Biology & CS (Biology)

2020 SBA Annual Conference



HKEAA staffs:

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General Observations

- Biology: 12600 students (407 schools) submitted SBA marks
- CS(Bio): 232 students (10 schools) submitted SBA marks
- Moderation (statistical methods and professional judgment)
- Biology: 66.2% of schools within expected range
 - 22.1% of schools higher than expected
 - 11.7% of schools lower than expected
- CS (Bio): 64.3% of schools within expected range
 - 28.6% of schools higher than expected
 - 7.1% of schools lower than expected



Outlier detection and follow-up actions

Statistic	DC's comment	Action
↑	Strict	Adopt statistic result
↓	Lenient	Adopt statistic result
-	Appropriate	Adopt statistic result
↑	Lenient	Supervisor review
↓	Strict	Supervisor review
↑	Appropriate	Supervisor review
<u></u>	Appropriate	Supervisor review
-	Lenient / Strict	Supervisor review



Correlation with written exam

Exam Year	Paper 1	Paper 2
2016	0.74	0.69
2017	0.76	0.70
2018	0.75	0.71
2019	0.76	0.70
2020	0.77	0.73



SBA work plan for 2020-2021

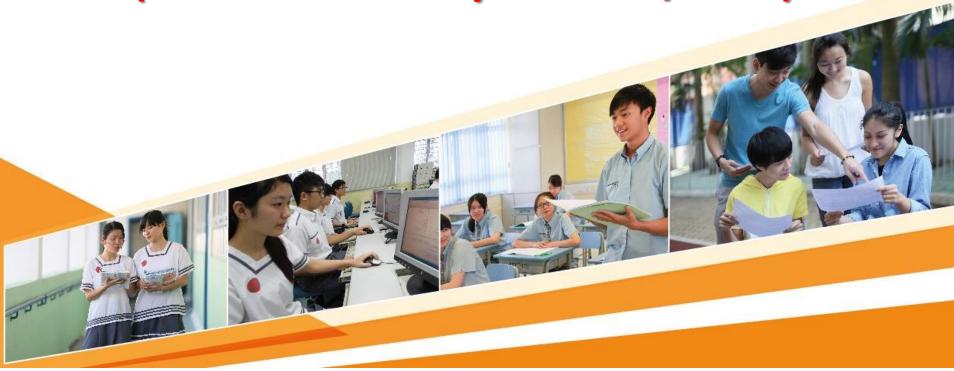
Month/Year	Events
November 2020	SBA annual conference
Sep 2020 – Jun 2021	S5 SBA activities to be conducted by schools
May – Jun 2021	Email 'S5 Lists of experiments for 2022 Exam' to District Coordinator
21 Jul 2021 (tentative)	Release of 2021 HKDSE results





2021 Exam

(i.e. S6 of school year 2020/2021)





2021 Exam

- SBA has been cancelled for Biology and CS Biology
- The weighting of Paper 1 and Paper 2 will be adjusted proportionally.

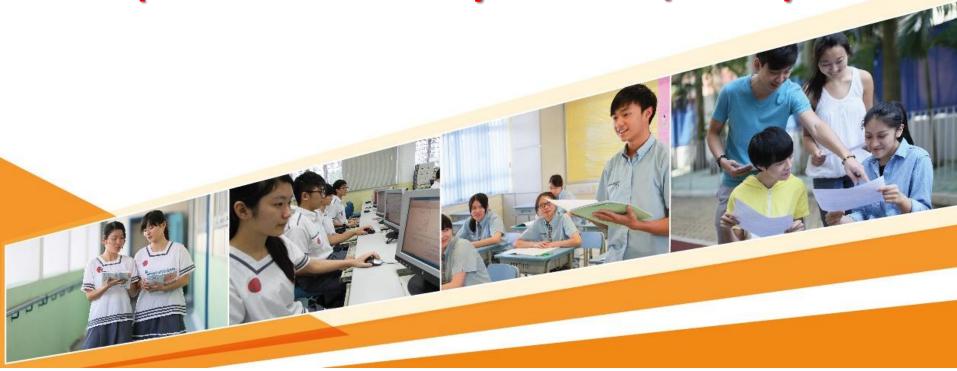
Paper	Weighting
Paper 1 Compulsory part	60% → 75 %
Paper 2 Elective part	20% → 25 %





