

Don Bosco Academy, Patna
Holiday Home Work , Std 12 .
Session : 2022- 23

ENGLISH LITERATURE

[This work is to be done neatly in the English Literature and English Language notebook respectively.]

FERDINAND. I do believe it

Against an oracle.

PROSPERO. Then, as my gift, and thine own acquisition worthily purchased, take my daughter.

Sit then and talk with her; she is thine own.

What, Ariel! My industrious servant, Ariel!

Enter ARIEL.

ARIEL. What would my potent master? here I am. PROSPERO. Thou and thy meaner fellows your last service

Did worthily perform; and I must use you

In such another trick. Go bring the rabble,

(O'er whom I give thee pow'r) here to this place. Incite them to quick motion, for I must

Bestow upon the eyes of this young couple Some vanity of mine art. It is my promise, And they expect it from me.

1. What is an oracle? What is it that Ferdinand believes even against an oracle? Answer
2. What was "thine own acquisition, worthily purchased"? How was it purchased? Answer
3. Why was Ariel summoned all of a sudden? Who are the rabbles? What was the rabble asked to do?
4. What is the vanity of Prospero's art? How is it presented?
5. What does Ariel say that Prospero's command will be carried without any delay?
6. Give the meaning of the following words as they are used in the context of the passage
(a) industrious (b) potent

Extract 2:

IRIS. You nymphs, call'd Naiades, of the windring brooks,
With your sedg'd crowns and ever-harmless looks,

Leave your crisp channels, and on this blue land Answer your summons; Juno does command. Come, temperate nymphs, and help to celebrate A contract of true love; be not too late.

Enter certain NYMPHS. You sunburn'd sicklemen, of August weary, Come hither from the furrow and be merry. Make holiday; your rye-straw hats put on, And these fresh nymphs encounter every one In country footing.

1. Who are Naiads? Describe their physical appearance and other qualities. Answer
2. What is meant by 'A contract of true love'? Who has to enter into the contract?

- How has he arranged the contract of true love? What steps did he take to ensure that their love was genuine?
- What does Iris ask the nymphs and the sickle men to do? How can you conclude from the extract that the celebration was grand?
- Who are sickle men? What are they asked to do?
- Give the meaning of the following words as they are used in the context of the passage:
(a) channels (b) weary

Extract 3:

CALIBAN. The dropsy drown this fool! what do you mean
To dote thus on such luggage? Let't alone
And do the murder first. If he awake

From toe to crown he'll fill our skins with pinches, Make us strange stuff.

STEPHANO. Be you quiet, monster. Mistress line, is not this my jerkin? Now is the jerkin under the line. Now, jerkin, you are like to lose your hair, and prove a bald jerkin.

TRINCULO. Do, do; we steal by line and level, and't like your Grace

STEPHANO. I thank thee for that jest; here's a garment for't. Wit shall not go unrewarded while I am king of this country. "Steal by line and level" is an excellent pass of pate; there's another garment for't

- What is meant by "Dropsy drown this fool! "? Why is Caliban annoyed with Trinculo?
- What was the murder plan? If it is done, what would follow?
- What is referred to as a mistress line and as underline? What allusion is there in their usage?
- What is meant by, "Steal by line and level"? Why does Stephano give Trinculo another garment?
- Where did they finally go?
- Give the meaning of the following words as they are used in the context of the passage:
(a) luggage (b) line and level

ENGLISH LANGUAGE

Test Paper 15 of Total English and ISC BOARD PAPER 2022 [SEMESTER-2]

Project Work : Mathematics

Students have to complete **two** projects, one from **Section A** and one from either **Section B** or from **Section C**

Section 'A' Project (Any one)

- Draw the graph of $y = \sin^{-1} x$, using the graph of $y = \sin x$. Demonstrate the concept of mirror line (about $y = x$) and find its domain and range.
- Explain the concepts of increasing and decreasing functions, using geometrical significance of $\frac{dy}{dx}$. Illustrate with proper examples.

