# JUNIOR COLLEGE 1 CURRICULUM PACKAGE

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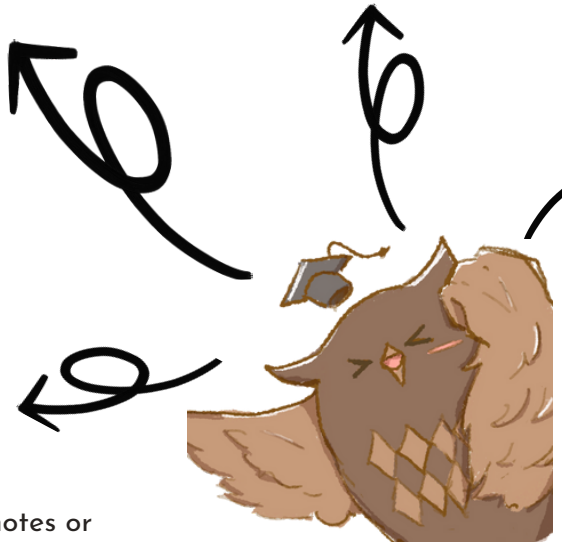
# Established in 2010

**3000+ students & counting**

**Proven Track Record**
PSLE- 92% AL1-AL3
O Lvl- 94% A1/A2
A Lvl- 93% A/B

**No Registration or Material Fee**
Specialised notes are provided by us foc!

**Personalised Progress Report**
Our progress reports after each class allow you to keep track of what your child learns in class, as well as tutor's analysis of your child's strengths, areas for growth, and learning habits to maximise your child's potential.



## THE EDUZ FACTOR

**Digital Whiteboards**
No more fumbling through notes or confusing recaps. Besides, can you un-erase a traditional whiteboard?

**Effiicient Communication Process**
Our admins and teachers work hand-in-hand with parents to ensure our students progress. We also go an extra mile to assist you with your child's concerns about studies.

**Our EduZ Teachers**
Most of our teachers have at least 7 years of teaching experience. This ranges from current school teachers to ex-school teachers who have joined us as full-time tutors.



EduzTUITION

# THANK YOU FOR TRUSTING US WITH YOUR CHILD'S ACADEMIC EXCELLENCE

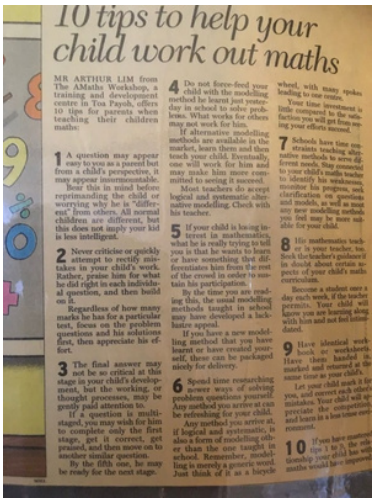
## Google

EduZ Tuition Woodlands- Quality Educat...
4.8 ★★★★★ (31) · Educational institution
306 Woodlands Street 31, #02-35
Opens 2 pm · 9062 5285
Online classes

EduZ Tuition CCK - Quality Education fo...
4.9 ★★★★★ (58) · Education center
223 Choa Chu Kang Central, #01-237B Block 223
Opens 2 pm · 9797 3786
On-site services · Online classes

EduZ Tuition Admiralty - Quality Educati...
4.9 ★★★★★ (61) · Education center
736 Woodlands Cir, #01-513
Opens 2 pm · 8940 7170
On-site services · Online classes

## Newspaper



10 tips to help your child work out maths

MR ARTHUR LIM from The AMaths Workshop, a training and development centre in Toa Payoh, offers 10 tips for parents when teaching their children maths:

1 A question may appear easy to you as a parent but from a child's perspective, it may appear insurmountable. Bear this in mind before reprimanding the child or worrying why he is "different" from others. All normal children are different, but this does not imply your kid is less intelligent.

2 Never criticise or quickly attempt to rectify mistakes in your child's work. Rather, praise him for what he did right in each individual question, and then build on it. Regardless of how many marks he has for a particular test, focus on the problem questions and his solutions first, then appreciate his effort.

3 The final answer may not be so critical at this stage in your child's development, but the working, or thought processes, may be greatly paid attention to. If a question is multi-staged, you may wish for him to complete only the first stage, get it correct, get praised, and then move on to another similar question. By the fifth one, he may be ready for the next stage.

4 Do not force-feed your child with the modelling method he learnt just yesterday in school to solve problems. What works for others may not work for him. If alternative modelling methods are available in the market, learn them and then teach your child. Eventually, one will work for him and may make him more committed to seeing it succeed. Most teachers do accept logical and systematic alternative modelling. Check with his teacher.

5 If your child is losing interest in mathematics, what he is really trying to tell you is that he wants to learn or have something that differentiates him from the rest of the crowd in order to sustain his participation. By the time you are reading this, the usual modelling methods taught in school may have developed a backbiting appeal. If you have a new modelling method that you have learnt or have created yourself, these can be packaged nicely for delivery.

6 Spend time researching newer ways of solving problem questions yourself. Any method you arrive at can be refreshing for your child. Any method you arrive at, if logical and systematic, is also a form of modelling other than the one taught in school. Remember, modelling is merely a generic word. Just think of it as a bicycle wheel, with many spokes leading to one rim.

7 Schools have time constraints teaching alternative methods to serve different needs. Stay connected to your child's maths teacher to identify his weaknesses, monitor his progress, seek clarification on questions and models, as well as most any new modelling methods you feel may be more suitable for your child.

8 His mathematics teacher is your teacher, too. Seek the teacher's guidance if in doubt about certain aspects of your child's maths curriculum. Become a student once a day each week, if the teacher permits. Your child will know you are learning along with him and not left behind.

9 Have identical work books or worksheets. Have them handed in, marked and returned at the same time as your child's. Let your child mark it for you, and correct each other's mistakes. Your child will appreciate the competition and learn in a less tense environment.

10 If you have mastered the tips 1 to 9, the odds are in favour that your child has well-grounded foundation in maths and would have improved

## Magazine



changes have had to be made in EduZ Tuition, following the announcement of the Circuit Breaker and closure of tuition centres. Hence, the steadfastness of the tutors and staff at EduZ Tuition came into play immediately switching to digital classes using an online portal. However, on the bright side, the Circuit Breaker has allowed us to offer hybrid business models, which gives students and parents the freedom to choose between online lessons and centre based lessons. We also boast our own app, which integrates tutors, admins and students simultaneously, one platform for multiple purposes. These purposes include administrative errands, like registration and payments. Students also use this app to download studying materials and watch recorded lessons. On top of that, this platform allows teachers to mark the class attendance, manage payslips and upload their own teaching materials.

We have since transformed into a fully digital classroom based experience, where physical whiteboards are no longer used. Instead, every student is provided with an iPad during class. Lessons are conducted using an online portal on that iPad. This has since greatly enhanced the students' learning experience and also instilled fun into the learning process. Additionally, active discussions are also encouraged via the online portal the classes are conducted using. As of now, there are plans to expand into the Chinese market, with the addition of a number of branches islandwide across Singapore as well.

Tuition Centres in Woodlands! Best in Singapore also included EduZ Tuition in the 24 Best Tutors in Singapore in 2020, putting us at the 6th spot. They brought up our experienced tutors, small class size, the option for both online and centre based lessons, as well as a competitive fee in the market! EduZ Tuition was also reviewed by MediaOne as one of the top math tuition centres in Singapore for the year of 2020. Their review stated that EduZ Tuition is a premium math education centre that employs a specialised learning model created by an ex Junior College tutor Mr Dave Lim, with the provision of specialised teaching materials curated by Mr Lim himself. Not forgetting the other subjects we provide here at EduZ Tuition, we were also selected as one of the best Chinese Tutors in Singapore by Best in Singapore in 2020! As mentioned earlier, our tutors have at least 7 years of teaching experience, which reassures parents that every tutor, regardless of the subject they teach, is an expert in their own field and pedagogy strategies.

