READING PASSAGE 2

*You should spend about 20 minutes on **Questions 14-26**, which are based on Reading Passage 2 on the following pages.*

Questions 14–20

*Reading Passage 2 has seven paragraphs, **A–G**.*

Choose the correct heading for each paragraph from the list of headings below.

*Write the correct number, **i-x**, in boxes 14-20 on your answer sheet.*

List of Headings

i	Choosing the best moment to migrate
ii	The physical characteristics of birds that allow them to migrate
iii	Environmental pollution and migration patterns
iv	The main reason why birds migrate
v	Research findings on how birds find their way
vi	Successful migration despite a lack of teaching
vii	Why some birds don't migrate
viii	How larger birds make use of the wind
ix	Success despite problems with wind during migration
x	The unexplained rejection of closer feeding grounds

14 Paragraph **A**

15 Paragraph **B**

16 Paragraph **C**

17 Paragraph **D**

18 Paragraph **E**

19 Paragraph **F**

20 Paragraph **G**

Bird Migration

A Birds are highly mobile and among the swiftest of living creatures. Flight gives them the power to move in any direction for as long as they have the energy to keep going. They are equipped with lightweight, hollow bones, a finely-tuned navigation system and an ingenious heat-conserving design that allows them to face life in the harshest of climates. Their respiratory systems have to perform efficiently during sustained flights at altitude, so they have evolved a system of extracting air from their lungs that far exceeds that of any other animal. These features enable birds to come and go with the seasons. On the way, they face constant danger and a daily requirement to find food, water and a safe place to rest. So why do millions of birds migrate rather than stay in one place?

B Most of the explanation revolves around food. In temperate and arctic regions of the northern hemisphere, food is abundant during a short growing season. Migration evolved as a way for birds to exploit resources that are seasonally abundant and, equally important, to go elsewhere when the resources become scarce or harsh weather arrives. Many species can tolerate cold temperatures if food is plentiful but when food is not available they must migrate.

C While this simple explanation for why birds migrate is essentially true, intriguing questions remain. One puzzling fact is that many birds journey much further than would be necessary to find food and good weather. Another apparent conundrum involves the huge migrations performed by arctic birds and mudflat-probing shore birds that breed close to polar regions. In general, the further north a migrant species breeds, the further south it spends the winter. Yet, en route to a final destination in southern latitudes, all these individuals overfly areas of seemingly suitable habitat spanning two hemispheres. Such compulsive journeys probably evolved over time and in response to fluctuations in weather but we do not really know.

D But just how do birds reach their destination and, more to the point, how do young birds migrate over vast distances without parental assistance? Very few adults migrate accompanied by their offspring and youngsters may have little or no inkling of their parents' appearance. Cuckoos are famous for depositing their eggs in the nests of other birds that unwittingly serve as foster-parents. Astonishing as this piece of evolutionary behaviour is, it is even more remarkable to consider that, once grown, the young cuckoo makes its own way to ancestral wintering grounds in the tropics before returning single-handedly to northern Europe to seek out a mate among its own kind.

E As we continue to study bird migration, its mystery is better understood but also compounded. Mounting evidence has confirmed that birds use the sun and stars to obtain compass directions but true navigation requires an awareness of position and time, especially when lost. Experiments have shown that, after being taken thousands of miles over an unfamiliar landmass, birds are still capable of returning rapidly to nest sites. Such phenomenal powers are the product of computing a number of sophisticated cues including an innate map of the night sky and the pull of the Earth's magnetic field. How the birds use their 'instruments' remains unknown, but one thing is clear – they see the world with a sensory perception superior to ours. Most small birds migrate at night and take their direction from the position of the setting sun. However, as well as seeing the sun go down, they also seem to see the plane of polarised light it causes. This calibrates their compass. Travelling at night provides other benefits: the danger of meeting predators as well as the risk of dehydration due to flying for long periods in warm sunlit skies is reduced. Furthermore, at night the air structure is cool and smooth and conducive to sustained, stable flight.

