







آغا خان یونیورسٹی ایگزامینیشن بورڈ  
AGA KHAN UNIVERSITY EXAMINATION BOARD

**List of Learning Resources (Compiled) for  
Secondary School Certificate Part 1 (SSC II)**

**ONLINE RESOURCES (across Subjects and Grades)**

<b>Knowledge Platform*</b> <a href="https://akueb.knowledgeplatform.com/login">https://akueb.knowledgeplatform.com/login</a>	
<b>Punjab Curriculum and Textbook Board</b> <a href="https://pctb.punjab.gov.pk/E-Books">https://pctb.punjab.gov.pk/E-Books</a>	
<b>Cantab Publishers*</b> <a href="https://cantabpublisher.com/">https://cantabpublisher.com/</a>	
<b>Phet Interactive Simulations</b> <a href="https://phet.colorado.edu/">https://phet.colorado.edu/</a>	

\* Subscription and/or purchase required

## **COMPULSORY SUBJECTS**

### **English Compulsory**

#### **Recommended Key Textbooks:**

*Model Textbook of English 10*. Cantab Publisher (Based on National Curriculum of Pakistan 2022-23)

*Textbook of English Grade 10*. National Book Foundation, Islamabad (Based on National Curriculum of Pakistan 2022-23)

*English Grade 10*. Sobia Kiyani (Caravan Book House) Punjab Curriculum and Textbook Board, Lahore

*English Grammar and Composition 9-10*, Punjab Curriculum and Textbook Board, Lahore  
*Oxford Progressive English 10*, Redford, R and Saunders, M, Oxford University Press

#### **Reference Book:**

*Grammar for GCSE English*. Gould, M. and Kemp, B. (2013) Collins

#### **Websites:**

[www.esl-lab.com](http://www.esl-lab.com)

<https://learnenglish.britishcouncil.org/skills/listening>

[www.majortests.com/sat/reading-comprehension.php](http://www.majortests.com/sat/reading-comprehension.php)

<https://learnenglish.britishcouncil.org/skills/reading>

<https://learnenglish.britishcouncil.org/skills/writing>

<https://www.perfect-english-grammar.com/grammar-exercises.html>

FOR TEACHING AND LEARNING ONLY

## Urdu Compulsory:

### Recommended Key Textbook:

بہ طورِ درسی کتاب: ماڈل درسی کتاب، اردو، جماعت دہم کے لیے، قومی نصاب ۲۳-۲۰۲۲ء کے مطابق، نیشنل بک فاؤنڈیشن بہ طور وفاق ٹیکسٹ بک بورڈ، اسلام آباد

### Reference Books:

- اصنافِ ادب، رفیع الدین ہاشمی
- اردو قواعد و انشاء، برائے نهم، دہم، پنجاب کریکولم اینڈ ٹیکسٹ بک بورڈ، لاہور
- اردو ادب کی مختصر تاریخ، ڈاکٹر انور سدید، مقتدرہ قومی زبان، اسلام آباد
- تذکرے اور تبصرے، سراج الاسلام
- بچوں کے رسائل (نونہال / جگنو / تعلیم و تربیت وغیرہ)
- مختلف روزنامہ اخبارات (جنگ / ایکسپریس / نوائے وقت وغیرہ)
- فیروز اللغات اردو، مولوی فیروز الدین، فیروز سنز، لاہور / کراچی / پشاور
- فرہنگ تلفظ، شان الحق حقی، مقتدرہ قومی زبان، اسلام آباد
- اردو مترادفات (تھیسارس)، احسان دانش

### Websites:

[https://genrica.com/books\\_download.aspx?titleID=245&metaID=0&volumes=0](https://genrica.com/books_download.aspx?titleID=245&metaID=0&volumes=0)

(اصنافِ ادب، رفیع الدین ہاشمی، سنگ میل پبلیکیشنز)

[https://www.taleem360.com/9th-and-10th-class-urdu-qawaid-o-insha-text-book-by-punjab-board-vfq#google\\_vignette](https://www.taleem360.com/9th-and-10th-class-urdu-qawaid-o-insha-text-book-by-punjab-board-vfq#google_vignette)

(اردو قواعد و انشاء برائے نهم و دہم، پنجاب کریکولم اینڈ ٹیکسٹ بک بورڈ، لاہور)

<https://xn--mgbqf7g.com/>

(اردو گاہ۔ روزمرہ، محاورات، کہاوتیں وغیرہ)