Looking Ahead
With the emergence of the COVID-19 pandemic in Singapore, many big

15

LISTED on Rating.sg

BestinSingapore

2018 TOP 3 TUITION CENTRES IN WOODLANDS THREE BEST RATED

BEST IN SINGAPORE

Best Business of 2020 ThreeBest Rated Excellence

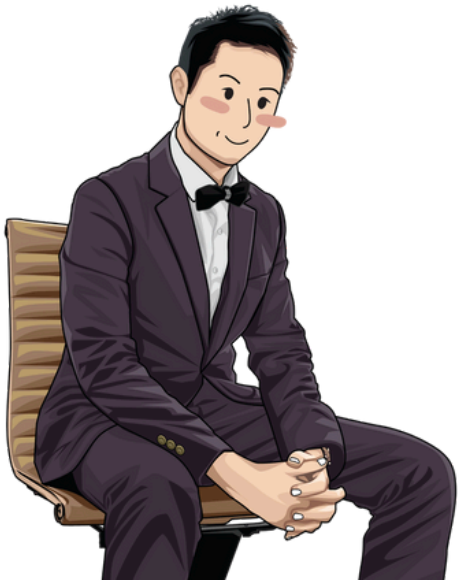
PRODUCT NATION'S Choice

BEST IN SINGAPORE

TOP IN SINGAPORE REVIEWED BY MEDIAONE

EduzTUITION

# SOME OF OUR EDUZ TUTORS



**Dave**

More than 12 years teaching exp
Ex NYJC teacher
Nanyang Scholar
1st Class Honours



**Johnathan**

More than 12 years teaching exp
Ex NYGHS, TMJC teacher
Nanyang President Research Scholar
1st Class Honours



**Cherry**

More than 5 years teaching exp
Primary Level Head
Overall coordinator of
EduZ Primary School Notes



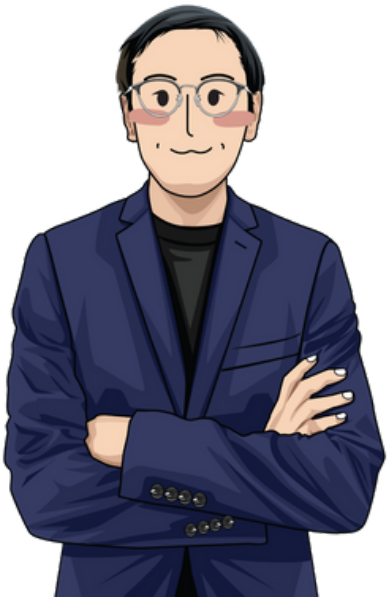
**Wei Quan**

More than 7 years teaching exp
Full time private tutor
Overall coordinator of EduZ
Secondary School Notes



**Yu 老师**

More than 20 years of teaching exp
Overall coordinator of the
EduZ Chinese Program



**Gerald**

More than 8 years teaching exp
Full time private tutor
Overall coordinator of
EduZ Primary School Notes

EduzTUITION

# SOME REVIEWS

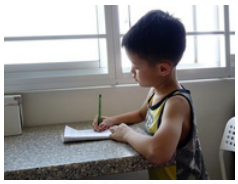


B

4 reviews · 1 photo

★★★★★ 2 months ago

Have good experience sending my girl to this branch for Primary Math in 2023. Teacher Gerald is very good at identifying the topics my girl is not confident with. He helps her to build the concept foundation and then her confidence on complex questions step-by-step. Her Math results improve and becomes more consistent at year end and PSLE. Not forgetting to mention, the centre admin Jodi, in EduZ Tuition CCK branch is always very friendly, flexible and understanding when handling admin matters. I'm very happy to find this tuition centre that both my girl and me are comfortable with.



Local Guide · 265 reviews · 1192 photos

★★★★★ a year ago

Conveniently located in Choa Chu Kang with a 5 minutes walk from the MRT station or perhaps less than 3 minutes walk from South View LRT.

The teachers here are patient and nice.



1 review

★★★★★ 5 days ago NEW

airconditioned, clean and have a huge monitor screen so that everyone can see the words. Teachers and staff are friendly and very swag. They very understanding also.



A

2 reviews

★★★★★ a month ago

My Son sec4 express, he start tuition of the Pure Chem, Pure phy, Emath and English on Nov 2023, the teacher are friendly and teach in line as what school teach, my son very happy to have the tuition in EduZ, can see he become intere
improve his study.



E

**Emiline Tay**

1 review

★★★★★ a month ago

My Daughter's Chinese has improved in her PSLE since we enrolled her with EduZ Tuition Bot at CCK Central. her teachers in the center are experienced and patient.

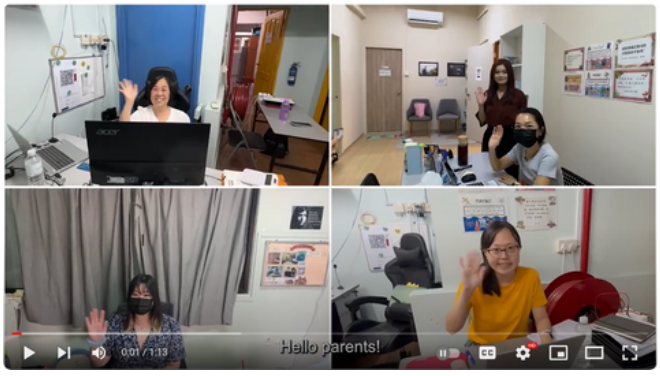
# The EDUZ Youtube





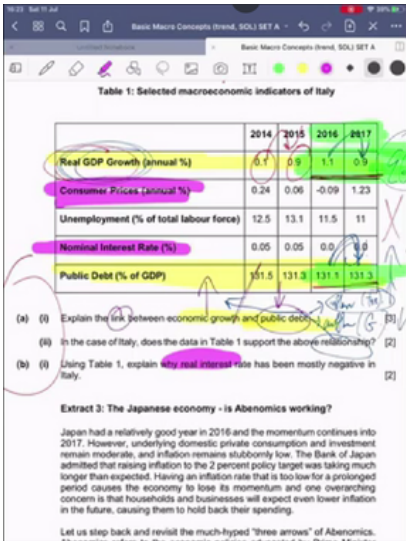
CLICK ON THE IMAGES TO WATCH THE VIDEOS

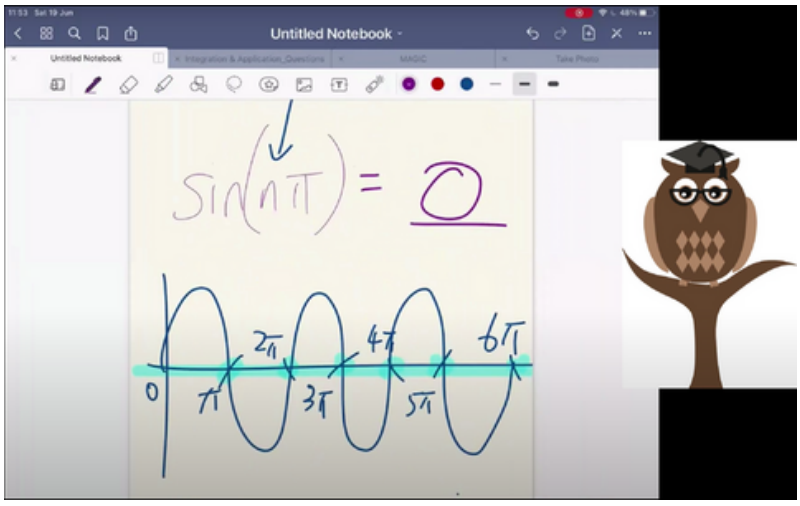
Welcome to EduZ Tuition!




The EduZ Experience

Learning in progress!



# LESSON FLOW

Below is a typical study flow for EduZ students.
Depending on the Tutor, there may be variations to the lesson flow.

| | |
|---|---|
| **Step 1** | Tutors will start with the summary of the basic concepts of each topic, then highlight important exam concepts that are commonly tested. |
| **Step 2** | Students will cover the assigned worksheets, with guidance by tutor for every question. |
| **Step 3** | Students can clarify their doubts throughout the lesson. Students can also bring along their school work to consult tutors. |
| **Step 4** | To maximise learning, extra worksheets will be assigned as extra revision practice for enrichment purposes. |



# JUNIOR COLLEGE GENERAL PAPER

## PAPER 1
ESSAY

CONTENT : 30
LANGUAGE : 20
TOTAL : 50

*weightage 50%*
*1hr 30 minutes*

- Choose 1 out of 8 questions
- Write between 500-800 words
- Questions are general in nature.
- Students need to be aware of local, regional and global issues

### Topics
- Society and Culture
- Economics
- Politics
- The Arts and Humanities
- Science and Technology
- The Environment

