

The background of the slide is a light beige color with a pattern of butterfly silhouettes. Most of the butterflies are white, but one butterfly in the bottom right corner is a distinct blue color. The butterflies are scattered across the page, some appearing larger and more prominent than others.

Singapore Junior Biology Olympiad (SJBO)

– Registration briefing

Delivered by Professor Lim Tit Meng

Dr Goh Yan Yih

Rationale

- Top 3 in IBO in recent years
- Many IBO alumni, students and schools have requested this competition
- Create similar opportunities for young students of Biology

Objectives

- Better prepare students for IBO by giving them an earlier taste of the competition
- More opportunities for young students to challenge themselves

Structure

- **Theory test** (online)
- **Practicals** (with presentation)

Theory (overview)

- Delivered completely online
- **100 questions**
- Links specific to each student will be given to schools
- Schools administer in computer labs
- Declaration **MUST** be signed and adhered to

Theory (structure)

- Mix of multiple choice, T/F, fill-in-the-blanks
- Weightage:
 - 35% 'O' level standard
 - 35% 'A' level standard
 - 30% IBO standard

Sample Questions (MCQ)

If the root tip a strip of the onion epidermal peel is stained with iodine solution, which of the following structures of a cell would be deeply stained?

- A. Chloroplast
- B. Cytoplasm
- C. Nucleus**
- D. Vacuole

Sample Questions (fill-in-blank)

Three potato strips each of 5 cm long were immersed in three sucrose solutions X, Y and Z. After one hour the final length of these potato strips were recorded as follows:

X – 5.0 cm Y – 5.2 cm Z – 4.8 cm

The ascending order of the water potential of these sucrose solutions is

Answer: ZXY

Sample Questions (T/F)

The following statements reveal the activities or properties of enzymes.

Indicate if each of the following statements is true.

- A. 37°C is the only temperature at which all enzymes work best.
- B. Only digestive glands can secrete enzymes.
- C. Hydrolysis of macromolecules into smaller molecules is catalyzed by enzymes
- D. synthesis of macromolecules from small molecules is catalyzed by enzymes

Answer: CD / DC

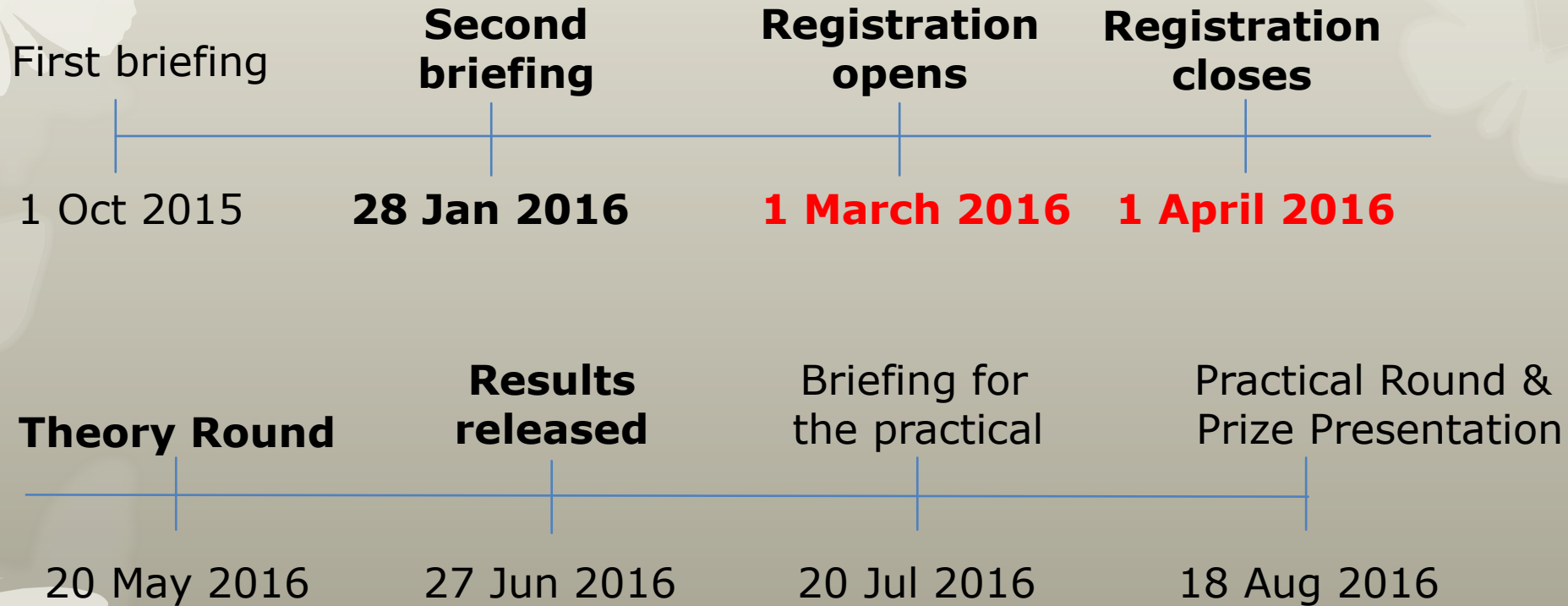
Practical (overview)

- **Top five schools** (based on the top 4 performers from each school)
- 4 team members 1 reserve (**from top 8 students from each school**)
- Takes place at **Science Centre Singapore**
- Students will have to give a **presentation** afterwards

Practical (structure)

- Duration – **2 hours**
- **Core skills** for Biology
- Some skills from IBO tested
- Does not follow IBO format

Timeline



Registration (administration)

<http://www.cma.sg/events/sjbo.html>

<http://www.sibiol.org.sg/>

Kindly submit this spreadsheet with your online registration form by 1 April 2016 (Friday).

SINGAPORE JUNIOR BIOLOGY OLYMPIAD (2016) SCHOOL NAME LIST

Name of School:

Teacher in Charge:

Email:

Contact No:

No	Name of Student (in BLOCK LETTERS)	NRIC / Passport No.	Nationality	Sex	DOB (dd/mm/ yyyy)	Year (e.g. Sec 2)	Student's Mobile No.	Student's Email
1								
2								
3								
4								

Theory (administration)

- **Schools will have to sign an NDA**
- Hotline will be available for troubleshooting
- Schools will be given a half-day window during which links will be accessible **(1200-1700), max of 2 batches**
- Each student has **2 hours** after first accessing the link
- Students who have completed the exam must be kept in **quarantine** until all students from the school have finished the exam
- Failure to conform will result in the disqualification of the whole school

Results release

- Date of release 27 Jun 2016
- Individual rank will be sent to school teacher-in-charge
- Top 5 schools will be invited for practical round briefing at Science Centre Singapore, 20 Jul 2016

Awards

➤ From theory (individual):

- Top 5%, Gold medal
- Next 10%, Silver medal
- Next 15%, Bronze medal

➤ From practical (school):

- Champion
- 1st runner up
- 2nd runner up

Q & A