<https://www.youtube.com/watch?v=i3JNHsP5Ly0>

(قافیہ، ردیف، مطلع و مقطع)

[Ilm e Bayan Ki Tareef | Urdu Notes | علم بیان کی تعریف](http://ilm-e-Bayan-Ki-Tareef-Urdu-Notes)

(علم بیان)

<https://urdunotes.com/lesson/ilm-e-badee-in-urdu/>

(علم بدیع)

[https://archive.org/details/20200302\\_20200302\\_1133](https://archive.org/details/20200302_20200302_1133)

(البدیع، عابد علی عابد، مجلس ترقی ادب، لاہور)

<https://www.bbc.com/urdu>

(بی بی سی۔ اردو، برائے سمعی و خوانی مہارت)

<https://jang.com.pk>

(جنگ، برائے سمعی و خوانی مہارت)

<https://www.express.com.pk/>

(ایکسپریس، برائے سمعی و خوانی مہارت)

<https://www.humsub.com.pk>

(ہم سب، برائے سمعی و خوانی مہارت)

[https://archive.org/details/pdf\\_20191115/mode/1up](https://archive.org/details/pdf_20191115/mode/1up)

(اردو ادب کی مختصر ترین تاریخ، ڈاکٹر سلیم اختر)

<https://udb.gov.pk/>

(اردو لغت (تاریخی اصول پر)، اردو لغت بورڈ)

<https://archive.org/details/TOOBAA-urdu-mutaradifat-ehsan-danish>

(اردو مترادفات (تھیسارس)، احسان دانش)

[https://archive.org/details/1\\_20210926\\_202109/page/n3/mode/1up](https://archive.org/details/1_20210926_202109/page/n3/mode/1up)

(تقریر نویسی)

[https://nazarurdu.blogspot.com/2019/02/blog-post\\_16.html?m=1#google\\_vignette](https://nazarurdu.blogspot.com/2019/02/blog-post_16.html?m=1#google_vignette)

<https://www.scribd.com/doc/61865121/%D8%A7%D8%B1%D8%AF%D9%88-%D9%85%D8%B6%D8%A7%D9%85%DB%8C%D9%86>

(مضمون نویسی)

<https://professorofurdu.com/%D8%A2%D9%BE-%D8%A8%DB%8C%D8%AA%DB%8C-%DA%A9%DB%92-%D8%B9%D9%86%D8%A7%D8%B5%D8%B1/>

(آپ بیتی)

<https://www.youtube.com/watch?v=0un9-YVDJ1M>

(خط نویسی)

[https://www.youtube.com/watch?v=\\_PBK2Rpn4k](https://www.youtube.com/watch?v=_PBK2Rpn4k)

(درخواست نویسی)

<https://archive.org/details/texts>

(آرکائیو، برائے مطالعہ، برقی کتب، خوانی مہارت)

## **Mathematics:**

### **Recommended Key Textbooks:**

*Mathematics Grade 9.* Punjab Curriculum and Textbook Board, Lahore

*Mathematics Grade 10.* Punjab Curriculum and Textbook Board, Lahore

*The Textbook of Mathematics for Class 9.* Sindh Textbook Board (Test Edition- 2022)

*The Textbook of Mathematics for Class 10.* Sindh Textbook Board (Test Edition- 2022)

### **Reference Books:**

*Model Textbook of Mathematics Science Group Grade 9.* National Book Foundation as Federal Textbook Board, Islamabad (Based on National Curriculum of Pakistan 2022-23)

*Model Textbook of Mathematics Science Group Grade 10.* National Book Foundation as Federal Textbook Board, Islamabad (Based on National Curriculum of Pakistan 2022-23)

Yeo, J., Seng, T., Yee, L., Chow, I., Meng, N. and Liew, J. (7<sup>th</sup> Edition). *Oxford New Syllabus Mathematics Book 1.* **Oxford University Press.**

Yeo, J., Seng, T., Yee, L., Chow, I., Meng, N. and Liew, J. (7<sup>th</sup> Edition). *Oxford New Syllabus Mathematics Book 2.* **Oxford University Press.**

Yeo, J., Seng, T., Yee, L., Chow, I., Meng, N. and Liew, J. (7<sup>th</sup> Edition). *Oxford New Syllabus Mathematics Book 3.* **Oxford University Press.**

Yeo, J., Seng, T., Yee, L., Chow, I., Meng, N. and Liew, J. (7<sup>th</sup> Edition). *Oxford New Syllabus Mathematics Book 4.* **Oxford University Press.**

Sue, P. (3<sup>rd</sup> Edition). *Cambridge IGCSE<sup>TM</sup> and O Level Additional Mathematics Coursebook.* Cambridge University Press.