3. Explain and illustrate (with suitable examples) the concept of, local maxima and local minima, absolute maxima and absolute minima using graph.
4. Explain the conditional probability, the theorem of total probability and concept of Bayes' theorem with suitable examples.
5. Illustrate the concept of definite integral $\int_a^b f(x)dx$, expressing as the limit of a sum and verify it by actual integration.

Section 'B' Project (Any one)

1. Using vector algebra, find the area of a parallelogram/triangle. Also, derive the area analytically and verify the same.
2. Find the image of a line with respect to a given plane.
3. Find the area bounded by a parabola and an oblique line.

Section 'C' Project (Any one)

1. Draw a rough sketch of Cost (C), Average Cost (AC) and Marginal Cost (MC)
Or
Revenue (R), Average Revenue (AR) and Marginal Revenue (MR).
Give their mathematical interpretation using the concept of increasing - decreasing functions and maxima-minima.
2. For a given data, find regression equations by the method of least squares. Also find angles between regression lines
3. Using any suitable data, find the Optimum cost in the manufacturing problem by formulating a linear programming problem (LPP).

Important instructions:-

- Both the project should be in a **single stick file**
- One project should be of **at least 10 to 15 pages**.
- It is mandatory that you include **Certificate, Acknowledgement, Index column, necessary pictures and graphs** (to make the data meaningful), **Conclusion and Bibliography** in your project.
- Certificate should contain **space for Internal and External Examiner's signature**.
- Project should be **handwritten**, use black or blue pen only

- Keep your project direct and to the point.
- Unnecessary decorative items should be avoided and it should be simple and formal
- Your Name, Class, Registration No along with School logo should be printed in an A4 size paper and used for the project.

FORMAT OF THE PROJECTS:

1. Certificate
2. Acknowledgment
3. Content
4. **Project 1**
 - (a) Introduction
 - (b) Needed work, graphs and examples
 - (c) Finding.
5. **Project 2**
 - (a) Introduction
 - (b) Needed work, graphs and examples
 - (c) Finding.
6. Bibliography.

Holiday Home Work (MATHEMATICS)

- Revise the all formulas of the chapters (i) **Trigonometry** (ii) **Co-ordinate geometry** from Class **XI** book
- Complete All the questions of Chapter Matrices and Determinant from Std XII book in a separate Copy.

PHYSICS

Answer the following questions in a separate copy

1. write properties of charge
2. write Coulomb's law in vector form.
3. state superposition theorem.
4. calculate electric intensity on the axis of a charged ring.
5. Draw electric lines of forces in various cases.
6. Define electric flux. Discuss different cases.
7. state and prove Gauss's theorem.
8. Give applications of Gauss's theorem.

CHEMISTRY

1. Solve board question from 2017 to 2021

i) Solid state

ii) Solutions

2. Complete chemistry practical record notebook PDF has already been sent to you.

COMPUTER SCIENCE

Question 1.

. Special number is a number in which the sum of the factorial of its digits is equal to the number
example :145($1!+4!+5!=145$).

Design a class special to check if the given number is a special number or not some of the members of the class are given below

Class name. : Special

Data member

n. : Integer to store number

Method

Special () : default constructor

Void read () : to accept the number

Int factorial(int x) : return the factorial of a number using recursive technique

Boolean isspecial() : check for the special number by in walking the function factorial () and return true if special, otherwise return false

Void display () : displays the result with an appropriate message

Specify the class special, giving detai...

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Question 2

An emirp number is the number which is prime backwards and forwards for example 13 and 31 are both prime numbers. Thus ,13 is an emirp number

Design a class emirp to check if a given number is emirp number or not. Some of the members of the class are given below

Class name: emirp

Data members

n: stores the numbers

rev: stores the reversed numbers

f: stores the divisor

Member functions

Emirp (int nn): to assign $n=nn, rev=0, f=2$

int isprime(int x): checks if the number is prime using the recursive technique and returns one if prime otherwise returns zero

Void isemirp() : reverses the given number and checks if both original and reversed numbers are prime ,by invoking the functions isprime (int)
and display the result with an appropriate message

Specify the class emirp giving details of the constructor(int), int is prime (int) and void isemirp.

