

# **Markscheme**

**May 2021**

**Interdisciplinary**

**On-screen examination**

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### Best fit Approach

'The approach used in assessment in the application of assessment criteria is a "best fit" model. The examiner or teacher applying an assessment criterion must choose the achievement level that overall best matches the piece of work being marked. It is not necessary for every detailed aspect of an achievement level to be satisfied for that level to be awarded but it must reflect the balance of student achievement against the markband. For example, if student work matches two of the three requirements within a markband but one is seriously lacking, the student should be awarded for the strands that have been met well, but the mark awarded should be at the lower end of the markband to compensate for what is lacking in one strand. If the level of student work spans multiple markbands, compensation depends on the performance in the higher order skills. It is worth noting that the highest level of any given criterion does not represent perfection'

**Note:** Before marking, please familiarize yourself with the pre-release material <http://idprm.ibo.org/#/English> all sources, the questions and the markscheme.

\*These are the command terms used throughout the markscheme.

Command term	Definition
<b>Identify*</b>	Provide an answer from a number of possibilities. Recognize and state briefly a distinguishing fact or feature.
<b>State*</b>	Give a specific name, value or other brief answer without explanation or calculation.
<b>Outline*</b>	Give a brief account or summary.
<b>Describe*</b>	Give a detailed account or picture of a situation, event, pattern or process.
<b>Evaluate*</b>	Make an appraisal by weighing up the strengths and limitations.
<b>Explain*</b>	Give a detailed account including reasons or causes.
<b>Develop*</b>	To improve incrementally, elaborate or expand in detail. Evolve to a more advanced or effective state.
<b>Analyse</b>	Break down in order to bring out the essential elements or structure. To identify parts and relationships, and to interpret information to reach conclusions.
<b>Compare and contrast</b>	Give an account of the similarities and differences between two (or more) items or situations, referring to both (all) of them throughout.
<b>Contrast</b>	Give an account of the differences between two (or more) items or situations, referring to both (all) of them throughout.
<b>Formulate</b>	Express precisely and systematically the relevant concept(s) or argument(s).
<b>Justify</b>	Give valid reasons or evidence to support an answer or conclusion. (See also "Explain".)
<b>To what extent</b>	Consider the merits or otherwise of an argument or concept. Opinions and conclusions should be presented clearly and supported with appropriate evidence and sound argument.

Question 1a

Compare and contrast the scientific method used in these two trials. In your answer, you must give:

- three similarities
- three differences.

(6 marks)

Note: Referral to use of insulin or treatment of diabetes are not allowed as these are given in the question.

Note: For differences, elements from both trials must be explicitly referred to. These can be in either order.

Note: Answers must relate to the scientific method.

(1 mark) for each similarity, maximum (3 marks)

(1 mark) for each difference, maximum (3 marks)

Similarities	Differences
Random assignment of patients to the groups (experimental/control) Control group is standard treatment/Control group used as a comparison Experimental group is the new treatment <u>Dependent variable</u> is blood glucose <u>Dependent variable</u> is quantitative	Trial 1 is not blinded <b>and</b> trial 2 is double blind/blind (or words to that effect) Trial 1 has a <u>dependent variable</u> of blood glucose and other symptoms measured <b>and</b> Trial 2 only has blood glucose as a <u>dependent variable</u> Trial 1 has a qualitative and <u>quantitative dependent variable</u> <b>and</b> trial 2 only has a <u>quantitative dependent variable</u> Trial 1 uses all age groups <b>and</b> trial 2 uses a restricted age group

**Question 1b**

**Explain two** strengths of using randomized controlled trials (RCTs) in the drug discovery process.

**(4 marks)**

Examples of strengths could relate to:

Random – The idea that participants are allocated to the experimental/control group randomly, means there is reduced bias, less chance of one group having preferential characteristics. Idea that when patients don't know which group they are in, placebo effects can be seen.

Control – The idea that other than what is being trialled, everything else is the same, that any effect must be caused by the difference of treatment. Dependent variables clearly defined.