## PAPER 2
ESSAY

CONTENT : 35
LANGUAGE : 15
TOTAL : 50

*weightage 50%*
*1hr 30 minutes*

- *Answer ALL* questions
- 3 different passages with total of 1200 words

### Sections
- Passage 1

Literal comprehension, inference, analysis, evaluation and synthesis of ideas

- Passage 2

Summary

- Passage 1 & 3, Passage 2 & 3

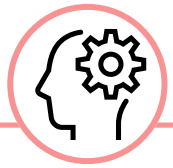
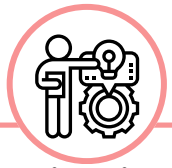
Connection of ideas between passages

- Application

Based on a theme related to the reading passages

# JUNIOR COLLEGE GENERAL PAPER

Our JC1 GP focuses on developing students' critical reading, writing and thinking skills for quick and accurate analysis of for their GP paper. Focus will also be on exposure to current affairs which is essential for the JC syllabus in building content knowledge for their papers.

|  **Content & Language Mastery** |  **Skills and Techniques** |  **Examination Techniques** |
|---|---|---|
| In our JC1 GP, we focus on understanding the individual requirements for the GP paper, mainly argumentative writing, comprehension, summary and application question. | In our JC1 GP, we focus on honing students' critical reasoning and writing skills to express ideas clearly. Student's inference and summarising skills will be honed, and they will also be trained to apply knowledge and understanding of issues in addressing specific task(s). | In our JC1 GP, revision will be focused on mastering the individual H1 GP paper requirements and honing time management skills through practice tests in simulated exam conditions. Discussion on key topics will be held to build students' repository of general knowledge. |

# The EDUZ Sample

## General Paper

E.D.U.Z™ Tuition
Beyond Education

**2**
**Answer one question.**
**Answers should be between 500 and 800 words in length.**

**1** 'Diversity should be celebrated, not feared.' Discuss.

**2** 'We need to talk about taboos. ' How true is this of your society?

**3** 'The value of memory is often underestimated.' Is this an accurate assessment of modern society?

**4** Examine the claim that the problem of inequality can only be tackled by governments.

**5** Consider the view that more action and less talk will help countries solve their current domestic problems

**6** 'The battle against consumerism is a pointless one.' Comment.

**7** 'Images are always more powerful than words' Do you agree?

**8** Assess the view that international agreements are well-intended, but ineffective.

**9** Has your society sacrificed too much for progress?

**10** How important is it to have a sense of humour?

**11** Is it justifiable for nations to always prioritise their national interests?

**12** Given the growing demands of modern society, has raising children become more of a burden?

# The EDUZ Sample

## General Paper

E.D.U.Z™ Tuition
Beyond Education

**"The solution to our environmental problems lies with the people, not with governments." Do you agree?**
**Zachary Goh 14S32**

As our environmental problems begin to compound and scientists proclaim the start of Earth's 6th Mass extinction, politicians, environmentalists and common folk alike have begun to broach the most Important question of the century: how do we solve our environmental problems? The result is a Pushing of responsibility from one party to another, with the masses reasoning that the government should be the one to solve these problems given that they wield a large amount of power, and the government bemoaning their lack of progress environmentally and blaming the masses for their profligate wasting of resources instead. My stand is that the solution to our environmental problems lies neither with the people nor the government, but rather with the big business conglomerates around the world, for their profit motive causes them to use up Mother Earth's resources at an enormous rate, and the fact that they have many bases of operation around the world means government policies have little impact on their actions.

However, the people still have a role to play in solving our environmental problems. The masses Contribute to environmental problems today by wasting resources through their day to day actions, Such as refusing to turn off lights and fans when not using a room in their house, turning the air Conditioner to the lowest temperature possible, and wasting food and water. A brief example to show This wastage of resources is how in Singapore, the National Environmental Agency found that Singaporeans wasted close to 800 000 tonnes of food in 2014, and considering the fact that Singapore Is a small country, the scale of food wastage in bigger nations like China and America would undoubtedly be proportionally bigger. Were societal habits to be changed, and the power of the masses harnessed, our environmental problems would be ameliorated, since the effect of nearly 7 billion people in the world cutting down their wastage of resources and doing eco-friendly activities like recycling would be massive indeed. Therefore, prima facie, the argument that the solution to our environmental problems lies with the people may hold.

# JUNIOR COLLEGE
# H2 MATHEMATICS

| | | |
|---|---|---|
| PAPER 1 | 10- 12 QUESTIONS : 100<br>weightage 50%<br>3HR | |
| PAPER 2 | SECTION A : 40<br>SECTION B : 60<br>weightage 50%<br>3HR | |

**Paper 1**

**Pure Mathematics**
- 10 to 12 questions

**Application of Mathematics in real-world contexts**
- 2 questions
- 12 marks each

**Answer ALL questions**

***Paper 2***
- ***Consist of Section A & B***

**Section A**

**Pure Mathematics**
- 4 to 5 questions
- 40 marks

**Section B**

**Probability and Statistics**
- 6 to 8 questions

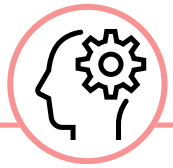
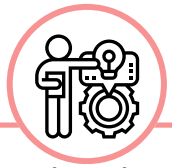
**Application of Mathematics in real-world contexts**
- 2 questions
- 60 marks

**Section A**
- Functions and Graphs
- Sequences and Series
- Vectors
- Introduction to Complex Numbers
- Calculus

**Section B**
- P&C and Probability
- Discrete Random Variable
- Normal Distribution
- Sampling
- Hypothesis Testing
- Correlation and Linear Regression

# JUNIOR COLLEGE H2 MATHEMATICS

In our JC1 math, teaching is paced to help students cope better with the intensity and the additional questions and explanation during our lessons can effectively help students understand better.

|  **Content & Language Mastery** |  **Skills and Techniques** |  **Examination Techniques** |
|---|---|---|
| In JC1 H2 math, students learn the more advanced pure math topics such as functions, graphs, Sequences and Series, vectors, complex numbers, and advanced calculus. | In our JC1 math, students are taught to master the use of their Graphic Calculator (GC) to solve and check for answers. They are also taught to identify the topic for each question and integrate various concepts to present answers. | In JC1 , revision will be focused on mastering some of the H2 Math topics through topical revision packages. Examination skills such as time management and error analysis will be honed through practice tests. |

# The EDUZ Sample

## H2 Mathematics

E.D.U.Z™ Tuition
Beyond Education

**Vectors Lecture Note** v.22

The introductory part for vectors begins with the basic concepts we learnt back in secondary school. Back then we learnt vectors in 2d, but we will be learning 3d vectors (extra z plane) now.

**Addition and subtraction of vectors by comparing just the numbers:**

Addition/Subtraction of Vectors:

$$\begin{pmatrix} x_1 \\ y_1 \\ z_1 \end{pmatrix} \pm \begin{pmatrix} x_2 \\ y_2 \\ z_2 \end{pmatrix} = \begin{pmatrix} x_1 \pm x_2 \\ y_1 \pm y_2 \\ z_1 \pm z_2 \end{pmatrix}$$

Example: $\begin{pmatrix} -1 \\ -2 \\ 2 \end{pmatrix} + \begin{pmatrix} -2 \\ 12 \\ 7 \end{pmatrix} = \begin{pmatrix} -3 \\ 10 \\ 9 \end{pmatrix}$

**Multiplication of vector by any constant number:**

Multiplication of Vector by a Scalar:

$$\lambda \begin{pmatrix} a \\ b \\ c \end{pmatrix} = \begin{pmatrix} \lambda a \\ \lambda b \\ \lambda c \end{pmatrix}, \text{ where } \lambda \in \mathbb{R}$$

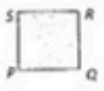
Example: $-\frac{1}{2}\begin{pmatrix} 1 \\ -2 \\ 2 \end{pmatrix} = \begin{pmatrix} -\frac{1}{2} \\ 1 \\ -1 \end{pmatrix}$

**Knowing how equal vectors work together with their applications on shape:**

Equal Vectors: (same direction & same magnitude)

$$\begin{pmatrix} a \\ b \\ c \end{pmatrix} = \begin{pmatrix} p \\ q \\ r \end{pmatrix} \Leftrightarrow a = p,\ b = q,\ c = r$$

Given that $PQRS$ is a square, then
$\overrightarrow{PQ} = \overrightarrow{SR}$ ; $\overrightarrow{PS} = \overrightarrow{QR}$