Define the main() function to create the object and call the methods to check for the emirp number.

BIOLOGY

SUGGESTED TOPICS FOR STUDENTS

List of Project topics	Name of student
Genetic disorder	Aahana Singh, Achin Rudra
Gene therapy	Abhinav Kumar, Bhavya Narayani
Human genome project	Ahmed Sayed, Jayashree
DNA finger printing	Aditya Ranjan, Sameer Priyadarshi
Bio-piracy	Ankit Chandra, Aditya Chauhan
Cancer	Rahul Raj, Nukta Bhargav
AIDS/ Hepatitis	Aiesha Shahzad
Drug addiction and community	Ananya Singh, Raunak Singh
Role of micro-organisms in industry	Ankita Kumari, Rohaan Mukul
Human population	Navodit Arya
Mendelian inheritance	Arpita Suman, Ishica Das
Environmental resistance	Ayush Babu, Raunak Rajneesh
Traditional and modern methods: study of a few traditional methods of pest deterrence vis-à-vis modern methods of pest control- viability of traditional methods in today's scenario and limitations and dangers of modern methods.	Tejas Kumar Singh, Subhankari Shubham
Role of agrochemicals in increasing food production.	Prashansa Priyadarshani, Shireen Sweetin

IMPORTANT INSTRUCTIONS

- Project to be made in a practical record of 80 pages.
- Project should be hand written, use blue/black pen only.
- Use Sketch pens/Highlighter for writing headings and sub-headings.
- Unnecessary decoration of the record to be avoided.
- You can use diagrams, print out, charts, graphs and photocopies newspaper cuttings to support the subject matter of your project.
- There should be minimum 40 pages of written matter related to the topic.
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- Format of the project
 1. Certificate-1page
 2. Acknowledgement-1 page.
 3. Content (Topics)-1-2pages.
 4. Introduction of topic-1-2pages.
 5. Details of the topic- min 25 pages.
 6. Conclusion-1-2 pages.
 7. Bibliography- 1page.

ECONOMICS

- Revise chapter 1 to 6
- Prepare two projects in two different practical copies

Economics Project work (2021 – 22) for Class XII

Project – 1: [Project on Banks]

1. Certificate (with Internal and External sig. Space)
2. Acknowledgement
3. Content
4. Introduction
 - i. Definition of Bank
 - ii. Type of Banks
 - iii. Imp. Of Bank / Role of Commercial Bank.
 - iv. Function of Commercial Bank
 - a. Accepting deposit
 - b. Granting Loan
 - c. Process of Credit Creation
 - d. Other functions
 - v. Functions of Central Bank.
(All major functions including credit control)
 - a. Quantitative
 - CCR
 - SLR
 - Bank Rate
 - Open Market operation
 - b. Qualitative
 - Marginal Requirement
 - Direct Action
 - Moral Suasion
 - Credit Rationing

(In Detail)

- vi. Conclusion
- vii. Bibliography

Project – 2: [Project on Fiscal Policy]

1. Certificate
2. Acknowledgement
3. Content
4. Introduction
 - i. Definition
 - ii. Objectives of Fiscal Policy
 - iii. Tools of Fiscal Policy
 - a. Taxation – Direct (Merit and Demerit)
Indirect (Merit and Demerit)
 - b. Structure of Taxation
 - Progressive
 - Digressive
 - Regressive
 - iv. Public Expenditure
 - Definition
 - Type of Public Expenditure
 - v. Public Borrowing
 - Definition
 - Types of Public Borrowing
 - Method of Debt. Redemption
 - vi. Deficit Financing
 - Definition
 - Types of Deficit Financing
 - Reason of Deficit Financing
 - Effect of Deficit Financing
5. Conclusion
6. Bibliography

- **Note :-**

1. Project work should be done in two separate copies.
2. Each project should consist at least 30 pages.
3. Avoid red and green pen.
4. Both project should be learned and prepared for internal assessment.
5. Clips, paper cutting, chart and grafts can be used to highlight your research.

