

وزارة التربية والتعليم



مركز القياس والتقويم التربوي
The Center for Educational Assessment and Measurement (CEAM)

# امتحان دبلوم التعليم العام للمدارس الخاصة (ثنائية اللغة)

## الفصل الدراسي الأول - الدور الأول

## للعام الدراسي ١٤٤٨/١٤٤٧ هـ - ٢٠٢٥ / ٢٠٢٦ م

**تنبيه:**
- المادة: تقنية المعلومات والاتصالات.
- الأسئلة في ( ٩ ) صفحات.
- زمن الإجابة: ساعتان.
- الإجابة في الورقة نفسها.

**تعليمات مهمة:**

- يجب الحضور إلى قاعة الامتحان قبل عشر دقائق على الأقل من بدء زمن الامتحان.
- يجب إحضار أصل ما يثبت الهوية وإبرازها للعاملين بالامتحانات.
- يجب الالتزام بالزي (الدشداشة البيضاء والمصر أو الكمة للذكور) والزي المدرسي للطالبات ، ويستثنى من ذلك الدارسون من غير العمانيين بشرط الالتزام بالذوق العام، ويمنع على جميع المتقدمات ارتداء النقاب داخل المركز وقاعات الامتحان.
- يحظر على الممتحنين اصطحاب الهواتف النقالة وأجهزة النداء الآلي وآلات التصوير والحواسيب الشخصية والساعات الرقمية الذكية والآلات الحاسبة ذات الصفة التخزينية والمجلات والصحف والكتب الدراسية والدفاتر والمذكرات والحقائب اليدوية والآلات الحادة أو الأسلحة أياً كان نوعها وأي شيء له علاقة بالامتحان.
- يجب على الممتحن الامتثال لإجراءات التفتيش داخل المركز طوال أيام الامتحان.
- يجب على الممتحن التأكد من استلام دفتر امتحانه، مغلفاً بغلاف بلاستيكي شفاف وغير ممزق ، وهو مسؤول عنه حتى يسلمه لمراقبي اللجنة بعد الانتهاء من الإجابة.
- يجب الالتزام بضوابط إدارة امتحانات دبلوم التعليم العام وما في مستواه وأية مخالفة لهذه الضوابط تعرضك للتدابير والإجراءات والعقوبات المنصوص عليها بالقرار الوزاري رقم ٥٨٨ / ٢٠١٥.
- يقوم المتقدم بالإجابة عن أسئلة الامتحان المقالية بقلم الحبر (الأزرق أو الأسود).
- يقوم المتقدم بالإجابة عن أسئلة الاختيار من متعدد بتظليل الشكل (▭) وفق النموذج الآتي:

س - عاصمة سلطنة عمان هي:

▭ القاهرة ▭ الدوحة

■ مسقط ▭ أبوظبي

**ملاحظة:** يتم تظليل الشكل (■) باستخدام القلم الرصاص وعند الخطأ، امسح بعناية لإجراء التغيير.

**صحيح** ■ **غير صحيح** ▭ ◉ ◒ ☒ ☑

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## Question One: Multiple Choice (Items 1 – 12) (12 Marks)

Shade in the bubble (⬭) next to the correct answer for each of the following items.

**1.** Electronic currency can be defined as:

- ⬭ a credit card issued by a bank.
- ⬭ a totally decentralized monetary system.
- ⬭ a type of money used only for in-game item transactions.
- ⬭ a type of money that exists digitally and is used for online transactions.

**2.** The main use of an electronic wallet is to:

- ⬭ store digital currency and facilitate transactions.
- ⬭ exchange physical banknotes and coins.
- ⬭ check the expiry date of banknotes.
- ⬭ keep physical credit cards safe.

**3.** A gamer wants to buy new outfits for their character in an online game. The game offers coins that players can earn by completing missions or buy with real money.

Which statement explains how players can use these coins?

- ⬭ Players can use these coins for online shopping in any website that accepts digital payments.
- ⬭ Players can store them in their electronic wallet to increase their total balance without spending them.
- ⬭ Players can spend them within the game to unlock items and upgrades.
- ⬭ Players can exchange them for real cash outside the game.

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## Question One continued

**4.** Which of the following terms in data mining is used to describe the process of removing errors and inconsistencies from data?

- ⬭ Data collection
- ⬭ Data modeling
- ⬭ Data cleansing
- ⬭ Data deployment

**5.** A hospital has started a data mining project to improve patient care. The team is currently collecting patient records from different databases and checking whether the data is accurate and complete before any analysis takes place.

Which stage of the data mining process is the hospital in?

- ⬭ Business understanding
- ⬭ Data understanding
- ⬭ Data preparation
- ⬭ Evaluation

**6.** One defining character of the chat room is that it:

- ⬭ allows multiple users to be online and type messages to each other at the same time.
- ⬭ organizes posts into topic-based threads that users can reply to asynchronously.
- ⬭ requires the users to input both sender and receiver email addresses to exchange messages.
- ⬭ allows users to post messages that others can read and respond to at any time.

