RANIGANJ LIONS J.D.M.C. D.A.V PUBLIC SCHOOL, RANIGANJ.W.B.
HOLIDAY HOMEWORK SESSION 2024 - 25
CLASS : XI SCIENCE

ENGLISH

SUBJECT-ENGLISH CORE
CLASS-XI
PROJECT WORK

Project work is to be prepared as per the instructions listed below.
1. The entire project should be in a file format. (Use shoe-lace Practical Copy)
2. The project should be handwritten in blue/black pen (Highlighters can be used).
4. The project report should be developed in the following sequence–

• Cover page: School Name, logo, Title statement, Name of the Student and Year/session
• Index (list of contents)
• Acknowledgements and Preface
• Certificate
• Introduction statement (The purpose of the Project)
• Detailed Project
• Learning outcomes/experiences
• The project should have illustrations/photos/sketches as per the need and suitability with respect to the pattern of the presentation.
Topic of the Project
Having read the chapter "Discovering Tut the Saga Continues," share your thoughts on the following:
1. Tutankhamun and Mystery Go Hand in Hand
2. An Archaeological Study of Tutankhamun
3. Gaining insight into Egypt via King Tut.

PHYSICAL EDUCATION

Q1) Case: The local soccer club is considering upgrading their playing surface and equipment to enhance player performance and safety. They want to incorporate the latest technological advancements in their decision-making process.
Question: How can the club leverage technological advancements in playing surfaces and sports equipment to improve player performance and safety? Provide specific examples of innovations and their potential impact on the club's operations and player experiences.(3)

Q2) what are the difference objective of Fit India Programme? Mention any three. (3)
Q3) What is the official motto of the Olympic Games?   (1)
a) "Unity in Diversity"
b) "Faster, Higher, Stronger"
c) "Peace and Harmony"
d) "Friendship Forever"
Q4) What organization is responsible for overseeing the Olympic Movement? (1)
a) International Olympic Committee (IOC)
b) National Olympic Committee (NOC)
c) International Federations (IFs)
d) World Anti-Doping Agency (WADA)
Q5) Case Based Question
A school did not have sports period as part of it's curriculum. On the basis of the case given, answer the following question: (2)
A)   Which skills will most likely be missing in the students of such school?
B)   If the school creates a sports department in future, what sort of employees will it requires?

C)   _____ is an important objective of physical education?
D)   A _____ and _____ physical programme must be an integral part of school curriculum.

Project Work:
IOA recognized Sport/Game: Volleyball or Football or Kho-Kho (any one)
1. Labeled diagram of Field
2. Equipments
3. Rules of Game
4. Terminologies
5. Skills

Note:
Use Inter leaf page to write your project.
Paste and Draw relevant picture (Use White sheet or page)
Project should be completely hand written.

Project should have the following:
1. Index
2. Acknowledgement
3. Introduction to the topic
3. Content of the project
4. Conclusion
6. Bibliography
Follow all the instructions given in class related to the project work.

PAINTING

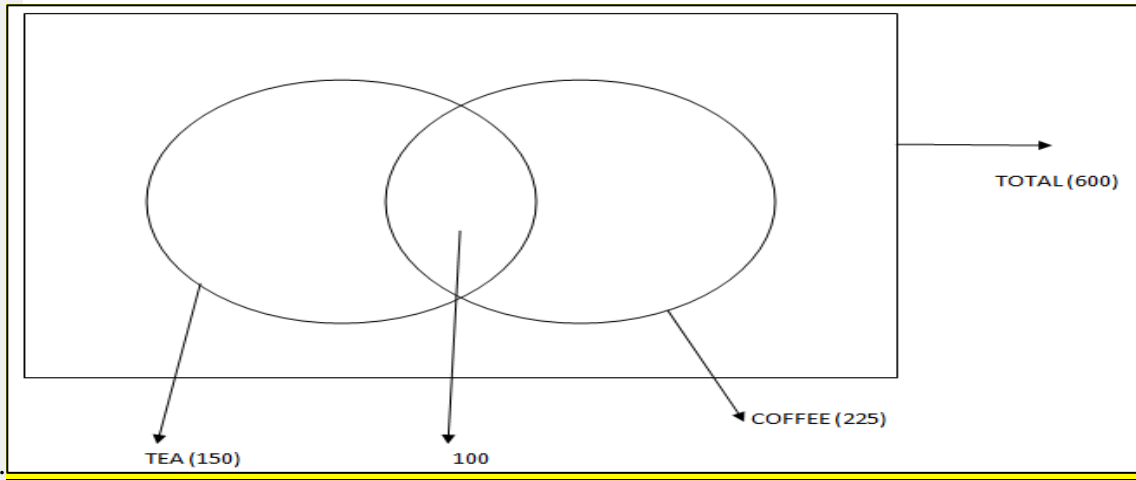## Answer the following questions :