Trial – sample of the population i.e. not everyone has to be tested.

Marks	Descriptor
0	The student does not achieve a standard described by any of the descriptors given below.
1	The student identifies one strength.
2	The student identifies <b>two</b> strengths. <b>or</b> The student provides <b>one</b> strength with a reason.
3	The student identifies <b>two</b> strengths, <b>one</b> with a reason.
4	The student identifies <b>two</b> strengths <b>and</b> provides a reason for <b>both</b> strengths.

Question 2a

Identify the author's purpose for each selection below.

(2 marks)

Answers: Selection 1 is **persuade**, Selection 2 is **inform**

Draggable purpose:

Entertain

Describe

Selection 1

Persuade

Selection 2

Inform

Marks	Descriptor
0	The student does not match any of the selections with the correct author's purpose.
1	The student matches one of the selections with the correct author's purpose.
2	The student matches both selections with the correct author's purpose.

**Question 2b**

From the perspective of a child with diabetes, **develop** the missing narrative elements for the provided climax.

**(8 marks)**

**Note: Only elements from the perspective of the child and relating to the climax can receive credit.**

**Note: The student must write in each box the narrative element that respects the literary component specified above the box as explained below.**

Exposition – **Introduction**

Rising action – **Building story**

Climax – **Point of tension provided in the question**

*“My mother lost her job, which means we don’t have any way to cover the cost of my insulin.*

*My current supply will run out in 30 days. We don’t know what to do, or who to turn to.”*

Falling action – **Tension eases**

Resolution – **Story concludes**

Marks	Descriptor
0	The student does not achieve a standard described by any of the descriptors given below.
1–2	The student <b>states</b> : <ul style="list-style-type: none"> <li>• Exposition</li> <li>• Rising action</li> <li>• Falling action</li> <li>• Resolution</li> </ul>
3–4	The student <b>outlines</b> : <ul style="list-style-type: none"> <li>• Exposition</li> <li>• Rising action</li> <li>• Falling action</li> <li>• Resolution</li> </ul>
5–6	The student <b>describes</b> : <ul style="list-style-type: none"> <li>• Exposition</li> <li>• Rising action</li> <li>• Falling action</li> <li>• Resolution</li> </ul>
7–8	The student <b>develops</b> : <ul style="list-style-type: none"> <li>• Exposition</li> <li>• Rising action</li> <li>• Falling action</li> <li>• Resolution</li> </ul>

**Question 3**

Based on the information above, **justify** which country has the best healthcare system. In your answer, you must address all **four** indicators of healthcare.

**(8 marks)**

**Note: To apply best fit each outline is worth (1 mark) and each explain is worth (2 marks).**

**Note: Indicators are: Quality of Health Care, Burden of Healthcare, Prescription Spending, Doctor to Patient ratio**

Marks	Descriptor
0	The student does not achieve a standard described by any of the descriptors given below.
1-2	The student addresses the following points: <ul style="list-style-type: none"> <li>• <b>outlines</b> 2 indicators justifying their choice of healthcare system.</li> </ul> or <ul style="list-style-type: none"> <li>• <b>explains</b> 1 indicator justifying their choice of healthcare system</li> </ul>
3-4	The student addresses the following points: <ul style="list-style-type: none"> <li>• <b>outlines</b> 4 other indicators justifying their choice of healthcare system.</li> </ul> or <ul style="list-style-type: none"> <li>• <b>explains</b> 2 indicators justifying their choice of healthcare system.</li> </ul>
5-6	The student addresses the following points: <ul style="list-style-type: none"> <li>• <b>explains</b> 2 indicators and <b>outlines</b> 2 indicators justifying their choice of healthcare system.</li> </ul> or <ul style="list-style-type: none"> <li>• <b>explains</b> 3 indicators justifying their choice of healthcare system</li> </ul>
7-8	The student addresses the following points: <ul style="list-style-type: none"> <li>• <b>explains</b> all 4 indicators justifying their choice of healthcare system.</li> </ul>

Question 4

**Contrast** how both speakers synthesize language and literature and science in their arguments. In your answer, you must include:

- elements of language and literature from both speakers
- elements of science from both speakers
- a conclusion.

