



BAHRIA COLLEGE KARSAZ

SUMMER VACATIONS HOMEWORK – 2019

FOR CLASS XII (FEDERAL & KARACHI BOARD)

ENGLISH

- Write **FIVE** Essays on the following topics:
 - * Impact of Media on the Society
 - * Energy Shortage
 - * Necessity of Tolerance
 - * The PSL-Matches 2019
 - * Significance of English Language
- Convert the sentences in Direct and Indirect Narration given in past papers from 2012 to 2015
- Home-work must be submitted in Files with your name, and class tags.

COMPUTER SCIENCE

- 1- Search Why C language is important.
- 2- Make Presentation on variables, constants and data types of C language.
- 3- Type a simple C language program with the help of book.
- 4- Explore the tabs, ribbons and tools of Ms. Access.
- 5- Search any recent topics to prepare projects for Science Exhibition with a complete plan to discuss.

CHEMISTRY

Karachi Board:

- Search Chemistry Project related to topics from the book.

OR

- Make Power point Presentation on any topic from Chapter # 10 or 11.

Federal Board:

- Search Chemistry Project related to topics from the book.

OR

- Make Power point Presentation on any topic from Chapter # 21, 22 or 23.

MATHEMATICS

Karachi Board:

Book: Mathematics for XI (Sindh Text Book Board Jamshoro)

Ex#3.8 (Q1, Q3, Q5, Q11), Ex#4.4 (Q2 ii, iii, Q5 vi, vii, viii), Ex #6.2 (Q4, Q5, Q6, Q16, Q17), Ex#6.3 (Q9, Q10, Q11), Ex#13.1 (Q10, Q12, Q13, Q14), Ex#13.2 (Q5, Q7, Q9, Q15)

Federal Board:

Book: Calculus and Analytic Geometry Mathematics 12 (Punjab Curriculum and Textbook Board, Lahore)

Note: Make a proper file and use line sheets to do the following.

- Graph the functions given in **Exercise # 1.1** Q4 (i, ii, iii, iv, viii)
- Describe all cases of Partial Fractions and resolve the rational functions into Partial Fractions given in **Exercise # 3.5** (1, 2, 5, 8, 10, 11, 14, 16, 18, 21, 22, 24, 26, 29, & 30)
- Enlist all the trigonometric formulae. Show that:

$$\text{a. } \frac{1 - \cos x}{\sin^2 x} = \frac{1}{1 + \cos x}; \quad \text{b. } \frac{1 - \sin x}{\cos x} = \frac{\cos x}{1 + \sin x}; \quad \text{c. } \frac{\tan \theta - \sin \theta}{\sin^3 \theta} = \frac{1}{\cos \theta (1 + \cos \theta)}$$

iv. Express the product $\cos 3x \sin 2x$ as sum or difference.

v. Prove the following identities, state the domain of θ in each case:

$$\text{a. } \tan \theta + \cot \theta = \operatorname{cosec} \theta \sec \theta \quad \text{b. } \sin^6 \theta + \cos^6 \theta = 1 - 3 \sin^3 \theta \cos^3 \theta$$

PHYSICS

Students can work in pairs on any of the following topics for making models/projects/research work. Only biodegradable material will be used if possible.

Topics :

- Alternative Energy,
- Communication,
- Universe,
- Robotics,
- New Car Tyre Nanogenerators Can Convert Road Friction Into Useable Energy
- Magnets and their basic properties of attraction and repulsion to create a levitating setup.
- Light & Charge system, at the carmaker's plant

PAKISTAN STUDIES

- * Collect information and basic data of any 5 largest countries and 5 smallest countries of the world
 - * Collect at least 30 main headlines (on current news) from any Newspaper (Urdu, English or any Regional Language).
 - * Prepare multimedia presentation on any one of the following topics:
 - (i) Pakistani Cultural heritage_ an attractive destination for tourism.
 - (ii) Growing population in Pakistan and its harmful effect.
 - (iii) Importance of Pakistan's location in South Asia (with map illustration)
 - (iv) Development and destruction of Mohen Jo Daro.
 - (v) Maritime
- (All given work must be submitted in typed form)

BIOLOGY

- Q1. Design a project on novelties in biotechnology with requirements, methodology and applications.
- Q2. Draw and practice the diagrams of the following systems
- i. Excretory system
 - ii. Nervous system
 - iii. Reproductive systems of human male and female
 - iv. Stages of chick development
- Q3. Practice the life cycle of angiosperm plants.
- Q4. Suggest some innovative methods for the conservation of the environment also illustrate how pollution impacts the well being of our environment.
- Q5. Find out some Islamic views with regard to Evolution.
- Q6. Make a power point presentation on: Why is cancer regarded as a result of uncontrolled cell division? Highlight treatment methods and environmental aspects that promote cancer growth.

COMMERCE

- Q1. Open your Young Savers bank account in any of the nearest branch of Bank Al Habib and list the procedure involved.
- Q2. Collect and bring the documents relevant to bank transactions.
- Q3. Draw a map of Pakistan and locate the following:
*Dams *Barrage *Physical Regions
- Q4. Draw a map of World and locate the following:
* Continents * Oceans *Poles
- Q5. Google the Financial Statements of any THREE Multinational Companies (Income Statement and Balance Sheet) and analyze the trends of financial performance and position over the years.

URDU

- نصابی کتاب کی روشنی میں سیرتِ محمدؐ کی جامعیت پر مختصر نوٹ تحریر کیجیے۔ *
- ادبی اصطلاحات تشبیہ، استعارہ، مطلع، مقطع، تلمیح کو امثال کی ساتھ خوش خط تحریر کیجیے۔ *
- ناول، افسانہ، داستان کی تعریف بیان کیجیے۔ *
- اردو ادب کے پہلے افسانہ نگار سجاد حیدر یلدرم کی کوئی پانچ خصوصیات تحریر کیجیے۔ *
- کس ادبی شخصیت نے خطوط نویسی کے حوالے سے مراسلہ کو مکالمہ بنادیا چند سطریں تحریر کیجیے۔ *
- اپنے پسندیدہ شاعر کی کوئی غزل خوش خط تحریر کر کے لایے۔ *
- مقطع اور تلمیح پر مشتمل پانچ پانچ اشعار خوش خط تحریر کیجیے۔ *
- ماحولیاتی آلودگی کے منفی اثرات پر مختصراً خیالات کا اظہار کیجیے۔ *
- اپنے چھوٹے بھائی کے نام خط لکھیں جس میں اُسے وقت کی پابندی سے آگاہ کیا گیا ہو۔ *