1. Describe the location of the important pre-historic rock shelters in India.

    Write a short note on the pre-historic rock painting "Wizard's Dance".
2. In how many groups Bhimbetka caves had been classified, name them .

    Describe the classification of Bhimbetka.

Project work :

1. Still Life:-
        A) Pencil Shade - 01
        B) Water Colour – 01
2. Composition:- 04
        A) Tea Stall
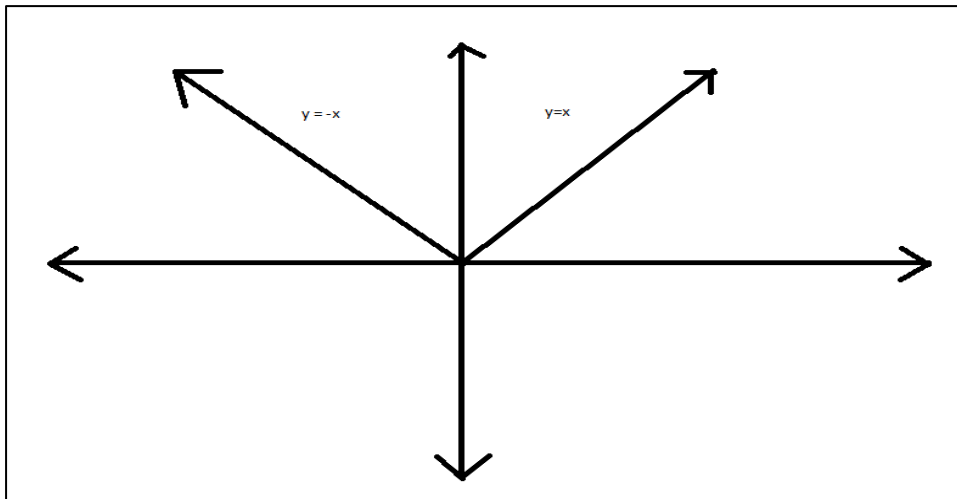   B) Market
        C) Book Fair
        D) Rainy Day

1.

A. Find the number of students taking at least one drink .   1+1+1+1+1=5
B. Find the number of students taking tea only.
C. Find the number of students taking coffee only.
D. Find the number of students taking exactly one drink.
E. Find the number of students not taking any drink.

2.

A. Define the above function ?   1
B. Write the domain of the function?   1
C. Write the range of the function?   1

3. Draw the graph of signum function.(Use mm graph)   2

PROJECT WORK(use shoelace file)

1.To find the number of subsets of a given set and verify that if a set has n number of elements , then the total number of subsets is 2^n.

2.To distinguish between a relation and a function.

3.To plot the graphs of sinx, sin2x , 2sinx ,and $\sin\frac{x}{2}$, using the same coordinate axes. (use mm graph)

FORMAT TO BE FOLLOWED:-

a)1st Page-Name of the school, Investigatory Project, name, class, section, roll no., subject, Guide teachers' name

b)2nd Page-Certificate

c)3rd Page-Acknowledgement

d)4thPage-Index

APPLIED MATHEMATICS

PROJECT WORK : (USE SHOELACE FILE AND GRAPH SHEETS)

1) Collect the data for 15 days on weather, price inflation (5 commodities) and pollution , sketch different types of graphs and analyze the result.