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## Question One continued

**7.** A non-profit organization plans to include a social networking section in their website where they write posts documenting the different activities they do in the community.

Which social networking type will fit their need?

- ⬭ Blogs
- ⬭ Emails
- ⬭ Chat rooms
- ⬭ Instant Messaging

**8.** What is the main aim of Networked Learning?

- ⬭ To encourage students to compete online.
- ⬭ To encourage students to support the learning of other students.
- ⬭ To replace face-to-face communication with online communication only.
- ⬭ To give students a safe space to discuss their concerns about the subject without the presence of the teacher.

**9.** During pandemics, teachers use video conferencing to teach students remotely. Video conferencing helps to enhance a learner's level of understanding by:

- ⬭ delivering lessons to as many students as possible.
- ⬭ showing students long slide shows with no interactions.
- ⬭ allowing students to ask questions and receive feedback in real-time.
- ⬭ keeping students' microphones and cameras off to avoid any distraction.

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## Question One continued

**10.** Given the following snippet of an HTML code:

```
<p id="info"></p>
```

Which JavaScript code line will correctly display the text "Hello Students" inside the paragraph?

- ○ document.write("info");
- ○ innerHTML("info").document = "Hello Students";
- ○ document.getElementById("info").innerHTML = "Hello Students";
- ○ document.getElementByName("info").innerHTML = "Hello Students";

**11.** The sentence that describes the options that appear in an alert and prompt box is:

- ○ An alert box provides only an [Ok] button, while a prompt box provides [Ok] and [Cancel] buttons.
- ○ An alert box provides [Ok] and [Cancel] buttons, while a prompt box provides a text box to enter text.
- ○ An alert box provides only [Cancel] button, while a prompt box provides only an [Ok] button.
- ○ Both alert and prompt boxes allow users to enter texts.

**12.** Which of the following will correctly log "Test Passed" in the console?

- ○ Log.console(Test Passed);
- ○ log.console("Test Passed");
- ○ console.log(Test Passed);
- ○ console.log("Test Passed");

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## Question Two: Extended Response (Items 13–21) (28 Marks)

Answer ALL questions in the space provided.

**13.** State **TWO** examples of cryptocurrency.

1- _____

2- _____

[2]

**14.** Match each data mining application with the correct sector:

| Application | Sector | |
|---|---|---|
| **a.** Forecasting employment and migration trends. _____ | 1- Healthcare | [1] |
| **b.** Detecting suspicious activities for safety reasons. _____ | 2- Research | [1] |
| **c.** Discovering hidden patterns in scientific data. _____ | 3- National Security | [1] |
| **d.** Predicting patient numbers in hospitals. _____ | 4- Social and Economic Trends | [1] |

**15.** List **THREE** examples of social media platforms that offer instant messaging features.

1- _____

2- _____

3- _____

[3]

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## Question Two continued

**16.** A lecturer teaches multiple MOOCs. Each MOOC has hundreds of students.

Identify **ONE** assessment tool that can be used by this lecturer to save his time and effort?

_____ [1]

**17.** A student is expected to complete a MOOC in environmental science as part of a required school assignment. The course is entirely online and completed independently.

State **ONE** disadvantage of using MOOCs, and analyze how this disadvantage could negatively affect the student's understanding and the overall learning outcome.

| Support your analysis with an illustrative example. |
|---|

_____ [4]

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## Question Two continued

**18.** Information Technology (IT) has offered many different services at home.

Name **ONE** IT device used for entertainment at home. Explain how it is used, and analyze **ONE** advantage of using this device for home entertainment.

[4]

**19.** Describe the purpose of the following JavaScript methods:

**a.** document.write

[1]

**b.** document.getElementById

[1]

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## Question Two continued

**20.** Write a JavaScript code line that:

**a.** Displays an alert message with the text "Are you ready".

_____ [1]

**b.** Requests the user to enter his/her name and saves the input in a variable called username.

_____ [1]

**21.** Read the following scenario, then answer all the questions in the space provided.

A city council has installed a network of smart surveillance systems across the downtown area. The system includes CCTV cameras with facial recognition, traffic monitoring dashcams on public buses, and cloud-based storage that allows police and insurers to access footage for investigations. While many residents appreciate the added security, some are worried about privacy and the potential misuse of data. The city council send regular emails to residents to inform them about any recorded criminal incidents in the city.

**a.** What surveillance technology can be used in the city to help find a missing person?

_____ [1]

**b.** Describe **ONE** way in which dashcam or CCTV footage could support insurance claims or criminal investigations.

_____

_____ [1]

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## Question Two continued

**c.** Discuss ONE argument in favor of and **ONE** argument against the unregulated use of IT in surveillance.

| In favor | Against |
|---|---|
| | |

[2]

**d.** Analyze **ONE** advantage of sending emails to residents notifying them of the crimes that happen in the community.