Holiday Assignment Subject: Economics

Chapter 14

- (i) Name of the types of deposit accepted by the commercial Banks.
- (ii) What is variable reserve Ratio?
- (iii) What are repo rate and reserve repo rate?
- (iv) Briefly explain clearing house function of the central Bank.
- (v) Explain various agency functions provided by commercial Banks.
- (vi) Explain the role of RBI.
 - a. Bank to the Government.
 - b. Promotional and development function.
 - c. Custodian of foreign exchange.
- (vii) Explain how CRR and SLR can be used by the central Bank to control credit.
- (viii) How do commercial Banks credit? Do they enjoy unlimited power to create credit? Discuss.
- (ix) Discuss qualitative method of controlling credit by the central bank in an Economy.
- (x) Discuss various method employed by a central Bank to control credit in an Economy.

Chapter – 16

- (i) Discuss any two objective of fiscal policy in a developing economy.
- (ii) Is deficit financing inflationary? Give reason for answer.
- (iii) Define direct and indirect tax? Give two merits of each.
- (iv) Public expenditure helps in increasing production of an economy. In this content discuss any two public expenditures.
- (v) What do you mean by redemption of public debt? Explain any four methods of public debt redemption.
- (vi) How does fiscal policy of the Government control inflation with the following tools :-
 - a. Public expenditure
 - b. Taxation.
 - c. Public borrowing

ACCOUNTACY

Prepare the projects (one comprehensive project and one specific project)mentioned below. The projects are to be prepared in a single practical copy each contain at least 50 pages.

Format of the project :

1. Cover page (which contain name, subject, class, Section, serial number etc)
2. Certificate
3. Acknowledgement
4. Contents (Index number and specify the page number)
5. What is a project? Usefulness of a project.

6. Introduction about the topics of the project
 7. Details of the projects (as per the question)
 8. Annexure like graph, charts, tables, paper cutting and supportive pictures etc.
 9. Conclusion(separate for each project)
 10. Bibliography. (Common for both the project)
- Cover the project copy with transparent cellophane paper.

Note: =

- Project should be hand written, use blue/black pen only.
- Use Sketch pens/Highlighter for writing headings and sub-headings if necessary
- Unnecessary decorations is not allowed

Project 1

Formany imaginary firm, name the firm, prepare its partnership deed and take at least 10 imaginary transactions with the help of which pass journal entry prepare ledger account, trial balance, trading and profit and loss account and balance sheet. calculate current ratio, quick ratio, Debt equity ratio, gross profit ratio and net profit ratio.

(Include in contents basic information about a partnership- definition of partnership, types of partners, different types of partnership, rights of partners, partnership deed and its contents.)

Project 2

Prepare a cash flow statement with the help of a balance sheet
Question number 59 (exercise from chapter13 cash flow statement)

(Include in content meaning of cash flow statement its objectives, importance and its limitations.)

Prepare a format of cash flow statement.

COMMERCE

Prepare any two projects out of the topics mentioned. Prepare Projects on topic 2 and 3. The projects are to be prepared in a single practical copy of 96 pages.

Format of the project :

1. Cover page
2. Acknowledgement
3. Certificate
4. Contents
5. What is a project? Usefulness of a project.
6. Introduction about the topics of the project
7. Different chapters of the project; such as definition, characteristics, advantages and disadvantages,
8. Requisites of the project and compilation of the project.
9. Conclusion
10. Annexures like graph, charts, tables etc.

11. Bibliography.

Cover the project copy with thin black coloured chart paper. Avoid use of Green and Red Colours.

BUSINESS STUDIES

Prepare any two projects out of the topics mentioned. Prepare Projects on topics 5 and 8. The projects are to be prepared in a single practical copy of 96 pages.

Format of the project:

1. Cover page (Blue Chart)
2. Acknowledgement
3. Certificate
4. Contents
5. What is a project? Usefulness of a project.
6. Introduction about the topics of the project
7. Different chapters of the project; such as definition, characteristics, advantages and disadvantages,
8. Requisites of the project and compilation of the project.
9. Conclusion
10. Annexure like graph, charts, tables etc.
11. Bibliography.

Cover the project copy with thin black coloured chart paper. Avoid use of Green and Red Colours.