2) Prepare a report card using scores of the last two exams (Pre- Boards) and compare the performance.

3) Draw a pie chart and bar graph of your Grade 10 Board result and analyze the result.

FORMAT TO BE FOLLOWED:

A) FIRST PAGE : Name of the school, Investigatory project, name, section , Roll Number, Subject, Guide Teacher's Name.
B) SECOND PAGE : Certificate
C) THIRD PAGE : Acknowledgement
D) FOURTH PAGE: Index

E) FIFTH PAGE -Aim/Objective.
F) SIXTH PAGE -Project Report
G) conclusion
H) Bibliography

PHYSICS

A. Prepare an investigatory project: Submit the draft of an investigatory project as per the topic allocated (groupwise) in class.

Follow the given format:-
a)**1st Page**-Name of the school, Investigatory Project, name of the student, class, section, Board roll no., subject, Guide teachers' name
b)**2nd Page**-Certificate
c)**3rd Page**-Acknowledgement
d)**4thPage**-Index
e)**5thPage**-Aim/Objective
f)**6th Page onwards**-Project Report
g)**Conclusion**
h)**Bibliography**
Important points to note:-
 # Maximum no.of page should not exceed 20
 # Project is to be written in shoelace file
#Project should be handwritten
 # Pictures/diagrams(coloured) may be pasted

SUGGESTED TOPICS FOR THE INVESTIGATORY PROJECT:

1. Finding the coefficient of restitution of a surface by dropping a ball from height h.
2. Finding the value of acceleration due to gravity by a sharp end rod.
3. Making rainwater alarm from different electronic components.

B. Write the following Activities:

1. To make a paper scale of given least count, e.g., 0.2cm, 0.5 cm.
2. To determine mass of a given body using a metre scale by principle of moments.
3. To plot a graph for a given set of data, with proper choice of scales and error bars.

CHEMISTRY

1.Calculate the mass per cent of calcium, phosphorus and oxygen in calcium phosphate $Ca_3(PO_4)_2$

(2 marks)

2.Four litre of dinitrogen reacted with 22.7 L of dioxygen and 45.4 L of nitrous oxide was formed. The reaction is given below:

$2N_2(g) + O_2(g) \longrightarrow 2N_2O(g)$

Which law is being obeyed in this experiment? Write the statement of the law.

(3 marks)

3.The reactant which is entirely consumed in reaction is known as limiting reagent. In the reaction $2A + 4B \longrightarrow 3C + 4D$, when 5 moles of A react with 6 moles of B, then

(i) which is the limiting reagent here?

(ii) calculate the amount of C & D formed.

(3 marks)

4.Concentrated HNO_3, is 63% by weight (density = 1.4 gm/ml). How much volume of this acid is required to prepare 250 ml of 1.2 M solution?

(2 marks)

Activity/Practical :

Experiment:
To determine the presence of the following radicals systematically
A.$CO_3^{(2-)}$

B.$NO_2^{(-)}$

C.$SO_3^{(2-)}$

NOTE : To write the EXPERIMENTS use the following format in the practical notebook:
1. Aim
2. Materials & Chemicals required
3. Physical characteristics
4. Observation table(experiment observation & inference)
5. Conclusion

OR

To prepare 250 ml of (M/40) Oxalic acid solution & determine the strength of unknown NaOH solution titrating with the given strength of Oxalic acid solution.

NOTE : To write the EXPERIMENTS use the following format in the practical notebook:
6. Aim
7. Materials & Chemicals required
8. Procedure
9. Observation table
10. Calculation of strength(in g/L)
11. Conclusion
12. Precautions.

Note - Use DAV CAE Practical copy for completion of the practicals

BIOLOGY

A.Write the following practicals in your practical copy.