F Nevertheless, all journeys involve considerable risk and part of the skill in arriving safely is setting off at the right time. This means accurate weather forecasting and utilising favourable winds. Birds are adept at both and, in tests, some can detect the minute difference in barometric pressure between the floor and ceiling of a room. Often birds react to weather changes before there is any visible sign of them. Certain species that feed on grassland flee at the onset of a cold snap because when the ground surface freezes the birds could starve. Yet they return ahead of a thaw, their arrival linked to a pressure change presaging an improvement in the weather.

G Unfortunately, some never complete their journey. Not so long ago the assumption was that a bird in the air on a dark windy night with no visible reference points to judge position was, like a pilot without radar, hopelessly lost. We now know this is not the case. Losses do occur, but mainly because birds get swept off course by strong air masses against which battle is futile, and this results in a watery grave. Indeed, it is not unusual for ocean fish to be caught with bird remains in their stomachs. But sometimes there's a silver lining. Each autumn a small number of North American birds are blown across the Atlantic by fast-moving westerly tail winds. Not only do they arrive safely in Europe but, based on tracking evidence, some make it back to North America in the following spring – probably after spending the winter with European migrants in sunny African climes.

Questions 21 and 22

*Choose **TWO** letters, **A–E**.*

Write the correct letters in boxes 21 and 22 on your answer sheet.

According to the passage, which **TWO** of the following statements are true of migrating birds?

A Many birds migrate longer distances than they need to.
B Family groups migrate most successfully.
C Birds need less water if they migrate at night.
D Only shore birds are unaffected by wind.
E Birds are unable to survive if separated from other members of their own species.

Questions 23–26

Complete the sentences below.

*Choose **ONE WORD ONLY** from the passage for each answer.*

Write your answers in boxes 23-26 on your answer sheet.

23 The cuckoo is able to migrate despite a lack of ..... guidance.

24 Night travel benefits birds because they can avoid contact with ..... .

25 Some birds can anticipate weather changes without ..... clues.

26 In the past, birds were thought to be ..... when flying in the dark.

一、段落标题匹配（Questions 14–20）

> 题干翻译：阅读文章 2 有 A–G 七段。请从标题列表 (i–x) 中为每一段选择最合适的标题，并将答案填入 14–20 题。

题号	答案	所选 Heading (英)	Heading 翻译 (中)	详细定位 (第 X 段定位句)	定位句翻译	详细解释
14	**ii**	The physical characteristics of birds that allow them to migrate	鸟类得以迁徙的身体特征	**第 A 段**："*lightweight, hollow bones … a finely-tuned navigation system … heat-conserving design …*"	"轻巧的中空骨骼……精密的导航系统……保温的结构设计……"	A 段在集中罗列 "鸟为什么能飞、能长途飞" 的硬件条件（骨骼、导航、保温、呼吸系统等），主题是**迁徙能力的身体基础**，对应 ii。
15	**iv**	The main reason why birds migrate	鸟类迁徙的主要原因	**第 B 段**："*Most of the explanation revolves around food.*"	"大多数解释都围绕着食物。"	B 段开头点题：迁徙主要是为追逐**季节性食物资源**（丰沛就去利用，匮乏/严寒就离开），所以选 iv。
16	**x**	The unexplained rejection of closer feeding grounds	对更近觅食地/栖息地的 "莫名放弃"	**第 C 段**："*many birds journey much further than would be necessary …*"	"许多鸟迁徙得远远超过……所必需的距离。"	C 段提出谜团：它们明明可以在 "看似合适" 的区域停下，却仍继续飞向更远处（"overfly areas of seemingly suitable habitat"），这正是 "**不选择更近地点的未解现象**"，对应 x。
17	**vi**	Successful migration despite a lack of teaching	缺乏教导仍能成功迁徙	**第 D 段**："*how do young birds migrate … without parental assistance?*"	"幼鸟没有亲鸟帮助，如何完成漫长迁徙？"	D 段的焦点是 "幼鸟没被带飞/没被教，也能迁徙成功"，并用杜鹃幼鸟独自去祖先越冬地作例子，因此选 vi。
18	**v**	Research findings on how birds find their way	关于鸟类如何辨路的研究发现	**第 E 段**："*birds use the sun and stars …*"；"*the Earth's magnetic field.*"	"鸟用太阳和星星……以及地球磁场。"	E 段全是 "研究证据/实验发现"：太阳星辰、磁场、偏振光、迷路仍能返回等，属于 "**如何找到路的研究结论**"，选 v。
19	**i**	Choosing the best moment to migrate	选择最佳迁徙时机	**第 F 段**："*setting off at the right time.*"	"在合适的时间出发。"	F 段强调 "安全到达的关键技能之一是**择时**"，并提到天气预报、利用有利风等，完全对应 i。
20	**ix**	Success despite problems with wind during migration	迁徙中尽管有风的麻烦仍可成功	**第 G 段**："*birds get swept off course by strong air masses …*"；"*blown across the Atlantic … arrive safely …*"	"鸟会被强气流吹离航线……"；"被西风带吹过大西洋……仍能安全到达……"	G 段先说风会把鸟吹偏导致死亡（风险），但也举例说有些鸟被强西风吹到欧洲仍能生存，甚至次年飞回（成功）。这就是 "**有风的困难下仍可能成功**"，所以选 ix（不是 viii，因为没讲 "大型鸟如何利用风" 的机制）。