Note: $\overrightarrow{PQ}$ is not equal to $\overrightarrow{PS}$

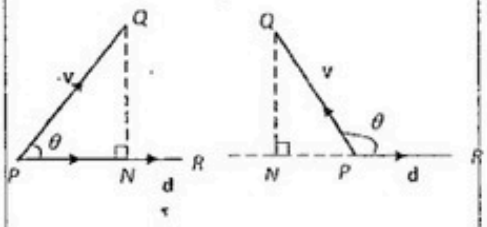
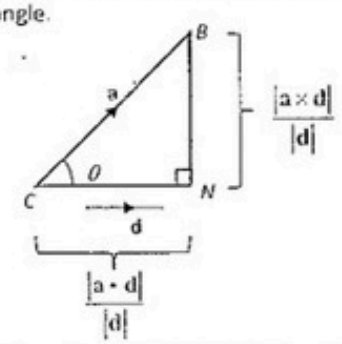
Given that $ABCD$ is a parallelogram, then
$\overrightarrow{AB} = \overrightarrow{DC}$ and $\overrightarrow{AD} = \overrightarrow{BC}$



# The EDUZ Sample

## H2 Mathematics

E.D.U.Z™ Tuition
Beyond Education

| | Uses of Scalar Product | Uses of Vector Product |
|---|---|---|
| 10 | Helps us determine if two given vectors are perpendicular to each other.<br>$\mathbf{a} \perp \mathbf{b} \Leftrightarrow \mathbf{a} \cdot \mathbf{b} = 0$ | Helps us find area of triangle.<br>Area of $\Delta ABC = \frac{1}{2}\left\lvert \vec{AB} \times \vec{AC} \right\rvert$ |
| 11 | Helps us find the angle between two vectors.<br>$\cos\theta = \frac{\mathbf{a} \cdot \mathbf{b}}{\lvert\mathbf{a}\rvert\lvert\mathbf{b}\rvert}$ | Helps us find area of triangle.<br>Area of parallelogram $ABCD = \left\lvert \vec{AB} \times \vec{AD} \right\rvert$ |
| 12 | Helps us find the length of projection.<br>  <br>Length of projection of v onto d<br>$= PN = \frac{\lvert\mathbf{v}.\mathbf{d}\rvert}{\lvert\mathbf{d}\rvert}$ | Helps us find the sides of a right-angled triangle.<br>  |

The important thing about mastering scalar and vector product is when it is used for lines and planes application.

Finding angles. Pointer 11.

Finding length of projection. Pointer 12.

It is interesting to note that length of projection (LOP) formula is pretty easy to remember.

For example, if you are asked to find the LOP of a onto b, it will be $|a.\hat{b}|$.

If you are asked to find the LOP of AB onto AC, it will be $|AB.\hat{AC}|$.

Then the length on the other side of the right angle triangle will be cross product.

Understand how to draw the diagram for finding LOP. If you are asked to find the LOP of a onto b, then imagine a falling onto b, creating a right angle triangle.

# The EDUZ Sample

## H2 Mathematics

E.D.U.Z™ Tuition
Beyond Education

Example 6

Points $A$, $B$ and $C$ have co-ordinates $(2,3,4)$, $(-2,1,0)$ and $(4,0,2)$ respectively. Calculate $\angle BAC$.

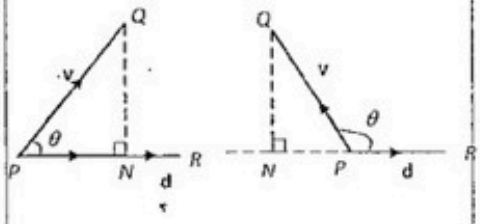
Example 7

The position vectors of the points $A$, $B$ and $C$ are $\begin{pmatrix}1\\2\\1\end{pmatrix}, \begin{pmatrix}0\\1\\1\end{pmatrix}, \begin{pmatrix}2\\3\\3\end{pmatrix}$ respectively.

Find (i) the length of projection of $\overrightarrow{BA}$ on $\overrightarrow{BC}$,
(ii) the perpendicular distance from $A$ to the line $BC$.

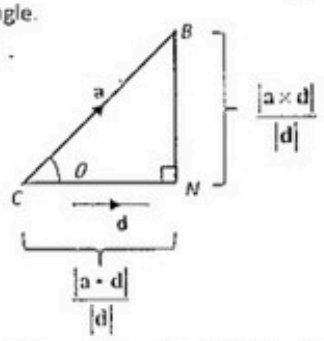
**It is also important that you can find the vector of the LOP. In other words, if you have found the LOP of a onto b, how do u make that length into a vector? By using unit vector. (Recall)**

Helps us find the length of projection.




Length of projection of v onto d
$= PN = \frac{|\mathbf{v}.\mathbf{d}|}{|\mathbf{d}|}$

Helps us find the sides of a right-angled triangle.




Left diagram:

PN (LOP) is $|\mathbf{v}.\hat{\mathbf{d}}|$. So, the vector PN = $|\mathbf{v}.\hat{\mathbf{d}}|(\hat{\mathbf{d}})$

Right diagram:

BN is $|\mathbf{a}\times\hat{\mathbf{d}}|$. So, the vector BN = $|\mathbf{a}\times\hat{\mathbf{d}}|\ (\hat{\mathbf{d}})$

# JUNIOR COLLEGE
# H1 MATHEMATICS

| PAPER 1 | *Section A: 40*<br>*Section B: 60*<br><br>*weightage 100%*<br>*3HRS* |
|---|---|

- **Section A**
  **: Pure Mathematics**
  **5 questions**

- **Section B**
  **: Probability and Statistics**
  **6 to 8 questions**

**Answer ALL questions**

## Section A

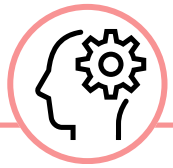
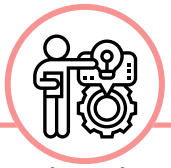
- **Exponential and Logarithmic Functions and Graphing Techniques**
- **Equations and Inequalities**
- **Differentiation**
- **Integration**

## Section B

- **P&C and Probability**
- **Binomial Distribution**
- **Normal Distribution**
- **Sampling**
- **Hypothesis Testing**
- **Correlation and Linear Regression**

# JUNIOR COLLEGE H1 MATHEMATICS

In our JC1 math, teaching is paced to help students cope better with the intensity and the additional questions and explanation during our lessons can effectively help students understand better.

|  **Content & Language Mastery** |  **Skills and Techniques** |  **Examination Techniques** |
|---|---|---|
| In our JC1 H1 Math, pure math topics such as Calculus, equations and inequalities and exponential, logarithmic function are covered. | In our JC1 math, students are taught to master the use of their Graphic Calculator (GC) to solve and check for answers. They are also taught to identify the topic for each question and integrate various concepts to present answers. | In our JC1 H1 math , revision will be focused on mastering all the H1 Math topics through topical revision packages. Examination skills such as time management and error analysis will be honed through practice tests. |

# The EDUZ Sample

## H1 Mathematics

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**P&C Questions**

1.

(i) A plate holds 10 different cakes. Find the number of ways all the cakes can be shared between Alex and Caleb if each of them receives an odd number of cakes. [3]

(ii) Another plate holds 12 items which consists of 7 cupcakes, each with a different colour icing, and 5 brownies, each of a different size.

**(a)** Find the number of ways these 12 items can be arranged in a row if all the brownies are separated from each other by at least one cupcake. [3]

**(b)** Given that 4 items are selected from these 12 items of which at least one is a brownie, find the probability that there is exactly 1 brownie selected. [3]

2.

A choir committee consisting of a President, a Vice-President and a Quartermaster are chosen from a group of 4 boys and 16 girls. Find the number of ways the committee can be formed if it comprises at least one girl. [2]

The committee, their conductor and two teachers are seated in a row to watch the choir rehearse. Find the number of seating arrangements such that

(i) the committee members must all sit next to each other, [2]

(ii) the teachers must be separated, [2]

(iii) the committee members alternate. [2]

3.

A car plate consists of 6 characters. The first two characters consist of letters chosen from {A, B, C, D, E, F, G, H}. The last four characters consist of digits chosen from {1, 2, 3, 4, 5}. Suppose that repetitions are allowed.

(i) Find the number of different car plates that can be formed. [1]

(ii) Find the probability that a car plate chosen at random

**(a)** contains exactly one vowel, one consonant and the digit 3 occurs exactly thrice, [3]

**(b)** has a vowel as its first character or has an odd number as its last character, but not both. [3]

# The EDUZ Sample

## H1 Mathematics

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5.

Mr Tan and Mrs Yeo brought a group of JC Maths Academy students to attend an overseas Maths conference recently. The group of students comprised three JC1 students and four JC2 students.

