

# Summer Holiday Homework 2018-2019

## Class-XII

### ENGLISH

#### English Literature

Q1. Comment on the poem 'The Spider and the Fly' as a fable in verse.

Q2. Critically analyse the concluding Act of 'The Tempest'.

Or

Write a detailed analysis of Act 1V of the play.

#### English Language

Write a composition on the following topic:-

Advancement in Technology has limited creativity. Argue for or against this proposition.

### MATHEMATICS

Book – Gupta and Bansal

( Homework to be done in a separate copy)

- 1) Page – 13.40 ( APPS )
- 2) Page-- 13.41 and 13.42 ( PACE )
- 3) Page – 14.54 and 14.55 ( APPS )
- 4) Page – 15.33 ( APPS )

# CHEMISTRY

A. Write balanced chemical equations for the following name reactions

1. Hunsdieker reaction
2. Finkelstein reaction
3. Iodoform reaction
4. Carbylamine reaction
5. Reimer Tiemer reaction
6. Sandmeyer reaction
7. Dow's process
8. Fittig reaction
9. Wurtz Fittig reaction
10. Friedel Craft alkylation of anisole
11. Benzoylation reaction
12. Williamson Synthesis
13. Diazotisation reaction
14. Hydroboration reaction
15. Rosenmund's reduction
16. Stephen's reduction
17. Clemmensen reduction
18. Wolff Kishner reduction
19. Aldol condensation
20. Cross Aldol Condensation.

B. How will you bring about the following conversions:-

1. Propanol to 1-propoxy propane
2. 2-methyl propene to 2- methyl propanol
3. Propene to propanol
4. Propene to propan-2-ol
5. Ethanal to propan-2-ol
6. Propanone to 2-methyl propan-2-ol
7. Phenol to picric acid
8. Phenol to Salicylic acid
9. Diethyl ether to ethanol
10. Phenol to benzoic acid
11. Benzene to phenol
12. Chlorobenzene to phenol
13. Propan-2-ol to propan-1-ol
14. Ethanal to propanone
15. Propanone to propene.

The above questions are to be solved in separate A4 size sheets and *submitted on 21.06.2018.*

# PHYSICS

Candidates should undertake any one of the following types of projects:

- Theoretical project
- Working Model
- Investigatory project (by performing an experiment under supervision of a teacher)

Candidates are to prepare a technical report formally written including title, abstract, some theoretical discussion, experimental setup, observations with tables of data collected, graph/chart (if any), analysis and discussion of results, deductions, conclusion, etc

No extra credit shall be given for typewritten material/decorative cover, etc. Teachers may assign or students may choose any one project of their choice.

Suggested Evaluation Criteria for Theory Based Projects:

Title of the Project

Introduction

Contents

Analysis/ material aid (graph, data, structure, pie charts, histograms, diagrams, etc.)

Originality of work (the work should be the candidates' original work,)

Conclusion/comments The Project report should be of approximately 15-20 pages.

Suggested Evaluation Criteria for Model Based Projects:

Title of the Project

Model construction

Concise Project report

The Project report should be approximately 5-10 pages

Suggested Evaluation Criteria for Investigative Projects:

Title of the Project

Theory/principle involved

Experimental setup

Observations calculations/deduction and graph work

Result/ Conclusions

The Project report should be of approximately 5-10 pages

***Submission of 1st draft: 21.6.2018***

***Submission of final project : 5.7.2018***

# COMPUTER

## Question1

Write a program to accept any string: Count and print the number of pairs of consecutive letters present in words in the forward direction only. Assume that all the letters in the string are in the same case, consecutive letters in two different words are not counted and 'za' or 'ZA' in any word is not a consecutive pair.

For example:

INPUT:

Enter String: ABSTRACT STRING IS BEING COUNTED EDUCATIONALLY.

OUTPUT:

Pairs of consecutive letter: 3

## Question2

Write a program to input a sentence and print each word in reversed order if any word contains 5 or more characters in it.

## Question3

Write a program to perform binary search on an array using recursion.

## Question4

If  $n$  is a natural number, then  $n$  is said to be a member of a Prime Triplet set if:

- $n, n+2, n+6$  are all prime; or
- $n, n+2, n+4$  are all prime.

For example, 3, 5, 7 are prime triplets.

Write a program to print and count all prime triplet sets within a range defined by the user. Use recursion.

Sample input and output:

Enter the starting position

1

Enter the end position

20

1      3      7  
5      7      11  
7      11     13  
11     13     17  
13     17     19

Total prime triplet combinations are 5

# BIOLOGY & EVS

XII (BIO)	Project topic given to each individual student should be submitted on <b>2<sup>nd</sup> July 2018</b> . + Study for CCE on Evolution.
XII (ENVS)	Project topic given to each individual student should be submitted on <b>14<sup>th</sup> August 2018</b> . + Study for CCE on Sustainable Development.

## **ECONOMICS**

Prepare a project on Civil Aviation Sector in India

Format- 1. Introduction 2. International Scene 3. History of Civil Aviation in India 4. Findings  
5. Low cost carriers 6. Civil Aviation Policy in India 7. Recommendations/ Future Prospects  
8. Conclusion. 9. Bibliography

*Date of submission – 25.06.2018*

## **ACCOUNTANCY**

Preparation of Common Size and Comparative Income Statement and Balance Sheet of two companies by taking into account its audited financial results of two consecutive years. (Needs, benefits, company profile, literature review, conceptual framework, analysis and recommendations, bibliography)

*Date of Submission : 21.06.2018*

## **BUSINESS STUDIES**

Project : Make a Comparative Study of any two E-Business in terms of their nature, size, products and services offered, functioning and policies.

*Date Of Submission :-21-06-2018*

## **COMMERCE**

Visit a Commercial Bank, find out the procedure to open a Savings Account. Students should collect account opening form, documents related there with, different types of commercial bank, functions rendered- primary and ancillary. Details discussed in class.

*Date of Submission : 28.06.2018*

## **PSYCHOLOGY**

Project

To study the causes and effects among students (boys and girls of Class XII)

*Date of Submission: 01.07.2018*

# **PHYSICAL EDUCATION**

Topic - Basketball and Badminton

## ***Date of Submission***

**12.05.2018- Submission of 1st draft**

22.06.2018 - Submission of 2nd draft

29.06.2018 - Submission of Final Project

# **HISTORY**

Topics- Present a life sketch and contributions of any one of the following personalities:

- Nelson Mandela
- Martin Luther
- Mahatma Gandhi
- Adolf Hitler
- Benito Mussolini
- Mao Zedong
- Karl Marx
- Joseph Stalin

Make a draft / structure for the project keeping in mind the total word limit being 2000.

## Structure of the Project

- Background and context
- Explanation of the theme and specific issue of the research question
- Interpretation, Analysis and Critical Evaluation of a range of evidence
- Conclusion
- Bibliography

***Date of Submission: 2<sup>nd</sup> of July 2018***

## **World History**

1. Work out the chronology of the Second World War as explained in class.

# **POLITICAL SCIENCE**

A. Answer the following question:

Discuss briefly the Directive Principles of the Indian Constitution. How are these Principles implemented?

B. Complete & submit the FIRST DRAFT of the Political Science Project on Friday June 22, 2018

## **Project topic**

**Examine one Supreme Court Case dealing with Fundamental Rights. Identify the issues of the case and analyse the final ruling.**

Total word limit: 2000 words.

Structure: as per guidelines given in class.