2022 Exam Requirements

(i.e. S5 of school year 2020/2021)





Biology

- Area A (40%)
 - Best two marks for area A across years
- Area B (60%)
 - Best two marks for area B across years, and the two marks should be coming from two different topics

CS Biology

- Area A (40%)
 - Best mark for area A across years
- Area B (60%)
 - Best mark for area B across years



SBA Requirements

	Minimum Number of Assessment Der Student				
	IVIINIM	Minimum Number of Assessment Per Student			
Bio	S5*		S6*		
	Practical Skills Report Writing		Practical Skills	Report Writing	
	(A)	(B)	(A)	(B)	
	1	1	1	1	
CS	S5 & S6				
(Bio)	Practical Skills (A)		Report Writing (B)		
	1			1	



SBA requirements for repeater / transfer candidates

 There might be School Repeaters, Switching of Courses / Transfer Students for S6 submission, i.e. minimum 1 A mark and 1 B mark for both Bio and CS Bio. For details, please see Chapter 2 of the SBA Teachers' Handbook.



Final SBA Mark – System Check

In SBA system, the following checks will be done during mark submission:

Biology:

- At least 1 A mark and 1 B mark per student in S5
- At least 1 A mark and 1 B mark per student in S6
- The two best marks selected for Area B are of different topics

CS Biology:

At least 1 A mark and 1 B mark per student



Assessment rubrics

Mark range	Performance
9-10	Most basic performance + many good performance
6-8	Most basic performance + some good performance
3-5	Some basic performance + a few good performance
1-2	A few basic performance

- Both full report and guided report share the same rubrics
- Marks awarded based on the performance shown by the report
 - If only simple and straightforward questions and responses are observed, the reports will only fulfill basic performance and will not score high marks.
- Guiding questions should allow the demonstration of good performances



Please refer to 2022 SBA Teachers' Handbook.

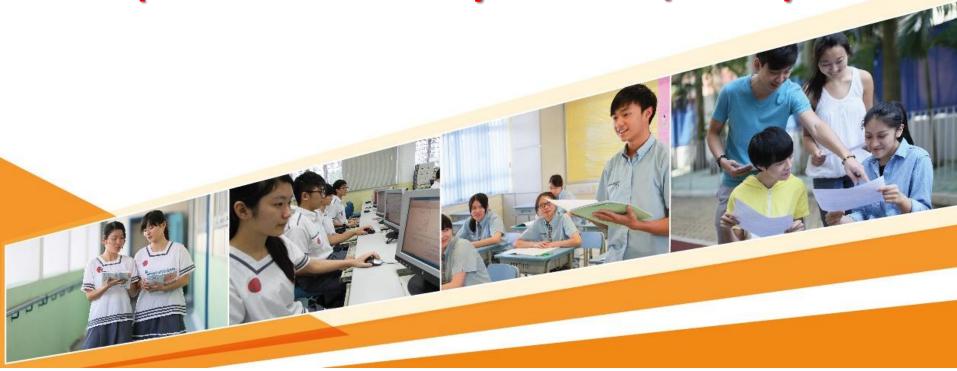
HKEAA will inform schools requesting teachers to email to District Coordinators the 'List of Experiments Performed in S5 and task sheets' around May 2021.





2023 Exam Requirements

(i.e. S4 of school year 2020/2021)





Changes in Area B

- Two types of tasks: Experimental Design (B1), results and discussion (B2)
- Teachers should decide if the experiment is suitable for assessment of B1, or B2 or both
- Writing up of procedure is not required
- 10 points scale
- Equal weighting for B1 and B2



Task for B1 only

- Students complete B1 under teacher's supervision
- After submission of B1, teacher provides the procedures to students to conduct the experiment
- The date for conducting the experiment shall be stated in the student's work
- Teachers may consider using the results collected for the learning and teaching of how to write up B2



Task for B2 only

- Teacher provide procedures for students to conduct the experiment and collect results
- Students may either complete B2 at school or at home
- Teachers may consider using the given procedure for the learning and teaching of B1



Task for B1 and B2

- Students complete B1 under teacher's supervision
- After submission of B1, teacher provides procedures to students to conduct the experiment and collect results
- Student may either complete B2 at school or at home