**(i)** On the first day of the conference, they arrived late due to traffic jam and were told that there were only a front row of 5 seats and a back row of 4 seats available in the auditorium. Find the number of ways in which they could sit if Mr Tan was seated in the front row and Mrs Yeo was seated at the back row. [2]

**(ii)** At the end of the first day, the whole team decided to take a photo. Find the number of ways they could stand in a row if Mr Tan and Mrs Yeo stood together and all JC1 students were separated. [3]

On the second day of the conference, Mr Tan decided to select 5 out of the 7 students randomly to attend a Maths Enrichment Workshop with him. Find the probability that in the group of students chosen, there were more JC2 students than JC1 students. [3]

6.

A random sample of four children is chosen from a class of 12 girls and 18 boys including one pair of twins of each gender. Find the probability that the sample contains

**(i)** all girls, **[2]**

**(ii)** at least one boy, **[2]**

**(iii)** the pair of twin brothers and only the elder of the twin sisters. **[2]**

For a random sample of four children, if $A$ represents the event that there are more girls than boys, and $B$ represents the event that both twin sisters are included,

**(iv)** find $\mathrm{P}(A \mid B)$. **[3]**

# JUNIOR COLLEGE
# H2 PHYSICS

## PAPER 1
*MULTIPLE CHOICE : 30*

*weightage 15%*
*1HR*

**Paper 1**
- **30 multiple choice questions**
- **Direct choice type with 4 options**
- **30 marks**

## PAPER 2
*STRUCTURED QUESTIONS: 80*

*weightage 30%*
*2HR*

**Paper 2**
- **Structured questions**
- **Data based questions**
- **20 to 25 marks**
- **80 marks in total**

## PAPER 3
*LONGER STRUCTURED QUESTIONS : 80*

*weightage 35%*
*2HR*

**Paper 3**
- **Section A**

**60 marks**
- **Section B**

**Students will only answer 1 out of 2 questions**

**20 marks**

## PAPER 4
*PRACTICAL: 55*

*weightage 20%*
*2HR 30 MIN*

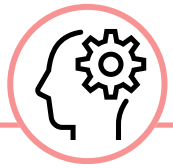
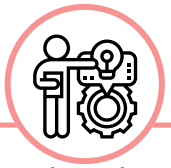
**Paper 4**
- **Planning 5%**
- **Manipulation, measurement and observations**
- **Presentation of data and observations**
- **Analysis, conclusions and evaluation**
- **15%**
- **55 marks in total**

## Topics

- *Measurement*
- *Kinematics*
- *Dynamics*
- *Forces*
- *Work, Energy and Power*
- *Motion in a circle*
- *Gravitational Field*
- *Temperature and Ideal gases*
- *First Law of Thermodynamics*
- *Oscillations*
- *Wave Motions*
- *Superposition*
- *Electric Fields*
- *Current of electricity*
- *D.C.Circuits*
- Electromagnetism
- Electromagnetic induction
- Alternating Current
- Quantum Physics
- Nuclear Physics

# JUNIOR COLLEGE H2 PHYSICS

Our JC1 Physics program acts as a bridging program for students from their 'O' level to 'A' Level. Certain 'O' level topics will be revisited and explored deeper.

|  **Content & Language Mastery** |  **Skills and Techniques** |  **Examination Techniques** |
|---|---|---|
| H2 Physics explores additional topics in Newtonian Mechanics, Thermal Physics and Oscillations and waves. | In our JC1 Physics program, students are taught to master the identification of the concept behind each question. They are honed to take note of key words in questions and understand the question requirements. | Lessons are held with simulations, demonstrations, and videos where we show how the physics concepts can be applied in everyday situations and use relevant examples to allow students to understand the theoretical concepts better. |

# The EDUZ Sample

## H2 Physics

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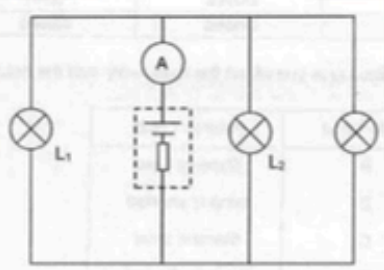
2 A wire of length L has resistance R. The cross-section of the wire is circular with radius r.

A second wire, also of circular cross-section, and of the same material, has resistance ½ R.

What could be the radius and the length of the second wire?

| | Radius | Length |
|---|---|---|
| A | r/2 | L/2 |
| B | r/ √2 | L/2 |
| C | √2r | 2L |
| D | 2r | 2L |

3 Three similar light bulbs are connected to a cell with internal resistance as shown in the diagram. Each bulb operates at normal brightness and the ammeter (of negligible resistance) registers a steady current.




The filament of bulb L1 breaks. What happens to the ammeter reading and the brightness of bulb L2?

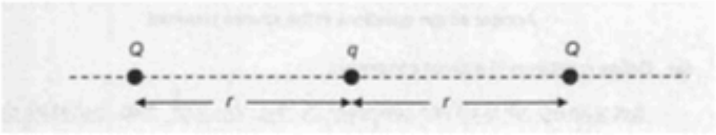
| | Ammeter reading | Brightness of L2 |
|---|---|---|
| A | decreases | decreases |
| B | decreases | increases |
| C | increases | decreases |
| D | increases | increases |

# The EDUZ Sample

## H2 Physics

E.D.U.Z™ Tuition
Beyond Education

9 A point charge q is at a distance r from each of the two identical point charges Q.




How much work is done by the forces of electrostatic repulsion when the point charge at the centre is removed to infinity?

A zero

B $2Q^2 / 4\pi\epsilon_0 R$

C $2Qq / 4\pi\epsilon_0 R$

D $Qq / 4\pi\epsilon_0 R$

10 The electric field lines in a region of space are shown in the diagram. P, Q, R and S are the electric field strengths at the respective position in the field as shown.




Which of the following is correct regarding the magnitude of P,Q,R and S?

A $P > Q > R > S$

B $P > Q = R > S$

C $P = Q = R = S$

D $P = Q = R = S = 0$

# JUNIOR COLLEGE
# H1 PHYSICS

**PAPER 1** — MULTIPLE CHOICE : 30
weightage 33%
1HR

**PAPER 2** — STRUCTURED QUESTIONS: 80
weightage 67%
2HR

**Paper 1**
- 30 multiple choice questions
- Direct choice type with 4 options
- 30 marks

**Paper 2**
- Consist of Section A & B

**Section A**
- Structured questions
- One or two data-based question
- 60 marks

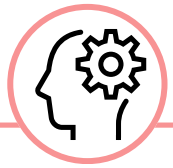
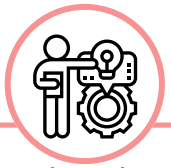
**Section B**
- 2 twenty marks questions
- Students will only answer 1 out of 2 questions
- 20 marks

## Topics

- *Measurement*
- *Kinematics*
- *Dynamics*
- *Forces*
- *Work, Energy and Power*
- *Motion in a circle and orbits*
- *Current of electricity*
- *D.C.Circuits*
- *Electromagnetism*
- *Nuclear Physics*

# JUNIOR COLLEGE H1 PHYSICS

Our JC1 Physics program acts as a bridging program for students from their 'O' level to 'A' Level. Certain 'O' level topics will be revisited and explored deeper.

|  **Content & Language Mastery** |  **Skills and Techniques** |  **Examination Techniques** |
|---|---|---|
| Our JC1 H1 Physics focuses on a broad range of introductory topics covering the whole of measurements, kinematics and Dynamics, which builds the foundation for the later part of the subject. | In our JC1 Physics program, students are taught to master the identification of the concept behind each question. They are honed to take note of key words in questions and understand the question requirements. | Lessons are held with simulations, demonstrations, and videos where we show how the physics concepts can be applied in everyday situations and use relevant examples to allow students to understand the theoretical concepts better. |

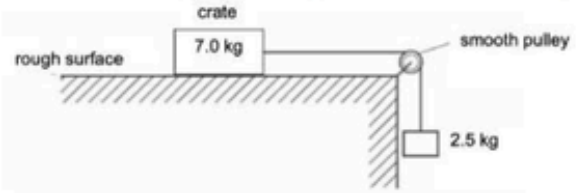
# The EDUZ Sample

## H1 Physics

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8 A crate of mass 7.0 kg rests on a rough horizontal surface. A light string attached to the crate passes over a smooth pulley and supports a load of mass 2.5kg at its other end.




When the crate is released, a frictional force of 5.0 N acts on it.

What is the acceleration of the crate?