[2]

**[ End of Examination ]**

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مركز القياس والتقويم التربوي
The Center for Educational Assessment and Measurement (CEAM)

وزارة التربية والتعليم

# Marking Guide for General Education Diploma for Private schools (Bilingual)

Semester One – First Session

Academic Year: 2025/2026

**Subject: ICT**

Note: There are 10 pages in this guide

## First: Answers for the Multiple-Choice Items (12 Marks):

| N. | Answer | Mark | Learning Outcome | Assessment Objective |
|---|---|---|---|---|
| 1 | A type of money that exists digitally and used for online transactions | 1 | 1.1.1.1 | AO1 |
| 2 | store digital currency and facilitate transactions. | 1 | 1.1.2.3 | AO1 |
| 3 | Players can spend them within the game to unlock items and upgrades. | 1 | 1.1.3.5 | AO2 |
| 4 | Data cleansing | 1 | 1.2.1.3 | AO1 |
| 5 | Data understanding | 1 | 1.2.1.3 | AO2 |

| | | | | |
|---|---|---|---|---|
| **6** | Allows multiple users to be online and type messages to each other at the same time. | 1 | 1.3.2.1 | AO1 |
| **7** | Blogs | 1 | 1.3.6.5 | AO2 |
| **8** | To encourage students to support the learning of other students. | 1 | 1.4.3.2 | AO1 |
| **9** | Allowing students to ask questions and receive feedback in real-time. | 1 | 1.4.5.6 | AO2 |
| **10** | document.getElementById("info").innerHTML = "Hello Students"; | 1 | 3.2.4 | AO2 |
| **11** | An alert box provides only an Ok button, while a prompt box provides OK and Cancel buttons. | 1 | 3.3.2 | AO1 |
| **12** | console.log("'Test Passed"); | 1 | 3.3.10 | AO2 |

## Second: Answers for the Extended Response Items (28 Marks):

General Notes

- There may be different ways of answering questions, but a basic requirement for all answers is that they are RELEVANT.
- If the answer is clearly not relevant, and the student has clearly made no attempt to answer the question that was set, NO marks should be awarded. However, if the student has genuinely attempted the answer, but his answer is only partly relevant, then a reduced mark (not zero) should be awarded.

| N. | Correct Answer | Mark | Guidance | Learning Outcome | Assessment Objective | Page Reference |
|---|---|---|---|---|---|---|
| 13 | Bitcoin, Litecoin<br>**Other acceptable answers:** Tron, BNB, Paradox, Ethereum, Hamster io coin. | 2 | **1 mark for each correct example [1*2=2 marks].**<br>**Any other correct answer must be awarded.** | 1.2.2.1 | AO2 | 270-271 |
| 14 | **a. Forecasting employment and migration trends**<br>Answer:<br>4 (Social and Economic Trends) **[1]**<br>**b. Detecting suspicious activities for safety reasons.**<br>Answer:<br>3 ( National Security) **[1]**<br>**c. Discovering hidden patterns in scientific data**<br>Answer:<br>2 (Research) **[1]**<br>**d. Predicting patient numbers in hospitals**<br>Answer:<br>1 (Healthcare) **[1]** | 4 | - | 1.2.2.1 | AO2 | 270-271 |

| N. | Correct Answer | Mark | Guidance | Learning Outcome | Assessment Objective | Page Reference |
|---|---|---|---|---|---|---|
| 15 | Any three of the following:<br>• X<br>• Facebook<br>• Snapchat<br>• Messenger<br>• LinkedIn<br>• Instragram<br>• Skype<br>• WhatsApp<br>• TikTok<br>• Telegram<br>• WeChat<br>• Discord<br>• iMessage | 3 | 1 mark for each correct platform<br>[1*3 = 3 marks] | 1.3.3.2 | AO1 | 273 |
| 16 | One of the following:<br>• Online tests that are marked automatically.<br>• Peer-reviews. | 1 | If the student writes online tests only, the answer should be considered as incorrect. | 1.4.4.3 | AO2 | 278-279 |

| N. | Correct Answer | Mark | Guidance | Learning Outcome | Assessment Objective | Page Reference |
|---|---|---|---|---|---|---|
| 17 | A sample Answer:<br>One disadvantage of using MOOCs is that learners often feel isolated due to the lack of interaction with teachers and other students [AO1-1].<br>This can lead to low motivation and difficulty understanding complex topics in Environmental Science, especially without real-time clarification [AO3-1], which reduce the overall learning outcome[AO3-1]. For example, if the student misinterprets a topic in environmental studies, they might complete their assignment incorrectly and lose marks, even though they put in effort [AO2-1].<br>**Other acceptable challenges:**<br>Technical or connectivity barriers: Weak or unstable internet prevents video streaming or assignment submission. Impact: interrupted study flow and missed assessments.<br>Limited recognition of certificates: Certificates may not be formally accredited. Impact: reduced incentive to complete or apply learning professionally.<br>Low motivation / self-discipline: MOOCs are self-paced; learners must manage their own study schedule. Without supervision, many fail to finish courses. | 4 | **The answer should include the following parts:**<br>**a. Statement of one valid disadvantage of MOOCs:**<br>1 mark –AO1<br><u>Acceptable answers include:</u><br>• Lack of tutor interaction / personalized feedback<br>• Feeling of isolation / lack of peer support<br>• Low motivation to complete courses<br>• Requires strong self-discipline<br>• High dropout rates due to lack of support<br>• Limited opportunities for collaborative learning<br>**b. Analysis of how the disadvantage negatively affects learning:**<br>2 marks – AO3<br>**c. Supporting the analysis with a brief, realistic example:**<br>1 mark –AO2 | 1.4.4.1<br>1.4.4.4 | AO1 [1],<br>AO2 [1],<br>AO3 [2] | 278-279 |

