

© International Baccalaureate Organization 2026

All rights reserved. No part of this product may be reproduced in any form or by any electronic or mechanical means, including information storage and retrieval systems, without the prior written permission from the IB. Additionally, the license tied with this product prohibits use of any selected files or extracts from this product. Use by third parties, including but not limited to publishers, private teachers, tutoring or study services, preparatory schools, vendors operating curriculum mapping services or teacher resource digital platforms and app developers, whether fee-covered or not, is prohibited and is a criminal offense.

More information on how to request written permission in the form of a license can be obtained from <https://ibo.org/become-an-ib-school/ib-publishing/licensing/applying-for-a-license/>.

© Organisation du Baccalauréat International 2026

Tous droits réservés. Aucune partie de ce produit ne peut être reproduite sous quelque forme ni par quelque moyen que ce soit, électronique ou mécanique, y compris des systèmes de stockage et de récupération d'informations, sans l'autorisation écrite préalable de l'IB. De plus, la licence associée à ce produit interdit toute utilisation de tout fichier ou extrait sélectionné dans ce produit. L'utilisation par des tiers, y compris, sans toutefois s'y limiter, des éditeurs, des professeurs particuliers, des services de tutorat ou d'aide aux études, des établissements de préparation à l'enseignement supérieur, des fournisseurs de services de planification des programmes d'études, des gestionnaires de plateformes pédagogiques en ligne, et des développeurs d'applications, moyennant paiement ou non, est interdite et constitue une infraction pénale.

Pour plus d'informations sur la procédure à suivre pour obtenir une autorisation écrite sous la forme d'une licence, rendez-vous à l'adresse <https://ibo.org/become-an-ib-school/ib-publishing/licensing/applying-for-a-license/>.

© Organización del Bachillerato Internacional, 2026

Todos los derechos reservados. No se podrá reproducir ninguna parte de este producto de ninguna forma ni por ningún medio electrónico o mecánico, incluidos los sistemas de almacenamiento y recuperación de información, sin la previa autorización por escrito del IB. Además, la licencia vinculada a este producto prohíbe el uso de todo archivo o fragmento seleccionado de este producto. El uso por parte de terceros —lo que incluye, a título enunciativo, editoriales, profesores particulares, servicios de apoyo académico o ayuda para el estudio, colegios preparatorios, desarrolladores de aplicaciones y entidades que presten servicios de planificación curricular u ofrezcan recursos para docentes mediante plataformas digitales—, ya sea incluido en tasas o no, está prohibido y constituye un delito.

En este enlace encontrará más información sobre cómo solicitar una autorización por escrito en forma de licencia: <https://ibo.org/become-an-ib-school/ib-publishing/licensing/applying-for-a-license/>.

Environmental systems and societies
Standard level
Paper 1

30 April 2026

Zone A afternoon | **Zone B** afternoon | **Zone C** afternoon

Session number

1 hour

--	--	--	--	--	--	--	--	--	--

Instructions to students

- Write your session number in the boxes above.
- Do not open this examination paper until instructed to do so.
- Answer all questions. Refer to the resource booklet which accompanies this question paper.
- Answers must be written within the answer boxes provided.
- A calculator is required for this paper.
- The maximum mark for this examination paper is **[35 marks]**.



Answer **all** questions. Answers must be written within the answer boxes provided.

1. (a) Using **Figure 2(d)**, identify the abiotic factor that most limits productivity and biodiversity in the Atacama Desert surrounding the city of Antofagasta. [1]

.....
.....

- (b) Much of the energy required for the mining industry in northern Chile comes from imported fossil fuels. With reference to **Figure 2(d)**, evaluate the option of solar energy as an energy source for this region. [3]

.....
.....
.....
.....
.....
.....

- (c) With reference to **Figure 2(e)** and **Figure 2(f)**, outline how the Humboldt Current influences the average annual temperature of Antofagasta. [2]

.....
.....
.....
.....

- (d) Using **Figure 2(g)**, identify the ecosystem with the highest carbon storage in the Punta Arenas region. [1]

.....
.....

(This question continues on the following page)



(Question 1 continued)

- (e) Using **Figure 2(d)** and **Figure 2(g)**, explain how the carbon storage process is influenced by climate in the ecosystems around Punta Arenas. [2]

.....

.....

.....

.....

- (f) With reference to **Figure 2(h)** and **Figure 2(i)**, explain how topographical factors in the region impact the development of a sustainable forestry industry. [3]

.....

.....

.....

.....

.....

.....



2. (a) Using **Figure 3(a)** and **Figure 3(b)**, draw a pyramid of energy that includes the huemul. [1]

- (b) With reference to **Figure 3(b)**, outline how the spread of feral red deer across the Andes could impact the huemul population. [2]

.....

.....

.....

.....

- (c) With reference to **Figure 3(b)**, **Figure 3(c)** and **Figure 3(d)**, explain how a specific *in situ* conservation strategy could improve the IUCN category of the huemul. [3]

.....

.....

.....

.....

.....

.....

(This question continues on the following page)



(Question 2 continued)

- (d) Using the information in **Figure 3(e) and Figure 3(f)**, outline the evidence that Chile is making progress towards UN Sustainable Development Goal (SDG) 15. [1]

.....
.....



3. (a) Using the information in **Figure 4(a)**, calculate the percentage increase in the number of aquaculture locations, assuming all those awaiting approval are granted permission to proceed.

[1]

.....
.....

- (b) Describe **two** negative impacts on the marine ecosystems in the fjords from intensified salmon aquaculture.

[2]

.....
.....
.....
.....

- (c) Evaluate the use of maximum sustainable yield (MSY) as a guide to the management of fish harvesting on the coast of Chile.

[3]

.....
.....
.....
.....
.....
.....



4. (a) Identify **one** trend in glacial loss percentage from **Figure 5(a)**. [1]

.....
.....

- (b) With reference to **Figure 5(c)**, identify **two** forms of natural capital provided by glaciers. [2]

.....
.....
.....
.....

- (c) Using **Figure 5(c)**, describe **two** negative impacts of glacier retreat on the local human communities. [2]

.....
.....
.....
.....



5. (a) Using **Figure 6(a)**, identify the largest source of electrical energy in Chile in 2015. [1]

.....
.....

- (b) Using **Figure 6(a)**, outline **two** trends in renewable electricity production from 2011 to 2023. [2]

.....
.....
.....
.....

- (c) Using **Figure 6(b)** and **Figure 6(c)**, discuss possible reasons why the value of the coal mining industry in Chile has changed. [2]

.....
.....
.....
.....

Disclaimer:

Content used in IB assessments is often taken from authentic, third-party sources. The views expressed within them belong to their individual authors and/or publishers and do not necessarily reflect the views of the IB. Sometimes fictitious companies, products or individuals are included in assessments; any similarities with actual entities are purely coincidental. Any trademarks™ or registered® trademarks included are used for illustrative purposes only, and use does not imply any affiliation with or endorsement by the International Baccalaureate.