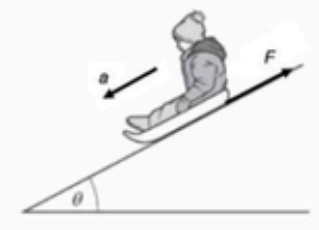
A 2.1 $ms^{-2}$

B 3.1 $ms^{-2}$

C 4.5 $ms^{-2}$

B 9.8 $ms^{-2}$

9 A child on a sledge slides down a slope with acceleration a. The slope is inclined at angle Ø above the horizontal.




The mass of the child is m and the mass of the sledge is M. The acceleration of free fall is g. Ignore the effects of air resistance.

What is the frictional force F?

A m(g cos Ø + a)

B m(g sin Ø – a)

C (m + M)(g cos Ø –a)

D (m + M)(g sin Ø –a)

# The EDUZ Sample

## H1 Physics

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2 The variation with time t of the velocity v of a ball is shown in Fig. 2.1.

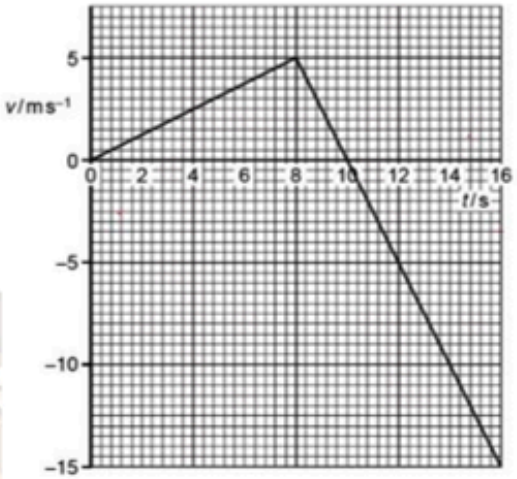



Fig. 2.1

The ball moves in a straight line from a point P at t=0. The mass of the ball is 400g.

(a) Use Fig. 2.1 to describe, without calculation, the velocity of the ball from t = 0 to t =16

.....

.....

.....

.....[2]

(b) Use Fig. 2.1 to calculate, for the ball,

(i) the displacement from P at t=10s,

displacement = .....m [2]

# JUNIOR COLLEGE
# H2 CHEMISTRY

## PAPER 1
*MULTIPLE CHOICE : 30*

*weightage 15%*
*1HR*

**Paper 1**
- 30 multiple choice questions
- 5 to 8 questions are multiple completion type with 4 options
- 30 marks

## PAPER 2
*STRUCTURED QUESTIONS: 80*

*weightage 30%*
*2HR*

**Paper 2**
- Structured questions
- Data based questions
- 20 to 25 marks
- 80 marks in total

## PAPER 3
*FREE RESPONSE QUESTIONS : 80*

*weightage 35%*
*2HR*

**Paper 3**
- Section A

3 to 4 free response questions
60 marks
- Section B

Students will only answer 1 out of 2 questions

20 marks

## PAPER 4
*PRACTICAL: 55*

*weightage 20%*
*2HR 30 MIN*

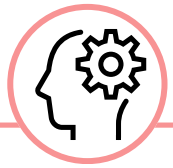
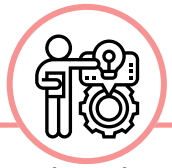
**Paper 4**
- Planning 5%
- Manipulation, measurement and observations
- Presentation of data and observations
- Analysis, conclusions and evaluation
- 15%
- 55 marks in total

## Topics

- Atomic Structure
- Chemical Bonding
- The Gaseous State
- Theories of Acids and Bases
- The Periodic Table
- The Mole Concept and Stoichiometry
- Chemical Energetics: Thermochemistry and Thermodynamics (Gibbs Free Energy and Entropy)
- Reaction Kinetics
- Chemical Equilibria
- *Chemistry of Aqueous solutions*
- *Organic Chemistry*
- *Electrochemistry*
- *An introduction to the Chemistry of Transition Elements*

# JUNIOR COLLEGE H2 CHEMISTRY

Our JC1 Chemistry program acts as a bridging program for students from their 'O' level to 'A' Level. Certain 'O' level topics will be revisited and explored deeper.

|  **Content & Language Mastery** |  **Skills and Techniques** |  **Examination Techniques** |
|---|---|---|
| For JC1 Chemistry, VSEPR model, structure and bonding of molecules are covered as bridging modules from O Level. JC1 H2 Chemistry cover Kinetics, Equilibrium, Energetics and Organic Chemistry chapters in full depth, while exploring Solubility Equilibria, Entropy, and Titration. | In our JC1 Chemistry program, students are taught to master the identification of the concept behind each question. They are honed to take note of key words in questions and understand the question requirements. | In our JC1 Physics program, revision will be focused on mastering some of the H2 Chemistry topics through topical revision packages. Examination skills such as time management and error analysis will be honed through practice tests. |

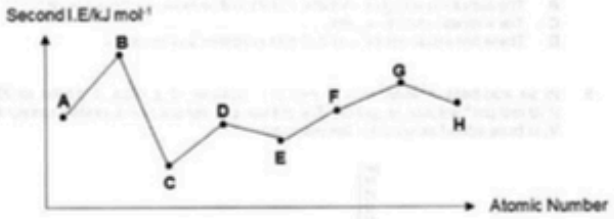
# The EDUZ Sample

## H2 Chemistry

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5

**11 The following graph shows the second ionization energies of eight consecutive elements, A to H which have atomic numbers between 3 to 20 in the Periodic Table.**




**Which one of the following statements about the oxides of the elements is correct?**

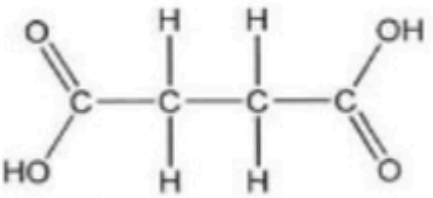
**A B forms a liquid oxide that forms a neutral solution when dissolved in water.**

**B D forms an oxide which can react with both NaOH(aq) and $H_2So_4$(aq)**

**C E forms an oxide which is soluble in water to give a solution of pH 9.**

**B F forms an oxide which react with water to give a green solution with universal indicator.**

**12 Malic acid is commonly found in fruits such as green apple and is used as an additive for "super sour" candy. It has the following structure:**




**What type of hybridization is shown by the carbon atoms in the molecule?**

**A $sp^3$ only**

**B $sp^2$ and $sp^3$**

**C sp, $sp^2$ and $sp^3$**

**D $sp^2$ only**

# The EDUZ Sample

## H2 Chemistry

E.D.U.Z™ Tuition
Beyond Education

13. Cars are usually fitted with catalytic converters in the exhaust system to remove pollutant gases present in the exhaust gases.

Which of the following is not a reaction that occurs in the catalytic converter?

A $2\,CO + O_2 \rightarrow 2CO_2$

B $2\,NO + 2\,CO \rightarrow N_2 + 2\,CO_2$

C $2\,CO_2 + N2 \rightarrow 2\,CO + 2\,NO$

D hydrocarbons $+ O_2 \rightarrow Co_2 + H_20$

9

Table 4.1 below lists some energy values.

Table 4.1

| | |
|---|---|
| Lattice energy of $MnSO_4$ / kJ $mol^{-1}$ | -2920 |
| Lattice energy of $MnCl_2$/kJ $mol^{-1}$ | -2510 |
| Enthalpy change of hydration for $SO_4^{2-}$/ kJ $mol^{-1}$ | -1060 |
| Enthalpy change of hydration for $Cl^-$/ kJ $mol^{-1}$ | -381 |
| Enthalpy change of solution for $MnCL_2$/ kJ $mol^{-1}$ | -92.0 |

(iii) Use the data given in Table 4.1 to calculate the enthalpy change of hydration for the manganese (II) ion.

[1]

(iv) Hence, calculate the enthalpy change of solution for $MnSO_4$.

[1]

# The EDUZ Sample

## H2 Chemistry

E.D.U.Z™ Tuition
Beyond Education



3 Nitrogen can form different oxides when combined with oxygen. Nitrogen dioxide ($NO_2$) and dinitrogen oxide ($N_2O$) are two such oxides. While $NO_2$ contributes to acid rain, $N_2O$ is best known as the laughing gas.

(a.) (i) Draw dot-and-cross diagrams to show the bonding in the molecules of $NO_2$ and N2O, given that N is the central atom in both molecules

[2]

(ii) Hence complete the table below.

| | NO2 | N2O |
|---|---|---|
| Shape of molecule | | |
| Bond angle with respect to central atom | | |

[2]

(b) At its boiling point of 21°C, a 100 g sample of NO2 gas was found to occupy 0.0262$m^3$ at 1 atm.

