



DELHI PUBLIC SCHOOL GAYA

ASSIGNMENT FOR DIWALI VACATION, SESSION 2018–19

CLASS – XII

Instruction: – *Kindly do your assignment work in assignment copies of the subjects.*

ENGLISH CORE

1. As Mukul / Mahima of Alps Public School, write a speech to be delivered in school assembly highlighting the importance of cleanliness suggesting that the state of cleanliness reflects the character of its citizens. (150-200 words)
2. Unrealistic dreams often lead to a great deal of unhappiness. Justify the statement on the basis of the story “Going Places”.
3. Give a detailed account of the preparations made by the Governor for Evans James to write his examination.
4. Give the theme of ‘Aunt Jennifer’s Tigers’. (120 words)

MATHEMATICS

Miscellaneous chapter : 7

CHEMISTRY

1. State Faraday’s First Law of electrolysis. How much charge in term of Faradays is required for the reduction of 1mole of Cu^{2+} to Cu?
2. Define the following term :
 - (a) Limiting molar conductivity
 - (b) Fuel cell
 - (c) Order of a reaction
 - (d) Order of a molecularity
3. In first order reaction takes 30 minutes to 50% completion. Calculate the time required for 90% completion of the reaction.
4. Calculate the rate constant at 400K for the following reaction.
$$2\text{N}_2\text{O}_5 \rightleftharpoons 4\text{NO}_2 + \text{O}_2$$

Arrhenius factor is $4.3 \times 10^{10} \text{ S}^{-1}$ & activation energy is $103.344\text{KJ mol}^{-1}$.

PHYSICS

Practice on paper

(10 derivation+ 40 definitions+ 20 numerical)

Chapter including: current electricity, capacitor and magnetic effect of current.

Reference books: NCERT Book, previous year question bank and class notes book.

BIOLOGY

1. Draw and explain a logistic curve for a population of density (N) at a time (t) whose intrinsic rate of natural increase is (r) and carrying capacity is (k).

2. Why are herbivores considered similar to predators in ecological context? Explain
Differentiate between the following interspecific interactions in a population :-
 - (i) Mutualism and Competition
 - (ii) Commensalism and Ammensalism
3. What is meant by ecological succession? Explain how it occurs.
What properties distinguish a pioneer community from a climax community?
4. Diagrammatically represent a hydrarch succession.

INFORMATICS PRACTICES

1. Prepare a practical file copy and make minimum thirty different MySQL queries based on tables chosen by you. Table details with data types must need to be included in the file. Make the queries based on all types i.e. create, alter, drop, select , update, join, transaction etc. For each query composed the corresponding output must be written alongside in the white page. Apply the functions in few queries also.

[NOTE:Don't make any new file copy; continue with the same file where HTML and java work have been made previously. For each query the appropriate question must be prefixed.]
2. Project File:

Students in group of 2-3 are required to work collaboratively to develop a project using database and programming skills learnt during the entire course. The project should be an application in any one of the domains e-governance-learning and e-business with GUI front-end corresponding database at the back-end.

PHYSICAL EDUCATION

1. Prepare project for barrow three items test on 10 students.
2. Administrative senior citizen fitness test on 5 elderly family members.
3. Write a notes on Yoga and Life Style.

-----X-----