1. To study the parts of a compound microscope.
2. To study osmosis by potato osmometer.
3.To study the virtual specimens/slides/models
and write the identifying features of -Amoeba, Hydra, Liver fluke,
Ascaris, leech, earthworm, prawn,silkworm, honey bee, snail, starfish,
shark, rohu, frog, lizard, pigeon and rabbit.
4. To study and describe locally available common flowering plants including
dissection and display of floral whorls, anther and ovary to show
number of chambers (floral
formulae and floral diagrams), type
of root (tap and adventitious); type
of stem (herbaceous and woody);
leaf (arrangement, shape, venation,
simple and compound).
5.To study specimens/slides/models and write the
identifying features with reasons -Bacteria, Oscillatoria, Spirogyra,Rhizopus, mushroom,
yeast,liverwort,moss,fern, pine, one monocotyledonous plant, one dicotyledonous plant and one lichen.
6.To study mitosis in onion root tip cells and animals cells (grasshopper) from
permanent slides
7.To test for the presence of sugar,starch, proteins and fats in suitable plant and animal materials
8.To study plasmolysis in epidermal peels (e.g. Rhoeo/lily leaves or
fleshy scale leaves of onion bulb. in urine.

B.TO PREPARE AN INVESTIGATORY PROJECT ON ANY TOPIC OF YOUR CHOICE

FORMAT TO BE FOLLOWED:-

a)1st Page-Name of the school, Investigatory Project, name, class, section, Board roll no., subject, Guide teachers' name

b)2nd Page-Certificate

c)3rd Page-Acknowledgement

d)4thPage-Index

e)5thPage-Aim/Objective

f)6th Page onwards-Project Report

g)Conclusion

h)Bibliography

Maximum no.of page should not exceed 20

Project is to be written in shoelace file

#**Project should be handwritten**

Pictures/diagrams(coloured) may be pasted

SUGGESTED TOPICS FOR THE INVESTIGATORY PROJECT

1. Diabetes and health
2. HIV and AIDS
3. Drug addiction
4. Sickle Cell Anaemia: Molecular basis
5. Covid-19: the pandemic
6. Ozone depletion and its effect on mankind
7. Effects of Parthenium on humans
8. Cancer and cell division
9. Biological Nitrogen Fixation
10. Blood grouping: Bombay phenotype
11. Cloning in organism.
12. Alzheimer's and Dementia
13. Possible effects of maternal behaviour on foetal development
14. Biological Oxygen Demand (BOD) as pollution indicator in water body
15. Agrochemicals and their effects
16. Impact of local industry on environment
17. Drug resistance in bacteria
18. Coral reef: existence and depletion

ECONOMICS

1'Economics is about making choices in the presence of scarcity.' Explain the statement.
2. Distinguish between quantitative and qualitative data.
3.In what way is statistics useful to economist?
4.Case based questions :
  Read the following case study paragraph carefully & answer the questions on the basis of the same.
Collection of data is the first step in a statistical analysis. Data can be collected either from primary
Source or secondary source. Primary data is original as it being collected for the first time after collecting
the data, next step is to organize the data as raw data cannot be used for further Statistical analysis. There
are various methods of classification of data based upon the nature of qualitative data
1.Which of the following are Statistical series based on general character?
i.Time series   ii.Spatial series   iii.Condition series
Choose from the options below
a.i & ii   b. ii & iii, c.i & iii   id.i,ii&iii
 2.Classification of data based on time period is known as ………………. Classification.
  a. Geographical   b.Chronological
3.Data are grouped with reference to the attributes is referred to …………. Classification.
a.Qualitative   b.Quantitative
5.Massive unemployment will shift the PPF to the left. Defend or refute.
6.What is the opportunity cost of an input which has no alternative use?
7.**Project Report**
                    Prepare a short project report on Census Survey and Sample Survey.

COMPUTER SCIENCE

1.WAP for calculating simple interest(SI=PRT/100)

2. WAP to accept a number from the user and display whether it is an even number or odd number.

3.WAP to calculate area of a circle.

4. WAP to calculate the perimeter of a rectangle.

5.WAP to calculate the factorial of a number.

6. WAP to check whether the person is eligible for vote or not.

7. WAP to find LCM and GCD of two numbers.

8. WAP to calculate the root of quadratic equation.

9. WAP to check whether the year is leap year or not.

10. WAP to accept percentage of a student and display its grade accordingly.

Percentage	Grade
>=90	A+
>=80	A
>=70	B
>=60	C
>=50	D
<50	F

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