



VIKAS BHARTI SCHOOL, GORAKHPUR

HOME ASSIGNMENTS FOR SUMMER VACATION - 2023

FORM-Sc (Science)

English Language:

Write a composition (400-450 words) on each of the following subjects:

1. Narrate an experience when you took on a responsibility in your school that you usually would not and were pleasantly surprised at the outcome.
2. Time

English Literature:

1. Write a note on the **comic elements** of the play *The Tempest*.

Physics:

1. Prepare an impressive project on any one topic as per ISC guidelines & syllabus (25-30 pages).
2. Read all questions & solved examples of text book up to taught portion and put tick if understood or cross if not understood.

Chemistry:

Execute *any one* project (*At least 45 – 50 pages*) creatively. Following is the list of projects:

- i. Chemistry of Vitamins and Hormone.
- ii. Natural polymers (Structure, characteristics and uses).
- iii. Synthetic polymers (Method of preparation, structure, characteristics and uses).
- iv. Types of Dyes (Methods of preparation, characteristics and uses).
- v. Chemical in medicines.
- vi. Chemicals and chemical processes in forensic studies.
- vii. Insecticides, pesticides and chemical fertilizers.
- viii. Organic Chemistry in Nutrition, Food Science and Biotechnology.
- ix. Effect of Chemical fertilizers on Environment.
- x. Food Adulteration.
- xi. Extraction of metals (Such as *Copper, Aluminium, Silver, Gold, Zinc and Iron*)

Note: Evaluation criteria for Project Work:

Introduction/purpose
• Contents
• Analysis/ material aid (<i>graph, data, structure, pie charts, histograms, diagrams, etc.</i>)
• Presentation
• Bibliography

Biology:

Make a well organized project on any one of the following topic

1. Genetic disorders
2. Gene therapy
3. Human Genome Project
4. DNA Fingerprinting
5. Cancer
6. AIDS

7. Mendelian Inheritance
8. Drug addiction and Community
9. Role of micro-organism in industry
10. Recombinant DNA Technology

Mathematics:

1. Do 30 MCQ questions on principal values of inverse trigo functions.
2. Prepare a project on vital application of matrices and determinants in the field of science and technology

Hindi:

1. प्राकृतिक पर्यावरण व वन्य जीवों के प्रति हमारा क्या दायित्व होना चाहिए ? अपने भावों को पूर्ण अभिव्यक्ति दीजिए।
2. अपने माता-पिता व गुरुजनों को किस प्रकार खुश किया जा सकता है? उनके प्रति हमारा क्या दायित्व होना चाहिए?
3. कोई एक मौलिक कहानी लिखिए। जिससे कोई सीख मिलती हो।
4. गौरी का जीवन परिचय विस्तार से लिखिए।
5. भक्तिन पाठ का सारांश अपने शब्दों में लिखिए।
6. मल्लिका एक आदर्श प्रेमिका है, जिसका त्याग सराहनीय है। सिद्ध कीजिए। "
7. "सारा आकाश की कहानी मध्यवर्गीय परिवारों की अभावों व समस्याओं की एक गाथा है"। स्पष्ट कीजिए।
8. किन्हीं दस (10) मुहावरों का अर्थ लिखकर उन्हें वाक्य में प्रयोग कीजिए।
9. किन्हीं दस (10) अशुद्ध वाक्यों को शुद्ध करके लिखिए।
10. एक अच्छे नागरिक में कौन कौन से गुण होने चाहिए ? क्या आपमें वे विशेषताएं हैं ? अपने शब्दों में लिखिए।

Computer Science:

1. Write/type and compile 20 programmes in JAVA.
2. Collect information and make a working module of A.I.

Physical Education:

1. Complete your practical file & make a project on any one game & sports of your interest based on ISC prescribed syllabus.

Environmental Science:

You are recommended to complete one project from the list given below. The project work could take one of the five forms:

- 1: Address a current environmental problem (preferably at local or regional scale) and should include problem identification and analysis, use of secondary data as well as some collection of primary data, design of solution, documentation of the entire process in the form of a solution proposal.
- 2: Conduct a study on the density and population of the plants growing in a particular area using the quadrat method.
- 3: Field work and training in an environmental organization (NGOs, Industrial Pollution Control Firms, Testing Laboratories etc.) for a period of not less than one month. This works should be focused on one area in the syllabus.
- 4: Systematic monitoring of an aspect of the local environment over a period of at least six months.
- 5: Design and conduct an environment impact assessment. The candidates may use secondary data, demonstrate their capacity to collect and analyses primary data by incorporating some primary data collected and use it in a few sectors of their work.



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Principal