HOLIDAY HOMEWORK
CLASS XI (2021-22)

ENGLISH

Book Review-Read any E- Story Book of your choice.

***Write its summary**

***Write character sketch of any two characters of your choice.**

2) Literature- Read L-1to3 &Write summary.

4) Writing skill- Do the following in your grammar notebook.

***Notice Writing- i) Cultural programme/ English Quiz**
ii) sale/lost or found (any 2)

***Posters- i)Save water / Science Exhibition**
ii) Kindness towards animals/Prevention against natural disasters

***Letter-Write a letter to the Editor of the National Daily & Complaint letter.**

- **Prepare a PPT on a Specially abled person who has set an example as an inspiration for others in the society.**

***Do the given assignment**

PHYSICS

Content:
Chapter 1: Physical world
Chapter 2: Units and Measurement

1. Recall all the work completed in the classes.
2. Make a PowerPoint presentation on scope in Physics(roll no. 1 to 9)
3. make a PowerPoint Presentation on excitement of Physics(roll no 10 to 18)
4.Complete assignment in your fair notebook.
5. Make a project on Fundamental Quantities and derived quantities and their dimensions.

Question for assignment are as follows:

A. One mark question:
1. Why do we call physics an exact science?
2. Why is physics regarded as basic science?
3.Why was science called natural philosophy in earlier days?
4. Is science not on speaking terms with humanities?comment,
5.Does imagination play any role in Physics ?
6. What is nuclear force?
7. What are the similarities between science and arts?
8.How is science different from Technology?
9. What is electromagnetic force?
10. What is gravitational force?
11.What is the necessity of selecting some units as fundamental units?
12. What is the principle of homogeneity of dimensions?
13.Why is it convenient to express the distances of stars in terms of light year rather than in metre or kilometre?
14.Can a quantity have units but dimensionless?
15. Can an instrument be called precise without being accurate?can it be accurate without being precise?

B. short answer questions:
1. Distinguish between classical physics and quantum physics.

2.Discuss the relation of physics to chemistry?
3.What is the role of Physics in your daily life?
4. What is the law of conservation of charge?
5.What are the properties of electromagnetic force?
6. What are the properties of gravitational force?
7.What is a scientific theory?
8. What is thermodynamics?
9. Why it become necessary to redefine metre on atomic standards?
10. Define the following terms:
(i)Light year
(ii)Parsecond
(iii) Astronomical unit
11. Write dimension formula for
(i) relative density
(ii) velocity gradient
(iii) Specific heat
(iv) thermal conductivity
(v) entropy
12. What are different types of variables and constants?
13. The escape velocity v of a body depend upon(i) the acceleration due to gravity planet and(ii) radius of planet R. is published by emotionally the relation between v,g and R?
14. Using the method of dimension derive an expression for the energy of a body executing SHM during this energy depends upon its mass(m) frequency(v) and amplitude of vibration r.
15. 5.74 g of a substance occupies 1.2 cm^3 Express its density keeping significant figures in view?

CHEMISTRY

1. Revise and do all NCERT questions of all the chapters done in the class in fair notebook.
2. Solve the assignment in fair chemistry notebook.
3. Prepare one investigatory project. The project report to be written as follows:
    1. Title Page – This is the first page carry the following information
        i. Title / Aim of the project
        ii. Name of the student with class and section

2. Table of contents – This page records the content of the project report preferably with corresponding page numbers.
3. Introduction and review – This provides a brief history of the project including chronological order of previous work done in this direction.
4. Experimental – This section should include the following information:
    i. Apparatus /equipment
    ii. Procedure /experimental methodology
    iii. Data / observation (with proper units of all the quantities
    iv. Calculations (use the correct formulae for the calculations
    v. Graphs / diagrams / charts
    vi. Result and conclusion
5. Bibliography – On this page a list of books, periodicals, review article, research work (if any) related to the present work is to be reported.

4. Make a power point presentation on "Rules of IUPAC nomenclature "or "Isomerism".
5. Draw the atomic model of elements from atomic number 1-20.
6. Prepare a short video performing activity of chromatography or electrolysis of water.

BIOLOGY

(I) .ASSIGNMENT OF CHAPTER-2 & 3 [TWO MARK]

Q1. What are the differences between artificial and natural system of classification?
Q2. Define phylogenetic classification systems, numerical taxonomy, cytotaxonomy and chemotaxonomy.
Q3. Give general characteristics of Kingdom Algae & discuss its mode of reproduction also.
Q4. Name two hydrocolloids obtained from algae.
Q5. Name two algae from which agar is obtained. give commercial use of agar.

