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

ENGLISH

1- Read 'The Alchemist' by Paulo Coehlo and write its summary
2- Read descriptive and narrative essays from Upper Secondary Essays.
3- Write at least five of your personal experiences in summer holidays.
4- Write five stories   (300 – 400 words)
5- Write five informal letters.
   Read articles from English newspapers and note useful vocabulary to establish your World Bank.

MATHEMATICS

Practice the following topics from last six years past papers.
i.   Gradient of a straight line.
ii. Graphs of linear equations in the form of $ax + by + c = 0$
iii. Solving simultaneous linear equations using Graphical method and Algebraic method.
iv. Factorization of Algebraic expressions.
 Expansion

COMPUTER

- Explain the following number systems with examples:
  ➢ Binary Number System
  ➢ Octal Number System
  ➢ Denary Number System
  ➢ Hexa Decimal Number System
- Define the following terms:
  ➢ Bit
  ➢ Byte
  ➢ KB, MB,GB, TB
- How would you measure the size of the computer memory?
- What do you know about memory dumps?
- Explain hypertext markup language (HTML).
- Shortly explain media access control (MAC)
- What is Internet protocol address (IP address)?
- What is URL?
- 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.
1- Define data.
2- Define information.
3- What is meant by data transmission? Explain.
4- Shortly explain simplex, half duplex and full duplex.
5- What do you know about parallel and serial transmission?
6- What is meant by universal Bus (USB)?
7- Shortly explain the followings:
  ➢ Parity checking
  ➢ Automatic repeat request (ARQ)
  ➢ Checksum.
8- What is echo check?
9- Define ISP
10- Explain Web browser.

HISTORY

The following topics are included in the home work .students are advised to write all the assignments related to topics and also learn them by heart.
1: Reasons of the decline of Mughal Empire
2: shah walliullah complete
3:Sayed Ahmad shaheed brailvi ,jehad movement etc
4 : Haji Shariatullah ,MOHSIN UD DIN.Titu Mir
5: East india company, Bengal,battle of Plassey,
6: British annexation of Punjab and Sindh, war of independence of 1857 (Reasons, Events, Failure reasons)

BIOLOGY

Solve all the questions [self-assessment & past papers] at the end of following chapters:
- Cell structure and organization
- Diffusion and osmosis
- Enzymes

Learn key points and practice to draw following diagrams:
- A typical animal cell
- A typical plant cell
- Red blood cell
- White blood cell
- Root hair cell

CHEMISTRY

1- Solve all the MCQs and structured questions of following topics from O- Level chemistry by Christopher N-Prescott
- The structure of atom
- Elements, compounds and mixture
- Bonding and structure
- Chemical formulae and equations
2- Solve past paper questions related to above topics from (2014-17).
Explore the websites for related topics to get more knowledge and information.

3-   Suggested Books
✓ Fundamental chemistry for O- Level by Rose Marie Gullagher and Paul Ingram endorsed by University of Cambridge International examination
✓ GCSE Chemistry by Earl and Wilford.
✓ GCSE Chemistry by Ramsden.
✓ Pacific O level guide by Peter Black Burn
4- How to reduce billions of tons of trash that is escalating day by day? Give your suggestions.
5- Suggest pragmatic ideas to overcome the frightening issue of global warming.

ISLAMIYAT

Read Chapter no.2 "History and Importance of Hadith" and make comprehensive notes on all topics.
Read Chapter no.3 "The Period of Rule of the Rightly Guided Caliphs and their Importance as Leaders" and make comprehensive notes about the life, main events, battles and administration of the following:
 (i) Hazrat Abu Bakr (R.A)   (ii) Hazrat Umer (R.A)
(iii) Hazrat Usman (R.A)   (iv) Hazrat Ali (R.A)

GEOGRAPHY

✓ Draw and locate following tropic and cities.
   Tropic of cancer, tropic of Capricorn, latitudes 30 N , 36 N, longitudes 64E 70 E and 76E Lahore , Gujranwala , Rawalpindi, Murree, Islamabad, Faisalabad, Multan, Quetta , Karachi, Peshawar
✓ Temperature is key factor to determine the climate make a sheet a daily temperature of Lahore.
✓ What two hazards are associated with rain? Make a sheet of rain fall during monsoon.
✓ Describe the characteristics of the winter climate of the northern mountains?
✓ Describe the characteristics of the summer climate of the Thar Desert.
✓ Which three types of rain are experienced in Pakistan Explain?
✓ Why do many rivers in Pakistan flood in July?

۱۔   نثر: درج ذیل مضامین ۔افسانے پڑھیئے اور پہلے مضمون پر تنقیدی نوٹ لکھئے ۔

اسوہ حسنہ صلی اللہ علیہ وآلہ وسلم، میبل اور میں، کنڈکٹر، ایک تھی فاختہ

۲۔   نظمیں: درج ذیل نظموں کا مطالعہ کیجئے اور پہلی نظم پر تنقیدی نوٹ تحریر کیجئے ۔

سفر ہو رہا ہے، ایک کمرہ امتحان

۳۔   غزلیں: میر تقی میر اور ناصر کاظمی کی غزلیات پڑھئے اور میر کی پہلی غزل پر نوٹ لکھئے ۔

۴۔   املاء: روزانہ دس الفاظ کی املا اور خوشخطی کیجئے ۔

۵۔   تخلیقی کام :   پانچ تفہیم عبارت، پانچ اقتباسات کا تنقیدی جائزہ، پانچ مضامین (تفصیل) اور پانچ

مضامین (بیان) تحریر کیجئے ۔

۶۔   مطالعہ: مضامین پطرس (احمد شاہ پطرس بخاری)، بانگِ درا (علامہ اقبال)، کلیات ناصر کاظمی (ناصر کاظمی)

PHYSICS

- ❖ Solve all the Structured Questions, Multiple Choice Questions from the years (2012-2018) from the past papers of C.I.E of Unit1 and 4.
- ❖ Physics Project: Develop and perform an experiment to measure the dimensions, mass, weight and volume of your Physics Text Book. Record your observations your answer should clearly indicate the instruments used, observations recorded, procedure performed and precautions taken.
- ❖ Make an innovative poster related to the topic "Energy Conservation"
- ❖ Explore the websites
  hyperphysics.phy-astr.gsu.edu/hbase/.../temper.h...
  <http://javalab.uoregon.edu/virtuallab/Piston/>
- ❖ Explore the following websites
  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