DIVISIONAL PUBLIC SCHOOL & INTERMEDIATE COLLEGE, LAHORE
Summer Vacation Homework
CLASS – O-I
SESSION 2019-20

ENGLISH

1. Solve the past papers of English from 2015 to 2017
2. Read the following books to write a review on each book.
   i. Rich Dad Poor Dad by Robert T. Kiyosaki
   ii. Seven Habits of Highly Effective People by Stephan R. Covey
   iii. Treasure Island by Robert Louis Stevenson
   iv. How to Think and Grow Rich by Napoleon Hill
3. Write a page daily on the activities you do in a day. The activity will enhance your observation and writing skill at the same time.

MATHEMATICS

Solve the following exercises and questions on the note books.
  ➢ Book 2 (7th Edition) Chapter no. 3, 7 and review exercises.
  ➢ Book 3 (7th Edition) Chapter no. 1,2,3,4 and review exercises.
Solve the relevant questions from past papers

PHYSICS

❖ Solve all the Structured Questions, ATP Questions and Multiple Choice Questions from the year (2010-2018) from the past papers of C.I.E of Unit1 to 9.
❖ Do research work on the effects of increase in temperature on the environment and the human body. Make an abstract, evaluate and analysis your findings. Prepare Power Point Presentations of about 20 slides to explain your research work.
❖ Make an innovative poster related to the topic "Energy Conversions"
❖ Explore the following websites
http://www.wikihow.com/Use-a-Vernier-Caliper
hyperphysics.phy-astr.gsu.edu/hbase/press.html
hyperphysics.phy-astr.gsu.edu/hbase/.../temper.h...
❖ Consult the following books
Explaining Physics by Stephen Popple
Physics by A.F.Abbot
O-Level Classified Physics by Aline Chew

BIOLOGY

Solve all the questions [self-assessment & past papers] at the end of following chapters:
- Cell structure and organization
- Diffusion and osmosis
- Enzymes
- Plant Nutrition
- Animal Nutrition
- Transport in Flowering Plants
- Respiration
- Transport in Man
- Support Movement and Locomotion.

Learn key points and practice to draw following diagrams:
- A plant cell in a solution of low water potential
- Internal structure of heart
- Open and close stomata
- Internal structure of a Molar Tooth
  Prepare Posters on following topics:

Coronary Heart Diseases, Balanced Diet, Respiratory Disorders, Dental care

ISLAMIYAT

1. Read the passages with explanation from themes "Allah's
2. Relationship with Created World and Allah's Messengers"
3. From Section One and learn reference verses of these themes.
4. Read Chapter no.2 from Section Three "Life and Importance of Muhammad (P.B.U.H)", make comprehensive notes on all the battles fought in Madina and learn reference verses of these battles .
5. Read Chapter no.4 from Section Four "The First Islamic Community" and make comprehensive notes about the life of Ten Blessed Companions.
6. Read the book "*Muhammad His Life based on the Earliest Sources"* by Martin Lings (Abu Bakr Siraj Ad Din).

CHEMISTRY

Solve all the MCQs and structured questions of following topics from O-Level chemistry by Christopher N-Prescott
1- Electricity and chemistry
2- The redox reactions
3- The periodic table
4- Acids, bases and salts
Solve past paper questions related to above topics from (2013-17).
Explore the websites for related topics to get more knowledge and information.
Suggested Books
 (i) Fundamental chemistry for O- Level by Rose Marie Gullagher and Paul Ingram endorsed by University of Cambridge International examination.
(ii) GCSE Chemistry by Hunt and Skyes.
(iii) Pacific O level guide by Peter Black Burn
(iv) Direct approach towards O level chemistry by Imran Masood.
(v) GCSE Chemistry by Earl and Wilford.

HISTORY

Prepare and learn assignments on the following topics
1. Luck now pact 1916
2. The Rowlett Act 1919
3. Amritsar Massacre 1919
4. The Montague Chelmsford Reforms 1919
5. The Khilafat Movement 1919
6. Read and learn all topics from 1927 to 1947
7. Prepare an assignment on the topic of 'The achievements of Quaid-e-As am as a Governor General of Pakistan'
Suggested Readings
1. Who is who & what is what By Ehsan Ullah Saqib
2. The Emergence of Pakistan by Ch. Muhammad Ali
3. Jinnah of Pakistan by Stanely wolpert

GEOGRAPHY

Q: 1 Draw and locate following on the map of Pakistan.
=> The Tropic of Cancer, Latitudes 30° N, 36° N, Longitudes64° E, 70° E and 76° E
=> Cities: Islamabad, Murre, Rawalpindi, Gujranwala, Lahore, Faisalabad, Multan, Sialkot, Peshawar, Chitral, Gilgit,Hyderabad, Karachi, Quetta and Gawadar.