| N. | Correct Answer | Mark | Guidance | Learning Outcome | Assessment Objective | Page Reference |
|---|---|---|---|---|---|---|
| 18 | A sample answer:<br>A smart TV is an IT device used for entertainment at home [AO1-1].<br>It allows users to stream movies, TV shows, and music from the internet through apps like Netflix or YouTube [AO2-1].<br>One advantage of using a smart TV is that it gives families access to a wide range of content on demand, without needing extra devices or subscriptions [AO3-1]. This convenience makes it easier for family members to enjoy entertainment together, improving the quality of time they spend at home [AO3-1]. | 4 | The answer should include the following parts:<br>a. **Identification of a suitable IT device used at home for entertainment:** 1 mark-AO1<br>b. **An explanation that applies the device to the home context:** 1 mark-AO2<br>c. **Analysis of a clear advantage and its positive effect:** 2 marks- AO3<br>The provided answer is just a sample answer. Other correct answers should be awarded.<br>**Other examples of IT home** entertainment devices:<br>Google Home - Amazon Alexa -Games console –Tablet -Smart speaker -VR headset -Streaming box (Apple TV). | 1.5.8.1<br>1.5.8.2<br>1.5.8.4 | AO1 [1],<br>AO2 [1],<br>AO3 [3] | 283 |

| N. | Correct Answer | Mark | Guidance | Learning Outcome | Assessment Objective | Page Reference |
|---|---|---|---|---|---|---|
| **19. a** | It outputs the text to a webpage. | 1 | - | 3.2.1 | AO1 | 470 |
| **19.b** | It selects an HTML element by its ID attribute | 1 | - | 3.2.3 | AO1 | 470 |
| **20.a** | alert("Are you ready"); | 1 | - | 3.3.4 | AO2 | 471-472 |
| **20.b** | var username = prompt ("Enter your name"); | 1 | - | 3.3.8 | AO2 | 471-472 |
| **21.a** | Facial recognition | 1 | - | 1.5.10.1 | AO1 | 283 |
| **21.b** | **Any answer of the following:**<br>• Dashcam footage can prove who was at fault in a car accident, supporting an insurance claim.<br>• CCTV footage can be used in court to confirm a suspect's presence at a crime scene.<br>• Video evidence helps reduce disputes between drivers and insurers. | 1 | Any other answer that describes one <u>real</u> and <u>clear</u> use of dashcam or CCTV footage in supporting insurance claims or criminal investigations must be awarded. | 1.5.10.3 | AO2 | 284 |

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وكالة الاختبارات ودائرة الامتحانات
قسم الامتحانات

<table>
<tr><th>N.</th><th>Correct Answer</th><th>Mark</th><th>Guidance</th><th>Learning Outcome</th><th>Assessment Objective</th><th>Page Reference</th></tr>
<tr><td>21. c</td><td>Examples of possible arguments' discussion:
<table>
<tr><th>In favor</th><th>Against</th></tr>
<tr><td>Surveillance reduces crime because people know they are being watched.<br>For example: If cameras are visible in public areas, they discourage theft or damage.</td><td>Surveillance can invade privacy and misuse of data may occur.<br>For example: Facial recognition could be used to track people's movements without consent</td></tr>
<tr><td>Unregulated surveillance can improve emergency response times, since authorities have instant access to live footage.</td><td>It could lead to discrimination if surveillance systems unfairly target certain groups, such as through biased facial recognition algorithm</td></tr>
<tr><td>Unregulated surveillance can help reduce costs for law enforcement by automating monitoring.</td><td>Without clear rules, data from surveillance could be sold or shared with third parties, violating citizens' rights.</td></tr>
<tr><td>It increases public safety, as potential criminals know there is constant monitoring.</td><td>It creates a 'Big Brother' environment where people feel they are always watched, reducing trust in authorities.</td></tr>
<tr><td>Unregulated surveillance provides strong evidence for solving crimes quickly.</td><td>Technical failures or misuse might mean innocent people are wrongly accused if surveillance footage is taken out of context</td></tr>
</table></td><td>2</td><td>Answer should include one point in favor [1 mark], and one point against [1 mark] the unregulated use of IT surveillance.</td><td>1.5.10.3</td><td>AO3</td><td>284</td></tr>
</table>