### **Online Reference Books:**

Rayner, D. (2000). *Extended Mathematics for IGCSE.* **Oxford University Press.**

<https://www.pdfdrive.com/extended-mathematics-for-igcse-e183809326.html>

Tussy, A., Gustafson, R., Koeing, D. (4<sup>th</sup> Edition, 2010). *Basic Mathematics for College Students.* Brooks Cole.

<https://antinifizicari.wordpress.com/wp-content/uploads/2019/08/basic-mathematics-for-college-students-pdfdrive.com-.pdf>

Africk, H. (2021). *Elementary College Geometry* (2021 ed.). City University of New York (CUNY).

[https://academicworks.cuny.edu/cgi/viewcontent.cgi?article=1051&context=ny\\_oers](https://academicworks.cuny.edu/cgi/viewcontent.cgi?article=1051&context=ny_oers)

Stitz, C. and Zeager, J. (2013). *College Trigonometry* Version [π] Corrected Edition. Stitz Zeager Open Source Mathematics.

<https://www.stitzzeager.com/szct07042013.pdf>

Kruglak, H., Moore, J. and Mata-Toledp, R. (2<sup>nd</sup> Edition, 1998). *SCHAUM'S OUTLINE OF THEORY AND PROBLEMS OF BASIC MATHEMATICS* with Applications to Science and Technology. McGraw-Hill.

<https://brawijaya12.wordpress.com/wp-content/uploads/2011/08/schaums-outline-theory-and-problems-of-basic-mathematics-with-applications-to-science-and-technology-2nd-ed-kruglak-moore-mata-toledo-1998-mcgraw-hill.pdf>

## SCIENCES GROUP

### Biology:

#### **Recommended Key Textbooks:**

*Model Textbook of Biology for Grade 9.* Cantab Publisher (Based on National Curriculum of Pakistan 2022-23)

*The Textbook of Biology For Class 10.* Sindh Textbook Board, Jamshoro

*Textbook of Biology Grade 10.* National Book Foundation, Islamabad (Based on National Curriculum of Pakistan 2022-23)

*Biology 10.* Punjab Curriculum and Textbook Board, PLD Publishers, Lahore

#### **Reference Books:**

Lam Pang Kwan and Eric YK Lam. *Biology A course for O Level.* Singapore Federal Publication

D. G. Mackean, and Dave, Hayward. *Cambridge IGCSE Biology (4<sup>th</sup> Edition).* HODDER EDUCATION (UK)

Ron, Pickering. *Cambridge IGCSE® & O Level Complete Biology Fourth Edition.* Oxford University Press.

Raven, Johnson, Kenneth A. Mason, Jonathan B. Losos, and Tod Duncan.

*Biology (13th International Student Edition).* McGraw Hill Publisher.

#### **Websites:**

<https://www.youtube.com/watch?v=HbqPbg5pVE0> (How to Calculate, Mean, Median, and Mode ( Measures of Central Tendency)

<https://mathmonks.com/worksheets/mean-median-mode-range-worksheets>

[https://www.youtube.com/watch?v=e6N9\\_RhD10Q](https://www.youtube.com/watch?v=e6N9_RhD10Q) (The Cell Cycle)

<https://www.youtube.com/watch?v=NR9zTvMg-pE> (What are Haploid and Diploid Cells?)

<https://www.youtube.com/watch?v=cqkedbGv4cA> (Mitosis 3D animation)

<https://www.youtube.com/watch?v=kQu6Yfrr6j0> (Meiosis - YouTube)

<https://www.youtube.com/watch?v=CShAIAD-ask> (How Your Kidneys Work)

[https://www.youtube.com/watch?v=9\\_h0ZXx1IFw](https://www.youtube.com/watch?v=9_h0ZXx1IFw) (Formation of Urine - Nephron Function, Animation.)