Points to note

- B1 must be completed under teacher's supervision
- Hands-on experience is a must!
 - Students should conduct the experiment no matter the task is for B1 only, B2 only or for both
- Teachers have the discretions to decide whether the task sheet are to be provide before the date of assessment or on the date of assessment



Biology

- Area A (40%)
 - Best two marks for area A across years
- Area B (60%)
 - Best two marks for B1 across years and best two marks for B2 across years; the best two marks come from different topics

CS Biology

- Area A (40%)
 - Best mark for area A across years
- Area B (60%)
 - Best mark for B1 across years and best mark for B2 across years



	Minimum Number of Assessment Per Student					
Bio	S5*		S6*			
	Practical Skills	Report Writing		Practical Skills	Report Writing	
	(A)	B1	B2	(A)	B1	B2
	1	1	1	1	1	1
CS	S5 & S6					
(Bio)	Practical Skills (A)			Report Writing		
	1		B1	В	2	
			1		1	



SBA requirements for repeater / transfer candidates

 There might be School Repeaters, Switching of Courses / Transfer Students for S6 submission, i.e. 1 A mark, 1 B1 mark and 1 B2 mark for both Bio and CS Bio. For details, please see Chapter 2 of the SBA Teachers' Handbook.



 Please refer to 2023 SBA Teachers' Handbook for the details of the updates.



New Assessment Guidelines for B1

- Included new descriptors for basic, good and excellent performances for B1 (experimental design)
- Teachers are encourage to design worksheet with specific questions which address those performance



Mark range	Performance	
9-10	Most good performances + a few excellent performances.	
6-8	Most basic performance + some good performance	
3-5	Some basic performance + a few good performance	
1-2	A few basic performance	

- Both B1 and B2 share the same rubrics
- Marks awarded based on the performance shown by the student work
 - If only simple and straightforward questions and responses are observed, the reports will only fulfill basic performance and will not score high marks.



For students with Special Educational Needs (SEN)

- Accommodation
- Applying for exemption (if applicable)



Accommodation

- Provide necessary assistance to the student concerned and perform a FAIR assessment
- e.g. assigning a technician / classmate / teacher to tell the student the colour of the reacting mixture
- Provide alternative task (but same level of difficulty) and perform a FAIR assessment (e.g. making reference to School's SEN policy, soliciting advice from school management / Psychologist / Therapist)



Exemption

Formal approval from the HKEAA required

 Application form: https://www.hkdse.hkeaa.edu.hk

Apply at the beginning of school year



Supporting documents

School's recommendation for exemption

Relevant Medical supports
 Psychologist's supports
 Attendance record (such as record of extended sick leaves)



Reminder:

- Contact the SBA Team of the HKEAA for questions related to logistical arrangements
- Discuss with your District Coordinator for subjectrelated questions
- Explain to the student the accommodation, or why no accommodation is necessary
- Mark in the student work the kind of accommodation / exemption involved if being selected to be submitted to the HKEAA



Suggestions for conducting experiments during pandemic

- Observe the safety guidelines from EDB
- May consider some simple and safe experiments which can be done at home, e.g.
 - Growth conditions of plants
 - Alcohol production in anaerobic respiration (by putting grape juice with skin in a sealed container)
- To save time, for experiments involving repeated measurements (e.g. effect pH / temperature / light intensity on X), may consider having one group working one measurement and then pool the data for whole class



For assessment of area A

- If necessary, have limited number of groups per session, and run several sessions in the afternoon for area A
- May conduct individual assessment on the use of microscope for area A, a limited number of students each time
- May consider assess drawing skills for area A



For area B

- May consider experiments involving repeated measurements, each group work on one measurement to provide hands-on experience, then pool data for results and discussion
- May consider provision of data for results and discussions, supplemented with videos showing how the experiment was conducted



Important dates for public exam

Event	Date
Markers Recruitment	Mid Nov – Mid Dec, 2020 (tentative)
Exam Day	10 May, 2021 (tentative)
Markers' Meeting	18 May, 2021 (tentative)
OSM Training	19 May, 2021 (tentative)
Marking Period	20 May – 15 June, 2021 (tentative)



Feedbacks and Evaluations

 Please complete the feedbacks and evaluation online: https://forms.gle/sTTjMnzxiYWAAkKs5