Q6. Name two unicellular algae rich in proteins & which are used as protein supplements by space travelers.
Q7. What is double fertilization?
Q8. Give schematic representation of life cycle of an angiosperm

[THREE MARK QUESTIONS]

Q1. List the name divisions of kingdom Algae & give their characteristics.
Q2. Explain life cycle of Bryophytes (Mosses).
Q3. Why are bryophytes called amphibians of Plant Kingdom?
Q4. What is 'gemma'? Where do you find them?
Q5. Give schematic representation of life cycle of pteriophyte**?**

[FIVE MARK QUESTIONS]

Q1. Schematically represent life cycle of a gymnosperm.
Q2. What are main classes of Angiosperm? Explain briefly.
Q3. Describe male & female sex organs of an angiospermeach stage. Correlate the life phases of the individual with the stage of the process.
Q4. Algae are known to reproduce asexually by variety of spores under different environmental conditions. Name these spores and the conditions under which they are produced.
Q5.Biological classification is a dynamic and ever evolving phenomenon which keeps changing with our understanding of life forms. Justify the statement taking any two examples

(II) .LEARNING WORK : Learn all the chapters completed in class and revise them with the help of extra questions.

(III). PROJECT WORK: Prepare a project on the topic BINOMIAL NOMENCLATURE given by LINNAEUS or TAXONOMICAL AIDS.

OR (PPT) ,{min10 pages}.

(IV) MODEL : Prepare model on topics a) five kingdom WHITTAKER classification b) algae (all major examples)

(V) ACTIVITY VIDEO : Prepare video on the topic how organisms are classify ,identify and nomenclate according to LINNAEUS binomial nomenclature (not more than 2 min.)

MATHEMATICS

CHAPTER – 1(SETS)

Choose the correct option: (3× 1 = 3)

1. For any set A, $(A')'$ is equal to
   (a) A' (b) A (c) ∅ (d) none of these
2. Let X, Y, Z be three sets given as $n(X) = 15, n(Y) = 22, n(Z) = 14\ and n(X \cap Y) = 11, n(Y \cap Z) = 8, n(X \cap Z) = 5, n(X \cap Y \cap Z) = 3$, then $n(X \cup Y \cup Z)'$ equals if $X, Y, Z are subsets of U and n(U) = 35$.
   (a) 35 (b) 30 (c) 26 (d) 5
3. Let $S = \{x: x is a positive multiple of\ 3\ less than\ 100\}, P = \{x: x is a prime number less than\ 20\}$. Then $n(S) + n(P)$ is
   (a) 34 (b) 31 (c) 33 (d) 41

Fill in the blanks: (2× 1 = 2)

4. If $A\ and\ B$ are two finite sets, then $n(A) + n(B)$ is equal to _____.
5. Power set of the set $A = \{1, 2\}$ is _____.

Answer the following: (3× 1 = 3)

6. Write the following sets in the roaster form.
   A = {x| x is a positive integer less than 10 and $2^x - 1$ is an odd number}.
7. Write the following in set builder form.
   A = {3, 9, 27, 81}
8. If the universal set$U = \{1, 3, 5, 7, 9, 11, 13, 15, 17\}, B = \{1, 3, 7, 13, 15\}$then find B'.

Short Answer Type questions: (2× 2 = 4)

9. Let A, B, and C be the sets such that $A \cup B = A \cup C$ *and* $A \cap B = A \cap C$. Then show that B=C.
10. For any sets A and B, Show that $P(A \cap B) = P(A) \cap P(B)$.

Long Answer Type - I Questions: (2× 4 = 8)

11. In a survey of 400 students in a school, 100 were listed as taking apple juice. 150 as taking orange juice and 75 were listed as taking both apple as well as orange juice. Find how many students were taking neither apple juice nor orange juice.
12. There are 200 individuals with a skin disorder, 120 had been exposed to chemical C_1, 50 to chemical C_2, and 30 to both chemicals C_1 and C_2. Find the number of individuals exposed toChemical C_1, but not chemical C_2, (ii) Chemical C_2 but not chemical C_1. (iii) Chemical C_1 or chemical C_2.