(12 marks)

**Note: If no examples are given to support the differences, then the maximum mark is 6.**

**Note: If only one speaker is discussed, then 0 should be awarded.**

Marks	Descriptor
0	The student does not achieve a standard described by any of the descriptors given below.
1-3	The student attempts to <b>contrast</b> by addressing the following points: <ul style="list-style-type: none"><li>• <b>states</b> the differences in language and literature from both speakers</li><li>• <b>states</b> the differences in science from both speakers</li><li>• no conclusion is given.</li></ul>
4-6	The student attempts to <b>contrast</b> by addressing the following points: <ul style="list-style-type: none"><li>• <b>outlines</b> the differences in language and literature from both speakers</li><li>• <b>outlines</b> the differences in science from both speakers</li><li>• attempts a conclusion.</li></ul>
7-9	The student <b>contrasts</b> by addressing the following points: <ul style="list-style-type: none"><li>• <b>describes</b> the differences in language and literature from both speakers</li><li>• <b>describes</b> the differences in science from both speakers</li><li>• provides a conclusion.</li></ul>
10-12	The student fully <b>contrasts</b> by addressing the following points: <ul style="list-style-type: none"><li>• <b>explains</b> the differences in language and literature from both speakers</li><li>• <b>explains</b> the differences in science from both speakers</li><li>• provides an evaluative conclusion.</li></ul>

**Question 5a**

You are a representative for a drug company opposing the proposition in reference 6. **Formulate** your opposition. In your answer, you must use evidence from the pre-release material.

**(12 Marks)**

**Note: Credit two arguments written in the same box.**

**Note: PRM does not need to be referenced or cited.**

Marks	Descriptor
0	The student does not achieve a standard described by any of the descriptors given below.
1-3	The student: <ul style="list-style-type: none"> <li>• attempts an opening statement</li> <li>• <b>states one</b> argument supporting the drug company's point of view.</li> <li>• attempts a closing statement</li> </ul>
4-6	The student: <ul style="list-style-type: none"> <li>• <b>states</b> an opening statement</li> <li>• <b>outlines two</b> arguments supporting the drug company's point of view</li> <li>• attempts to use evidence from the PRM</li> <li>• states a closing statement.</li> </ul>
7-9	The student: <ul style="list-style-type: none"> <li>• <b>outlines</b> an opening statement that expresses the drug company's point of view</li> <li>• <b>describes two</b> arguments supporting the drug company's point of view</li> <li>• uses evidence from the PRM to directly support <b>one</b> argument</li> <li>• a closing statement is given linking to <b>one</b> argument in the debate.</li> </ul>
10-12	The student: <ul style="list-style-type: none"> <li>• <b>outlines</b> an opening statement that expresses the drug company's point of view and their subsequent arguments</li> <li>• <b>justifies two</b> arguments supporting the drug company's point of view</li> <li>• uses evidence from the PRM to directly support <b>both</b> arguments</li> <li>• a closing statement is given directly linking to <b>both</b> arguments in the debate.</li> </ul>

**Question 5b**

**Analyse** your synthesis of language and literature and sciences in part (a). In your answer, you must provide:

- an explanation of how you have synthesized language and literature
- an explanation of how you have synthesized science
- a conclusion on your synthesis of language and literature and science.