[https://www.youtube.com/watch?v=\\_iqqEDAIGWg](https://www.youtube.com/watch?v=_iqqEDAIGWg) (Extracorporeal Shock Wave Lithotripsy (ESWL))

<https://www.youtube.com/watch?v=bn4m1VO2OzQ> (Hemodialysis)

<https://www.youtube.com/watch?v=cUGuWh2UeMk> (Neurons or nerve cells - Structure function and types of neurons)

<https://www.webmd.com/diabetes/endocrine-system-facts>

<https://www.mayoclinic.org/diseases-conditions/epilepsy/symptoms-causes/syc-20350093>

<https://my.clevelandclinic.org/health/diseases/15345-paralysis>

<https://james-mccormack.com/advice-centre/tendon-vs-ligament/>

<https://microbenotes.com/bone-vs-cartilage/>

[https://www.notesonzoology.com/rabbit/reproductive-system/reproductive-system-of-rabbit-with-diagram-chordata-zoology/7728#google\\_vignette](https://www.notesonzoology.com/rabbit/reproductive-system/reproductive-system-of-rabbit-with-diagram-chordata-zoology/7728#google_vignette)

<https://teachmephysiology.com/reproductive-system/embryology/gametogenesis/>

<https://www.practo.com/health-wiki/acquired-immune-deficiency-syndrome-aids-causes-complications-and-treatment/45/article>

<https://ib.bioninja.com.au/dna-structure/>

<https://ib.bioninja.com.au/standard-level/topic-4-genetics/43-theoretical-genetics.html>

<https://www.bbc.co.uk/bitesize/guides/zct7mnb/revision/2>

<https://www.bbc.co.uk/bitesize/guides/zcqbdxs/revision/10>

<https://www.onlinebiologynotes.com/bioremediation-concept-types-advantages-and-limitations/>

<https://www.youtube.com/watch?v=HdroY9UOG9k> (GCSE Biology - What is Antibiotic Resistance?)

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## **Chemistry:**

### **Recommended Key Textbook:**

*Chemistry for Grade 10*, National Book Foundation, Islamabad (Based on National Curriculum of Pakistan 2022-2023)

### **Reference Books:**

*Chemistry 10*, Caravan Book House, Lahore.

*Chemistry for Class X* Sindh Textbook Board, Jamshoro.

*Chemistry for Class XII*, Sindh Textbook Board, Jamshoro.

*Chemistry for Class 10*, Punjab Textbook Board, Lahore.

*Chemistry for Class 11*. Punjab Textbook Board, Lahore.

*Chemistry for Grade 12*, National Book Foundation, Islamabad.

Tan Yin Toon, Chen Ling Kwong, John Sadler and Emily Clare, *Chemistry Matters G.C.E. 'O' level*, Marshall Cavendish Education.

Christopher N. Prescott, *Chemistry, A Course for 'O' Level*, Marshall Cavendish Education.

Rose Marie Gallagher and Paul Ingram, *Complete Chemistry*, Oxford University Press.

Dr Rex M. Heyworth and J. G. R. Briggs, *All About Chemistry 'O' Level*, Hodder Education Singapore.

### **Websites:**

<https://www.usetute.com.au/index.html>

<https://www.chemguide.co.uk>

<https://www.bbc.co.uk/bitesize/subjects/znxyrd>

<https://phet.colorado.edu/>

<https://www.britannica.com/browse/Chemistry>

<https://chem.libretexts.org/Bookshelves>



## **Physics:**

### **Recommended Key Textbook:**

Punjab Textbook Board (2012). *Physics 10*. Lahore: Punjab Textbook Board.

### **Reference Books:**

John Avison, (Rev Edition). *The World of Physics*. Nelson.

Abbot, A. F. (1989). *Physics*. India: Heinemann Educational Publishers.

PHYSICS a course of O Level, Second Edition, Charles Chew, Leong See Cheng, Chow Siew Foong

Duncan, Tom and Kennett, Heather. South Asia Edition, *Cambridge IGCSE Physics*, (3'd Ed). Hodder Edition.

Physics X, Malik Sirajuddin and Sons, Lahore, 2013.

Sindh Textbook Board (2021). *A Textbook of Physics for Classes X*. Jamshoro: Sindh Textbook Board.

### **Websites:**

<http://phet.colorado.edu/>

<http://www.123physics.com>

<http://www.physicsclassroom.com/class>

<https://asana.com/resources/accuracy-vs-precision>

<https://www.britannica.com/science/scientific-method>

<https://ebooks.stbb.edu.pk/english/class-ix?sfnsn=scwspwa>

<https://scied.ucar.edu/learning-zone/earth-system/electromagnetic-spectrum>

<https://manoa.hawaii.edu/exploringourfluidearth/physical/world-ocean/map-distortion/practices-science-precision-vs-accuracy>

<https://steemit.com/steemstem/@shehzad/basics-of-production-transmission-and-reception-of-electromagnetic-waves-radio-waves>