| N. | Correct Answer | Mark | Guidance | Learning Outcome | Assessment Objective | Page Reference |
|---|---|---|---|---|---|---|
| 21.d | A sample Answer:<br>Sending regular emails helps keep residents informed and aware of criminal activities in their area, allowing them to take precautions [1 mark].<br>This improves public safety and trust in the council, as people feel more engaged and confident that local authorities are being transparent about security matters [1 mark]. | 2 | **The provided answer is just a sample answer; the correct answer should include:**<br>• Description of one valid advantage [1 mark]<br>• Analytical explanation of its impact [ 1mark]<br>**Other acceptable advantages' analysis:**<br>**Improves public awareness**: Regular updates help people stay informed about local crime patterns, leading to safer personal decisions.<br>**Encourages cooperation:** Citizens who know about incidents are more likely to report suspicious activity or share useful information.<br>**Reduces rumors and misinformation:** Official communication ensures accurate updates and prevents the spread of false information on social media. | 1.3.7.2 | AO3 | 276 - 277 |

[The End of the Marking Guide]

وزارة التعليم

# امتحان دبلوم التعليم العام للمدارس الخاصة (ثنائية اللغة)

## الفصل الدراسي الأول - الدور الثاني

## للعام الدراسي ١٤٤٨/١٤٤٧ هـ - ٢٠٢٥ / ٢٠٢٦ م

**تنبيه:**
- المادة: تقنية المعلومات والاتصالات.
- الأسئلة في (٨) صفحات.
- زمن الإجابة: ساعتان.
- الإجابة في الورقة نفسها.

**تعليمات مهمة:**

- يجب الحضور إلى قاعة الامتحان قبل عشر دقائق على الأقل من بدء زمن الامتحان.
- يجب إحضار أصل ما يثبت الهوية وإبرازها للعاملين بالامتحانات.
- يجب الالتزام بالزي (الدشداشة البيضاء والمصر أو الكمة للذكور) والزي المدرسي للطالبات ، ويستثنى من ذلك الدارسون من غير العمانيين بشرط الالتزام بالذوق العام، ويمنع على جميع المتقدمات ارتداء النقاب داخل المركز وقاعات الامتحان.
- يحظر على الممتحنين اصطحاب الهواتف النقالة وأجهزة النداء الآلي وآلات التصوير والحواسيب الشخصية والساعات الرقمية الذكية والآلات الحاسبة ذات الصفة التخزينية والمجلات والصحف والكتب الدراسية والدفاتر والمذكرات والحقائب اليدوية والآلات الحادة أو الأسلحة أياً كان نوعها وأي شيء له علاقة بالامتحان.
- يجب على الممتحن الامتثال لإجراءات التفتيش داخل المركز طوال أيام الامتحان.
- يجب على الممتحن التأكد من استلام دفتر امتحانه، مغلفاً بغلاف بلاستيكي شفاف وغير ممزق ، وهو مسؤول عنه حتى يسلمه لمراقبي اللجنة بعد الانتهاء من الإجابة.
- يجب الالتزام بضوابط إدارة امتحانات دبلوم التعليم العام وما في مستواه وأية مخالفة لهذه الضوابط تعرضك للتدابير والإجراءات والعقوبات المنصوص عليها بالقرار الوزاري رقم ٥٨٨ / ٢٠١٥.
- يقوم المتقدم بالإجابة عن أسئلة الامتحان المقالية بقلم الحبر (الأزرق أو الأسود).
- يقوم المتقدم بالإجابة عن أسئلة الاختيار من متعدد بتظليل الشكل (▭) وفق النموذج الآتي:

س - عاصمة سلطنة عمان هي:

▭ القاهرة ▭ الدوحة

▬ مسقط ▭ أبوظبي

**ملاحظة:** يتم تظليل الشكل (▬) باستخدام القلم الرصاص وعند الخطأ، امسح بعناية لإجراء التغيير.

**صحيح** ▬ **غير صحيح** ▭ ◉ ◔ ✗ ✓

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## Question One: Multiple Choice (Items 1 – 12) (12 Marks)

Shade in the bubble (⬭) next to the **correct** answer for each of the following items.

**1.** Which of the following defines electronic currency?

- ⬭ Money that exists only in digital form within electronic systems.
- ⬭ Debit cards used for online shopping.
- ⬭ Stored-value cards issued by banks.
- ⬭ Money printed by the central bank.

**2.** An example of cryptocurrency is:

- ⬭ PayPal
- ⬭ Bitcoin
- ⬭ Apple Pay
- ⬭ Credit card

**3.** A gaming company introduces a new system where players can buy items using tokens that are only valid inside the game. At the same time, the company also allows users to pay through Apple Pay to upgrade their accounts.