**(8 marks)**

**Note: Analysis must relate to the candidates own synthesis in 5a. Anything not relating to it should be ignored**

Marks	Descriptor
0	The student does not reach a standard described by any of the descriptors below.
1 -2	The student: <ul style="list-style-type: none"> <li>• <b>states</b> how they have synthesized language and literature in their arguments</li> <li>• <b>states</b> how they have synthesized science in their arguments.</li> </ul>
3-4	The student: <ul style="list-style-type: none"> <li>• <b>outlines</b> how they have synthesized language and literature in their arguments</li> <li>• <b>outlines</b> how they have synthesized science in their arguments</li> <li>• attempts a conclusion.</li> </ul>
5-6	The student: <ul style="list-style-type: none"> <li>• <b>describes</b> how they have synthesized language and literature in their arguments</li> <li>• <b>describes</b> how they have synthesized science in their arguments</li> <li>• provides a conclusion.</li> </ul>
7-8	The student: <ul style="list-style-type: none"> <li>• <b>explains</b> how they have synthesized language and literature in their arguments</li> <li>• <b>explains</b> how they have synthesized science in their arguments</li> <li>• provides a conclusion explicitly referring to their synthesis.</li> </ul>

**Question 6**

**To what extent** is healthcare a right? In your answer you must include:

- the extent to which healthcare is a right
- the extent to which healthcare is not a right
- evidence to support your arguments
- a conclusion.

**(12 marks)**

**Note: If a candidate only discusses one side, the maximum allowable score is (6 marks).**

**Note: Responses should relate to whether it should be a right, and not about the pros and cons of it being a right.**

Marks	Descriptor
0	The student does not achieve a standard described by any of the descriptors given below.
1-3	The student: <ul style="list-style-type: none"><li>• states the extent to which healthcare is a right</li><li>• states the extent to which healthcare is not a right.</li></ul>
4-6	The student: <ul style="list-style-type: none"><li>• outlines the extent to which healthcare is a right</li><li>• outlines the extent to which healthcare is not a right</li><li>• attempts a conclusion.</li></ul>
7-9	The student: <ul style="list-style-type: none"><li>• describes the extent to which healthcare is a right using evidence</li><li>• describes the extent to which healthcare is not a right using evidence</li><li>• provides a conclusion.</li></ul>
10-12	The student: <ul style="list-style-type: none"><li>• explains the extent to which healthcare is a right using evidence</li><li>• explains the extent to which healthcare is not a right using evidence</li><li>• provides an evaluative conclusion.</li></ul>

**Question 7**

**Evaluate** how the related concepts, **point of view** and **evidence** shape your perception of medical systems. In your answer you must include:

- strengths of how point of view and evidence shape your perception of medical systems
- weaknesses of how point of view and evidence shape your perception of medical systems
- an evaluative conclusion.

**(8 marks)**

**Note: Both point of view and evidence must be referred to in a single strand to receive credit. If only one of the related concepts is referred to in the entire response the maximum allowable score is (2 marks).**

Marks	Descriptor
0	The student does not achieve a standard described by any of the descriptors given below.
1-2	The student: <ul style="list-style-type: none"> <li>• <b>states</b> the strengths of points of view <b>and</b> evidence in shaping their perception of medical systems</li> <li>• <b>states</b> the weaknesses of points of view <b>and</b> evidence in shaping their perception of medical systems</li> </ul>
3-4	The student: <ul style="list-style-type: none"> <li>• <b>outlines</b> the strengths of points of view <b>and</b> evidence in shaping their perception of medical systems</li> <li>• <b>outlines</b> the weaknesses of points of view <b>and</b> evidence in shaping their perception of medical systems</li> <li>• attempts a conclusion.</li> </ul>
5-6	The student: <ul style="list-style-type: none"> <li>• <b>describes</b> the strengths of points of view <b>and</b> evidence in shaping their perception of medical systems</li> <li>• <b>describes</b> the weaknesses of points of view <b>and</b> evidence in shaping their perception of medical systems</li> <li>• provides a conclusion.</li> </ul>
7-8	The student: <ul style="list-style-type: none"> <li>• <b>explains</b> the strengths of points of view <b>and</b> evidence in shaping their perception of medical systems</li> <li>• <b>explains</b> the weaknesses of points of view <b>and</b> evidence in shaping their perception of medical systems</li> <li>• provides an evaluative conclusion.</li> </ul>