(i) Calculate the $M_r$ of the sample.

# JUNIOR COLLEGE
# H1 CHEMISTRY

**PAPER 1** — MULTIPLE CHOICE : 30
weightage 33%
1HR

**PAPER 2** — STRUCTURED QUESTIONS: 80
weightage 67%
2HR

**Paper 1**

- 30 multiple choice questions
- 4 to 6 questions are multiple completion type with 4 options
- 30 marks

**Paper 2**

- *Consist of Section A & B*

**Section A**

- Structured questions
- One or two data-based question
- 60 marks

**Section B**

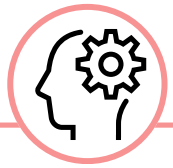
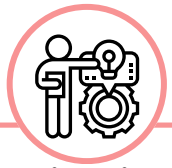
- 2 twenty marks questions
- Students will only answer 1 out of 2 questions
- 20 marks

## Topics

- Atomic Structure
- Chemical Bonding
- Theories of Acids and Bases
- The Periodic Table
- The Mole Concept and Stoichiometry
- Chemical Energetics: Thermochemistry
- Reaction Kinetics
- Chemical Equilibria
- Nanomaterials

# JUNIOR COLLEGE H1 CHEMISTRY

Our JC1 Chemistry program acts as a bridging program for students from their 'O' level to 'A' Level. Certain 'O' level topics will be revisited and explored deeper.

|  **Content & Language Mastery** |  **Skills and Techniques** |  **Examination Techniques** |
|---|---|---|
| For JC1 Chemistry, VSEPR model, structure and bonding of molecules are covered as bridging modules from O Level. JC1 H1 Chemistry also cover the basics of Kinetics, Equilibrium, Energetics and parts of Organic Chemistry. | In our JC1 Chemistry program, students are taught to master the identification of the concept behind each question. They are honed to take note of key words in questions and understand the question requirements. | In our JC1 Chemistry, revision will be focused on mastering some of the H1 Chemistry topics through topical revision packages. Examination skills such as time management and error analysis will be honed through practice tests. |

# The EDUZ Sample

## H1 Chemistry

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3 (a) Outline the principles of the Valence Shell Electron Pair Repulsion (VSEPR) theory.

.....

.....

.....

.....[2]

(b) Predict and draw the shapes of the following molecules or ions.

(i) $F_2O$

[1]

(ii) $H_3O^+$

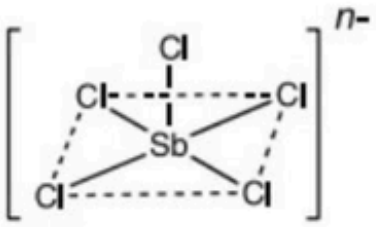
[1]

(iii) $ClF_4^-$

[1]

E.D.U.Z™ Tuition
Beyond Education

(C) Antimony, Sb, is in Group 15 of the Periodic Table. It forms a series of salts which contain the $SbCl_5^{n-}$ anion, the structure of which is square pyramidal.




Deduce the total number of electrons around the antimony atom, the value of n and the oxidation number of Sb in this ion.

.....

.....

.....

.....[2]

[Total: 7]

# JUNIOR COLLEGE
# H2 ECONOMICS

**PAPER 1**

CASE STUDY 1 : 30
CASE STUDY 2 : 30

weightage 40%
2HR 15 MINS

**PAPER 2**

ESSAYS: 75

weightage 60%
2HR 15MINS

**Paper 1**
**Case Studies:**

- Data response questions
  12 marks each
- Higher-order questions
  18 marks each

**Answer ALL questions**

***Paper 2***

- ***Consist of Section A & B***
- ***Answer total of 3 questions***

**Section A**

- 3 microeconomics questions
- Choose at least one out of three
- 25 marks each

**Section B**

- 3 macroeconomics questions
- Choose at least one out of three
- 25 marks each

**Theme 1**
The Central Economic Problem

- Scarcity

**Theme 2**
Markets

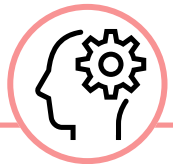
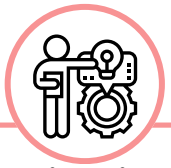
- Price Mechanism and its applications
- Firms and Decisions
- Market Failure

**Theme 3**
The National Economy

- Introduction to Macroeconomic
- Macroeconomic Aims and Policies
- Globalisation and the International Economy

# JUNIOR COLLEGE H2 ECONOMICS

JC Economics, as a brand-new topic to students, will be taught from scratch to students. Our program helps students with content understanding and organising and supporting of their arguments in a succinct and logical manner.

|  **Content & Language Mastery** |  **Skills and Techniques** |  **Examination Techniques** |
|---|---|---|
| JC1 will focus on the microeconomics analysis (individual and societal levels) where idea of unlimited wants, limited resources and knowledge of how firms and markets function are introduced to students. H2 Economics is a heavier load than H1 - with more content, with addition of topics such as Firms and Decisions. | Our JC1 economics explicitly teach the relevant economic skills like the tools and methods of analysis used by economists, the ability to explain and analyse economic issues and evaluate perspectives and decisions of economic agents. | In our JC1, revision will be focused on mastering all the H2 Economics topics through topical revision packages. Examination skills such as time management and error analysis will be honed through practice tests. |

# The EDUZ Sample

## H2 Economics

E.D.U.Z™ Tuition
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**Macroeconomic aims, consequences & policies Essay Questions 2022**

Q1

A government's main macroeconomic aims are price stability, full employment and economic growth.

Explain the main macroeconomic aims of a government and discuss whether a government should focus primarily on achieving price stability over other macroeconomic aims in a globalised world. [25]

Q2

The Covid-19 pandemic has severely disrupted global economic activity and led to both demand and supply shocks that resulted in falling incomes in Singapore. In response, the government rolled out four Budgets over four months, equivalent to almost 20% of its GDP.

Discuss whether fiscal policy is the most appropriate policy to deal with the adverse impacts of the pandemic on the Singapore economy in the short and long run. [15]

Q3

**(a)** Explain the possible causes of a balance of trade deficit. [10]

**(b)** Discuss the policies that a government could adopt to reduce a balance of trade deficit. [15]

Q4

The COVID-19 pandemic has caused both demand and supply shocks to economies all over the world, leading to negative economic growth, bursting unemployment and rising inflation.

(a) Explain the causes that might have led countries to face the twin ills of recession and inflation. [10]

(b) Discuss the considerations governments may have in their choice of policies when faced with these two macroeconomic problems. [15]

Q5

The U.S. trade deficit hit a fresh record high in March. The Commerce Department reported that the trade gap rose 57.6% from the same period a year ago to US$74.4 billion. Massive fiscal stimulus and economic recovery from the pandemic recession are fuelling demand for goods and services.

Source: CNBC, 4 May 2021

(a) Explain the possible causes of a deficit on the balance of trade of a country. [10]

(b) Discuss whether achieving a favourable balance of trade should be the key macroeconomic priority for a government. [15]

# The EDUZ Sample

## H2 Economics

E.D.U.Z™ Tuition
Beyond Education

Q12

The US Federal Reserve signalled on June 19 that it is ready to cut interest rates for the first time in more than a decade to give employment a boost but this could indirectly spur more inflation.

Source: Adapted from *The Conversation*, 20 June 2019

**(a)** Explain the main causes of unemployment in an economy such as the USA. [10]

**(b)** Discuss whether possible conflicts between macroeconomic objectives is the main factor that needs to be considered in policy decision-making by a government. [15]

Q13

In 2019, Singapore overtakes US to become the most competitive economy. Singapore will need to improve the capabilities of the enterprises, transform industries and ensure that workers are well-equipped with the right skills to stay competitive. The global competitiveness of an economy can be improved by supply-side policies that attracts FDI which brings about innovation.

Source: Adapted from *Channel News Asia*, 9 Oct 2019

**(a)** Explain how improving competitiveness will help Singapore achieve its macroeconomic goals. [10]

**(b)** Discuss whether supply-side policies focusing on attracting FDI is the best approach to help Singapore maintain its global competitiveness. [15]

Q14

(a) **Explain the internal and external factors that are likely to cause a balance of trade deficit.** [10]

b) Discuss whether a country should be concerned about an increasing balance of trade deficit. **[15]**

Q15

Singapore recession forecast for 2020 worsens to between -4% and -7%.