The statement that compares these two payment methods is:

- ⬭ Apple Pay is a digital payment method, while the in-game tokens are virtual currency.
- ⬭ Apple Pay is a virtual currency, while the in-game tokens are physical money.
- ⬭ Both are forms of central bank digital currency (CBDC).
- ⬭ Both are examples of cryptocurrencies.

**4.** The process of Data mining is defined as:

- ⬭ storing and organizing data within a database management system.
- ⬭ analyzing large data sets to discover patterns and useful information.
- ⬭ protecting stored data by applying passwords and security measures.
- ⬭ deleting outdated or unused data from a database to free up storage space.

Do not write in this space

## Question One Continued

**5.** Hospitals use data mining to predict the number of patients visiting during certain periods.

The main purpose of this process is to:

- ☐ plan appropriate staffing levels and resources.
- ☐ replace doctors with automated systems.
- ☐ reduce the cost of medical equipment.
- ☐ advertise new medicines to patients.

**6.** Which of the following is a major component of the email message?

- ☐ Posts
- ☐ Chat box
- ☐ Moderator
- ☐ Subject line

**7.** An IT department at a large company needs to send a secure, detailed technical report to the heads of the main departments in the company. The report contains confidential data.

Which social networking tool is appropriate and secure to communicate this type of information:

- ☐ Email
- ☐ Blogs
- ☐ Forum
- ☐ Chat room

**8.** "Courses that are not limited in the number of students that can access them and often have filmed lectures and other free resources"

The definition above refers to:

- ☐ MOOCs.
- ☐ Video Conferencing.
- ☐ Networked Learning.
- ☐ Computer-based training.

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## Question One Continued

**9.** A common feature among online tutorials and computer-based training is:

- ☐ Always free of cost.
- ☐ Learners can learn at their own pace.
- ☐ Allow students to ask questions in real-time.
- ☐ Only a small number of students can learn at the same time.

**10.** The following is a snippet of JavaScript code:

```
<p id=" demo"></p>
<script>
  document.getElementById("demo").innerHTML = 5 + 10;
</script>
```

When outputting the result, what will be displayed inside the paragraph?

- ☐ 15
- ☐ 510
- ☐ 5 + 10
- ☐ demo

**11.** The main purpose of writing messages in the console method is to:

- ☐ help the programmer debug the code.
- ☐ display extra text to the user.
- ☐ design the webpage layout.
- ☐ store data permanently.

**12.** Which code line ask the user to enter their age and store it?

- ☐ var age = alert("Enter age");
- ☐ var age = prompt(Enter age);
- ☐ var age = prompt("Enter age");
- ☐ var age = confirm("Enter age");

Do not write in this space

## Question Two: Extended Response (Items 13–21) (28 Marks)

Answer ALL questions in the space provided.

**13.** Describe what is meant by digital currency and provide **ONE** example of it.

_____

_____

_____ [2]

**14.** Describe **ONE** real-world application of data mining in the following sectors:

| The sector | The application | |
|---|---|---|
| **a.** Healthcare | _____<br>_____ | [1] |
| **b.** Business | _____<br>_____ | [1] |
| **c.** Research | _____<br>_____ | [1] |
| **d.** Prediction of Social Trends | _____<br>_____ | [1] |

**15.** List **THREE** types of social networking platforms

1- _____

2- _____

3- _____

[3]

**Do not write in this space**



Do not write in this space

Do not write in this space

## Question Two Continued

**16.** A company wants to train a new batch of employees on "Internet Safety Skills". Write **ONE** disadvantage that employees will have if this training was delivered using computer-based training compared to if it was delivered in face-to-face mode.

[1]

**17.** Schools in an urban region moved instruction to emergency remote teaching because a hurricane is expected to hit the area. As part of the emergency plan, video conferencing is being used to deliver instruction to students.

State and describe **ONE** challenge of using video conferencing as a means of delivering instruction in this irregular case and analyze how it can negatively impact teaching or learning.

[4]

Do not write in this space

## Question Two Continued

**18.** A patient with an irregular heartbeat is receiving support using an IT-based system.

Name **ONE** IT device that can be used in this situation, and explain how it can positively affect this patient's health.

| Support your answer with an illustrative example. |
|---|

[4]

**19.** Describe when would you use the following JavaScript methods:

**a.** document.write

[1]

**b.** document.getElementById().innerHTML

[1]

Do not write in this space

Do not write in this space

Do not write in this space

## Question Two Continued

**20.** Write a JavaScript code line that:

**a.** displays "System Error!" in an alert box.

_____ [1]

**b.** asks the user to enter his/ her email and stores it in a variable called email.

_____ [1]

**21.** Read the following scenario, then answer all the questions in the space provided:

> A group of students in Grade 12 in an international school in Oman organized a campaign to promote healthy lifestyle in the school community. The integration of different technologies was a major feature of the campaign. First, students and teachers were encouraged to bring their smartwatches and use them in school. Second, several online competitions to test students' knowledge in several health-related topics using online quizzes were conducted. Additionally, the school hosted a tennis competition for all the private schools in the city. For the tennis competition, the school used "hawk eye" technology. This technology is a computer-vision system used in various sports to visually track the trajectory of a ball and provide precise data for officiating, broadcasting, and analysis. Finally, they created several social networking channels to document the activities they do.

