodiles' brain activity. 41 ____ That crocodiles should share characteristics with birds is not as surprising as some people might think. Birds are crocodiles' closest evolutionary relatives, having shared a common ancestor before splitting and becoming very different species about 155 million years ago.

Sleeping with one eye open may seem strange. 42 ____ 'We think that what birds and dolphins do seems unusual, but if it turns out that crocodiles and reptiles sleep in this way too, then it's the way *we* sleep that starts to look like the exception to the rule,' he said.

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A They discovered that this behaviour was also present in adult Nile crocodiles and caimans.

B The animals responded to that quite strongly and watched the person closely with one eye open.

C As a result, it has been difficult to study this behaviour in the wild.

D But according to Lesku, it may be that land-based mammals, which completely shut down to sleep, are the exception.

E However, they had never had reliable evidence of this behaviour.

F This will aim to find out if one half does indeed shut down.

G Again, the crocodiles opened one eye and kept watch.

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