Source: *The Business Times*, May 2020

(a) Using AD-AS analysis, explain the key determinants of actual and potential growth. [10]

(b) Discuss whether the size and openness of Singapore's economy would influence its choice of macroeconomic policies to counter the recession. [15]

# JUNIOR COLLEGE
# H1 ECONOMICS

| PAPER 1 | CASE STUDY 1 : 40<br>CASE STUDY 2 : 40<br><br>weightage 100%<br>3HRS |
|---|---|

**Case Studies:**

- Data response questions
  16 marks each
- Higher-order questions
  24 marks each

Answer ALL questions

**Theme 1**
**The Central Economic Problem**

- Scarcity

**Theme 2**
**Markets**

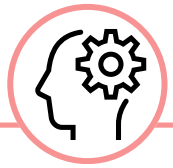
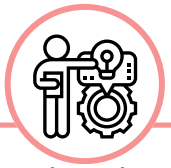
- Price Mechanism and its applications
- Microeconomic Objectives and Policies

**Theme 3**
**The National Economy**

- Introduction to Macroeconomic analysis
- Macroeconomic Objectives and Policies

# JUNIOR COLLEGE H1 ECONOMICS

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# The EDUZ Sample

## H1 Economics

E.D.U.Z™ Tuition
Beyond Education

### Let's look at some practice questions

**Q1:**

Explain whether electric vehicle is a public good. **[4]**

**Q2:**

Explain the market failure resulting from the usage of diesel-powered cars. **[6]**

**Q3:**

Discuss whether increasing production of electric vehicles, together with driverless and ride-hailing transportation, will mean that governments do not need to intervene in the public transport market of buses and trains. **[12]**

**Q4:**

Explain how the use of plastic bags could bring about allocative inefficiency and comment briefly on the likely extent of such an inefficiency in the future. [7]

**Q5:**

With reference to case materials and/or your own relevant knowledge, discuss whether public education on the harmful effects of plastic pollution is effective in correcting the market failure it creates. [12]

**Q6:**

Explain why public Wi-Fi is considered to be a private good. [4]

**Q7:**

Discuss whether governments should follow Singapore's example of providing free public Wi-Fi. [12]

**Q8:**

With reference to Extract 7, assess **two** reasons why the British government would like to intervene in the market for soft drinks. [9]

# The EDUZ Sample

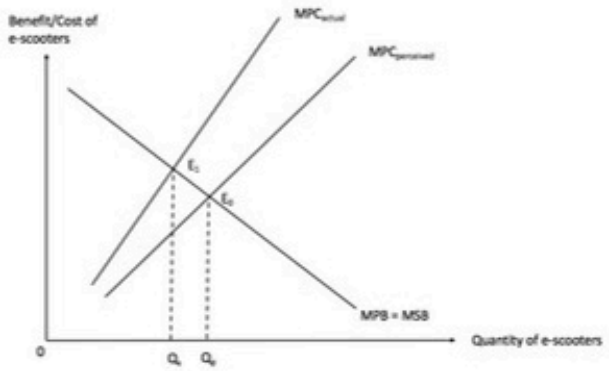
## H1 Economics



- Assuming that there are no externalities in the consumption of e-scooters. The imperfect information will mean that the social optimal level will be lower than the private optimal output level, leading to an overconsumption of the e-scooters under free market conditions.

**Evaluation:**

- It is likely that the positive externality in consumption is higher than the negative externality in consumption.
- Therefore, there is a net positive externality from the consumption of e-scooters.




**Q:**

**Discuss the policies to tackle the above sources of market failure.**

**A:**

**Legislation can be an appropriate policy to address the market failure in the market for e-scooters**

- Legislation can also be an appropriate policy to reduce the probability of incurring the marginal external cost.
- The government can implement rules and regulations to allow the use of e-scooters on specific areas or roads and to impose a speed limit.
- In addition, compulsory trainings such as safety course, can be conducted for e-scooters to obtain license to ride an e-scooters upon the completion of the course.

- **Limitations of using legislation to reduce the negative externality in consumption**
  - It will be difficult to ensure the adherence to this regulation in reality. Additional costs to ensure commuters' compliance will also drain resources that could otherwise be better utilised in other areas.

**Education campaign can be an appropriate policy to address the market failure in the market for e-scooters**

# The EDUZ Sample

## H1 Economics

E.D.U.Z™ Tuition
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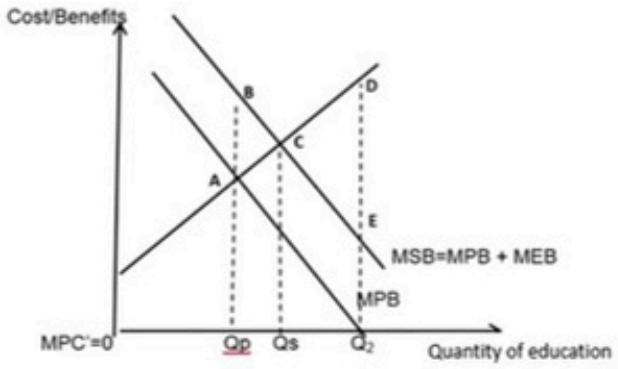
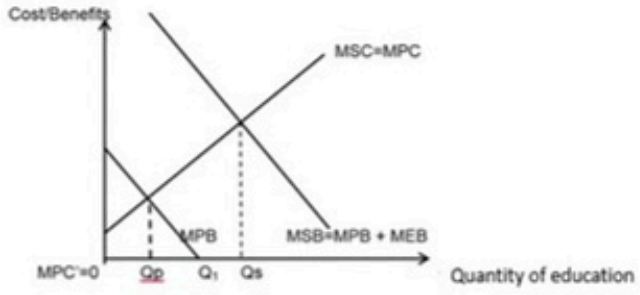



**Figure 2: Overconsumption of education when provided for free**

- Between Qs and $Q_2$, the additional cost to society of another unit of education is higher than the additional benefit to society, leading to welfare loss area of CDE, compared to the original welfare loss area of ABC when consumption was as Qp.
- This causes **greater inefficient allocation of an economy's resources**, resulting in a worse outcome than before.
- Moreover, government provision of free education will be inefficient if it does not target the **root cause of the problem**. For instance, in developing countries, the root cause of under-consumption might be due to ignorance about the benefits of consuming education. The perceived MPB could actually be very low. In these countries, parents are ignorant and would at times prefer to send their children to work rather than to attend school, not knowing that an educated individual can command higher wages compared to someone who is not literate. In this instance, referring to Figure 3, providing education for free only increases their consumption to $Q_1$ where MPC'=MPB.



EduzTUITION

# OUR LOCATIONS

## Admiralty

736 Woodlands Circle
#01-513, S730736
(5 mins walk from
Woodlands Mart)

8940 7170



## Choa Chu Kang

223 Choa Chu Kang Central
#01-237B, S680223
(5mins walk from CCK MRT
3mins walk from
Southview LRT)

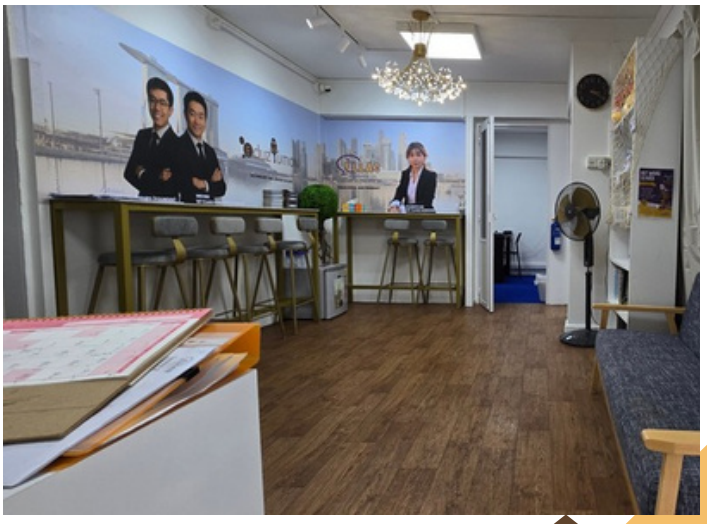
9797 3786



## Marsiling

306 Woodlands St 31
#02-35, S730306
(5 mins walk from
Marsiling MRT)

9062 5285





# Our Locations

**Choa Chu Kang**
223 Choa Chu Kang Central
#01-237B, S680223
9797 3786

**Marsiling**
306 Woodlands St 31
#02-35, S730306
9062 5285

**Admiralty**
736 Woodlands Circle
#01-513, S730736
8940 7170

# Our Socials

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## Feel free to contact us or just say hi!