**a.** Provide **ONE** example of a technology that can be used to enhance the fitness of the school community?

_____ [1]

**b.** Describe how can the use of online quizzes impact students' participation in the campaign?

_____

_____ [1]

Do not write in this space

## Question Two Continued

**c.** Discuss **ONE** positive impact and **ONE** negative impact for using "hawk eye" in the tennis competition.

| Positive impact | Negative impact |
|---|---|
| | |

[2]

**d.** Analyze **TWO** positive impacts of the use of social media as part of the campaign.

1- _____

_____

2- _____

_____

[2]

**[ End of Examination ]**

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وزارة التعليم

# Marking Guide for General Education Diploma for Private schools (Bilingual)

Semester One – Second Session

Academic Year: 2025/2026

**Subject: ICT**

**Note: There are 9 pages in this guide**

## First: Answers for the Multiple-Choice Items (12 Marks):

| N. | Answer | Mark | Learning Outcome | Assessment Objective |
|---|---|---|---|---|
| 1 | Money that exists only in digital form within electronic systems | 1 | 1.1.1.1 | AO1 |
| 2 | Bitcoin | 1 | 1.1.4.2 | AO1 |
| 3 | Apple Pay is a digital payment method, while the in-game tokens are virtual currency. | 1 | 1.1.3.1 | AO2 |
| 4 | analyzing large data sets to discover patterns and useful information. | 1 | 1.2.1.1 | AO1 |

| | | | | |
|---|---|---|---|---|
| **5** | plan appropriate staffing levels and resources. | 1 | 1.2.2.1 | AO2 |
| **6** | Subject line | 1 | 1.3.5.4 | AO1 |
| **7** | Emails | 1 | 1.3.5.5 | AO2 |
| **8** | MOOCs | 1 | 1.4.4.1 | AO1 |
| **9** | Learners can learn at their own pace | 1 | 1.4.1.2 | AO2 |
| **10** | 15 | 1 | 3.2.5 | AO2 |
| **11** | help the programmer debug the code | 1 | 3.3.9 | AO1 |
| **12** | var age = prompt(“Enter age”); | 1 | 3.3.8 | AO2 |

## Second: Answers for the Extended Response Items (28 Marks):

**General Notes**

- There may be different ways of answering questions, but a basic requirement for all answers is that they are RELEVANT.
- If the answer is clearly not relevant, and the student has clearly made no attempt to answer the question that was set, NO marks should be awarded. However, if the student has genuinely attempted the answer, but his answer is only partly relevant, then a reduced mark (not zero) should be awarded.

| N. | Correct Answer | Mark | Guidance | Learning Outcome | Assessment Objective | Page Reference |
|---|---|---|---|---|---|---|
| **13** | A form of payment that exists electronically and is used for online transactions. [1]<br>**Example:** Apple Pay or Google Pay. [1] | 2 | 1 mark for correct definition and 1 mark for the correct example. | 1.1.2.1 | AO1 | 265 |

| | | | | | | |
|---|---|---|---|---|---|---|
| **14** | <table><tr><th>The sector</th><th>The applications</th><th>Mark</th></tr><tr><td>a. Healthcare</td><td>Uses data mining to analyse patient records, predict disease outbreaks, or forecast patient numbers to plan staffing and resources.</td><td>[1]</td></tr><tr><td>b. Business</td><td>Uses data mining to analyse customer purchasing behavior to identify trends, target marketing campaigns, or improve stock control.</td><td>[1]</td></tr><tr><td>c. Research</td><td>Uses data mining to examine large scientific or academic datasets to discover patterns, relationships, or correlations.</td><td>[1]</td></tr><tr><td>d. Prediction of Social Trends</td><td>Uses data mining on public or social-media data to forecast consumer behavior, population movement, or public opinion trends.</td><td>[1]</td></tr></table> | 4 | **Other possible applications**<br><br>**Healthcare:** Analyzing test results to detect disease patterns or improve treatment outcomes.<br>**Business:** Sales forecasting, market segmentation, or fraud detection.<br>**Research:** Analyzing climate data or genetic information.<br>**Prediction of social trends:** Transport planning, housing demand, or resource allocation.<br><br>**The provided answers are just sample answers. Any other application should be marked as following**:<br>• Award 1 mark per correctly described application that clearly links the use of data mining to the sector context.<br>• The response must show application, not only define data mining. | 1.2.2.1 | AO2 | 270-271 |