二、双选题（Questions 21–22）

> 题干翻译：根据文章内容，下列关于迁徙鸟类的说法中，哪两项是正确的？（选两项 A–E）

题号	答案	选项内容 (英)	题干翻译 (中)	详细定位 (第 X 段定位句)	定位句翻译	详细解释
21	**A**	Many birds migrate longer distances than they need to.	许多鸟类迁徙的距离比 "必要距离" 更长。	**第 C 段**："*many birds journey much further than would be necessary …*"	"许多鸟迁徙得远远超过……所必需的距离。"	原文几乎同义改写：*much further than would be necessary* = "比需要的更远"，所以 A 正确。
22	**C**	Birds need less water if they migrate at night.	如果夜间迁徙，鸟类需要更少的水（不易脱水）。	**第 E 段**："*the risk of dehydration … is reduced.*"	"……脱水的风险降低了。"	题干把机制换成结果表达：夜间飞行减少在 "温暖日照天空中长时间飞行" 的脱水风险 ⇒ 实际上**水分流失更少/对水的需求更低**，所以 C 正确。B/D/E 原文均未支持，且 D、E 与文意相反（风会吹偏；还举例说明被吹到欧洲的北美鸟也能活）。

三、句子填空（Questions 23–26）

> 题干翻译：完成下列句子。每题从文章中选一个单词填空。

题号	答案	题干翻译 (中)	详细定位 (第 X 段定位句)	定位句翻译	详细解释
23	**parental**	杜鹃能够迁徙，尽管缺乏_____的引导。	**第 D 段**："*without parental assistance*"	"没有亲鸟的帮助。"	题干把 *assistance*（帮助）换成 *guidance*（引导），但核心信息一致：缺乏 "亲代/父母" 的带领，所以填 **parental**。
24	**predators**	夜间迁徙对鸟有利，因为它们可以避免与_____接触。	**第 E 段**："*the danger of meeting predators … is reduced.*"	"遇到捕食者的危险降低了。"	"avoid contact with …" 对应原文 "meeting predators"（遇到捕食者）。因此填 **predators**。
25	**visible**	有些鸟能在没有_____线索的情况下预判天气变化。	**第 F 段**："*before there is any visible sign of them.*"	"在出现任何可见迹象之前。"	题干 "clues" 对应原文 "sign"；"without visible clues"="在没有任何可见迹象前就能反应/预判"，因此填 **visible**。
26	**lost**	过去，人们认为鸟在黑暗中飞行时会_____。	**第 G 段**："*hopelessly lost.*"	"彻底迷失方向。"	题干是对旧观点的概括：过去以为黑暗中没有参照点会 "迷路"，原文直接给出 *lost*，所以填 **lost**。