Q.2. Temperature is the key factor to determine the climate. Make a sheet of daily (maximum and minimum) temperature of Lahore.

Q:3. What two hazards are associated with rain? Explain. Make a sheet of rainfall events during monsoon

Q. 4. Which type of forests are found in Pakistan? Why mangrove forests are important for Pakistan?

Q.5. Deforestation is becoming a disaster for Pakistan, what are the main causes of deforestation and how sustainable forestry can help to overcome deforestation?

Q.6. what are the differences between metallic and non metallic minerals? What are the methods of mining?

Q. 7. Describe the traditional fishing methods and give examples of the types or species of fish which are caught. Describe the developments which have taken place during recent years in both fishing methods and the range of fishing operations.

Q. 8- Write the names of Rabi and Khareef crops grown in Pakistan and make chart showing all human inputs and natural / geographical inputs for different crops of both type.

COMPUTER SCIENCE

Chapter 1
- What do you know about memory dumps and hypertext markup language (HTML)?
- Shortly explain media access control (MAC) and Internet protocol address (IP address).
- What do you know about Web Address?
- Solve the activities 1.1, 1.2, 1.4, 1.5, 1.6, 1.7 and 1.9.

Chapter 2
- Shortly explain simplex, half duplex and full duplex.
- What do you know about parallel and serial transmission?
- What is meant by universal Bus (USB)?
- Shortly explain parity checking, automatic repeat request (ARQ), and checksum.
- What are echo check, ISP and web browsers?

Chapter 3
- Draw the circuit diagrams and truth tables of AND, OR, NOT, NAND, NOR, XOR gates.
- Solve the examples given in chapter 3.
- Solve the activities 3.2, 3.3, 3.4, 3.5, 3.6 and 3.7.

Chapter 4
- Write down the functions of operating systems.
- What do you know about interrupts and buffers?
- What are system buses? Explain its different types with examples.
- What do you know about Fetch – Execute cycle?

Write down the names of famous operating system being used in the world

Chapter 5
- What do you know about 2D and 3D scanners?
- Shortly explain the working of computer topographic (CT) scanner.
- What do you know about barcodes and quick response (QR) codes?
- Shortly explain digital camera and microphone.
- Write down the advantages and disadvantages of different touch screens.
- Write down the examples of usages of different sensors in our life.
- What do you know about monitoring and control systems?
- Write down the features of inkjet and laser printers.
- Shortly explain the 3D printers.
- What do you know about 2D and 3D cutters?
- Write down the features of LCD, LED and OLEDs.

Chapter 6
- Shortly explain lossy and lossless compression with examples.
- Write down the differences between RAM and ROM.
- Write down the features of hard disc (HD) and solid state drives (SSD).
- Shortly explain how CD, DVD and Blue Ray are different.
- Write down the advantages and disadvantages of USB flash memories.

اردو

۳: امجد اسلام امجد اور علامہ اقبال کے کلام کی خصوصیات تحریر کیجیے۔

۴: تفہیم عبارت ۔ دس پیراگراف کی تفہیم کیجیے۔

۵: محاورات ۔ پچاس محاورات کو جملوں میں استعمال کیجیے۔

۶: تنقیدی جائزہ ۔ دس اقتباسات کا تنقیدی جائزہ تحریر کیجیے۔

۷: مضامین
- ☆ ایک یادگار سفر
- ☆ شہری اور دیہاتی زندگی کے مسائل
- ☆ ملکی ترقی میں نوجوانوں کا کردار
- ☆ فاسٹ فوڈ کے نقصانات
- ☆ فیشن
- ☆ پیسے

کتب برائے مطالعہ:
- ☆ ابن الوقت (ڈپٹی نذیر احمد)
- ☆ شہاب نامہ (قدرت اللہ شہاب)
- ☆ بانگِ درا (علامہ اقبال)