| | | | | | | |
|---|---|---|---|---|---|---|
| **15** | Any Three of the following:<br>• Chatrooms<br>• instant messaging,<br>• forums, email,<br>• blogs OR Microblogs OR Vlogs | 3 | Each is worth 1 mark [3*1 = 3 marks] | 1.3.1.2 | AO1 | 273 |
| **16** | **A sample answer:**<br>Learners may not have a tutor to answer any questions they have. | 1 | **The provided answer is just a sample answer; another disadvantage may be:**<br>Staff may not be motivated to follow the computer-based training as they are not watched and driven to do so. | 1.4.1.2 | AO2 | 277 |
| **17** | **A sample answer:**<br>One challenge of using video conferencing in education is unstable internet connectivity [1-AO1].<br>In emergency situations like a hurricane, students or teachers may experience frequent disconnections or poor-quality video/audio [1-AO2].<br>This affects the ability to maintain continuous learning and makes it difficult for teachers to deliver clear instructions or check student understanding [1-AO3]. As a result, students may miss key parts of lessons, leading to lower engagement and learning outcomes [1-AO3]. | 4 | **The provided answer is just a sample answer; a full mark correct answer must include the following parts:**<br>a. A clear statement of the challenge of using video conferencing to deliver lessons: 1 mark –AO1<br>b. Application of the challenge to the given context: 1 mark –AO2<br>c. Analysis of the challenge and its negative impact and consequence: 2 marks-AO3 | 1.4.5.1<br>14.5.3<br>1.4.5.6 | AO1 [1]<br>AO2 [1]<br>AO3 [2] | 279 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | **Other acceptable challenge analysis may be: (AO3)**<br><br>Reduced social interaction: Students may feel isolated, which can impact their motivation and engagement.<br><br>Distractions at home: Learners may not focus fully during online lessons, reducing learning effectiveness.<br><br>Limited teacher control: Teachers may struggle to maintain students' attention and prevent off-task behavior. | | | |
| **18** | **A sample Answer:**<br>A heart rate monitor is an IT device used to track the patient's heartbeat. [1-AO1]<br>It continuously measures the heart's activity and can send this data to medical staff for monitoring.<br>This can help doctors to detect irregularities early and intervene quickly if needed. [1-AO3].<br>For example, if the monitor shows dangerous changes in the patient's heartbeat, emergency services can be alerted immediately [1-AO2], helping to prevent serious complications and serious health risks. [1-AO3]. | 4 | **The provided answer is just a sample answer; a full mark correct answer must include the following parts:**<br>a. ONE example of an IT system that can be used in the specified context: 1 mark –AO1<br>b. Explanation of how it can positively affect this patient's health:<br>2 marks- AO3<br>c. An illustrative example: 1 mark-AO2 | 1.5.3.1<br>1.5.3.3<br>1.5.9.3 | AO1 [1]<br>AO2 [1]<br>AO3 [3] | 281 - 283 |

| | | | | | | |
|---|---|---|---|---|---|---|
| **19.a** | When I want to add text directly to the web page | 1 | | 3.2.1 | AO1 | 470 |
| **19.b** | When I want to update the content of an existing element without overwriting the whole page. | 1 | - | 3.2.3 | AO1 | 470 |
| **20.a** | alert(“System Error!”); | 1 | - | 3.3.4 | AO2 | 471-472 |
| **20.b** | var email = prompt(“Enter your email”); | 1 | - | 3.3.8 | AO2 | 471-472 |
| **21.a** | smartwatches. | 1 | Any other correct relevant answer can must be awarded. | 1.5.1.1 | AO1 | 281 |
| **21.b** | Online quizzes are expected to increase students’ engagement in the campaign because all students can participate anytime and anywhere. | 1 | - | 1.5.4.2 | AO2 | 281 |

| | | | | | | |
|---|---|---|---|---|---|---|
| **21.c** | **A sample Answer:**<br>Positive impact: The Hawk-Eye system helps umpires make more accurate and fair decisions by tracking the exact position of the ball, which reduces human error and increases confidence in match results [1-AO3].<br>Negative impact: the system may not always be completely accurate, and even small errors in data processing or camera alignment can affect the outcome of a crucial point, leading to disagreement or loss of trust among players and spectators [1 AO3]. | 2 | **The provided answer is just a sample answer; a full mark correct answer must include the following:**<br>a. A discussion of a positive impact of using Hawk-Eye system in the tennis game: 1 mark-AO3<br>b. A discussion of a negative impact of using Hawk-Eye system in the tennis game: 1 mark –AO3 | 1.5.1.2 | AO3 | 280 |
| **21.d** | **A sample answer:**<br>One positive impact is that using social media helps the campaign reach a wider audience quickly, allowing students, teachers, and parents to stay informed about events and activities.<br>Another positive impact is that social media platforms allow sharing photos and videos of events, which helps motivate others and creates a lasting digital record of achievements that can inspire future health-related initiatives. | 2 | **The provided answer is just a sample answer; a full mark correct answer must include the following:**<br>a. An evaluation of a positive impact of using social media as part of the campaign: 1 mark-AO3<br>b. An evaluation of a negative impact of using social media as part of the campaign: 1 mark –AO3 | 1.3.7.2 | AO3 | 276 - 277 |

[The End of the marking Guide]