WORKSHEET(STANDARD)

1. Given two finite sets A *and* B such that $n(A) = 115; n(B) = 326; n(A - B) = 47;$ *then* $n(A \cup B)$ is
   (a) 373 (b) 165 (c) 370 (d) None of these

2. Given two finite sets A *and* B such that $n(A) = 3$ *and* $n(B) = 6$. Then minimum numbers of elements in $A \cup B$ is
   (a) 3 (b) 6 (c) 9 (d) 18
3. If a set A containing 6 elements, then number of non-empty subsets of A is
   (b) 36 (b) 30 (c) 64 (d) 63

Fill in the blanks: (2× 1 = 2)

4. When $A = \emptyset$, then the number of elements in $P(A)$ is _____.
5. If A *and* B are any two sets, then $A - B$ is equal to _____.

Answer the following: (3× 1 = 3)

6. Write the following sets in the roaster form.
   H $= \left\{x: x = \frac{n}{n^2+1}\ and\ 1 \leq n \leq 3, where\ n \in N\right\}$.
7. Write the following in set builder form
   E $= \left\{\frac{1}{2}, \frac{2}{3}, \frac{3}{4}, \frac{4}{5}, \frac{5}{6}, \frac{6}{7}, \frac{7}{8}, \frac{8}{9}, \frac{9}{10}\right\}$
8. Write the following in interval form
   $\{x: x \in R, -4 \leq x < 6\}$

Short Answer Type questions: (2× 2 = 4)

9. Show that if $A \subset B, then\ C - B \subset C - A$.
10. Assume that $P(A) = P(B), Show\ that\ A = B$.

Long Answer Type - I Questions: (2× 4 = 8)

11. A college awarded 38 medals in football, 15 in basketball and 20 in cricket. If these medals went to a total of 58 men and only three men got medals in all the three sports, how many received medals in exactly two of the three sports?
12. In a survey of 60 people, it was found that 25 people read newspaper H, 26 read newspaper T, 26 read newspaper I, 9 read both H & I, 11 read both H and T. 8 read both T & I, 3 read all three newspapers. Find:
    (i) The number of people who read at least one of the newspapers.
    (ii) The number of people who read exactly one newspaper.

CHAPTER – 1(SETS)
WORKSHEET(ADVANCE)

1. Let $A = \{(x, y): y = e^{2x}, x \in R\}$ and $B = \{(x, y): y = e^{-2x}, \forall x \in R\}$, then $A \cap B$ is
   (a) Not a set (b) Singleton set (c) Empty Set (d) None of these
2. If $A = \{x: x = 4n + 1, \forall\ 2 \leq n \leq 6\}$, then the number of subsets of A are
   (a) 2^2 (b) 2^3 (c) 2^5 (d) 2^6
3. If $N_a = \{na, n \in N\}$, then $N_3 \cap N_5$ is equal to
   (a) N_8 (b) N_5 (c) N_3 (d) N_{15}

Fill in the blanks: (2× 1 = 2)

4. For all sets A and B, $A - (A \cap B)$ is equal to _____.
5. If $U = \{1, 2, 3, 4, 5, 6, 7, 8, 9, 10\}, A = \{1, 2, 3, 5\}, C = \{2, 3, 4, 8\}$, then $(C - A)'$ is _____.

Answer the following: (3× 1 = 3)

6. Write the following sets in the roaster form.
   N = $\{x: x^4 - 5x^2 + 6 = 0, x \in R\}$
7. Write the following in set builder form.
   F = $\left\{1, \frac{1}{4}, \frac{1}{9}, \frac{1}{16}, \frac{1}{25}, \ldots\ldots\ldots\ldots\right\}$
8. If A is a finite set containing n elements, then how many subsets of set A are obtained?

Short Answer Type questions: (2× 2 = 4)

9. Assume that $P(A) = P(B), Show\ that\ A = B.$
10. Let A and B be two sets. If $A \cap X = B \cap X = \emptyset\ and\ A \cup X = B \cup X\ for\ some\ set\ X, then\ Show\ that\ A = B.$

Long Answer Type - I Questions: (2× 4 = 8)

11. Prove that (a) $(\cup_{i=1}^{n} A_i)' = \cap_{i=1}^{n} A_i'$, (b) $(\cap_{i=1}^{n} A_i)' = \cup_{i=1}^{n} A_i'$

12. From 50 students taking examinations in Mathematics, Physics and Chemistry, each of the student has passed in at least one of the subject, 37 passed Mathematics, 24 Physics and 43 Chemistry. At most 19 passed Mathematics and Physics, at most 29 Mathematics and Chemistry and at most 20 Physics and Chemistry. What is the largest possible number that could have passed all three examinations?

CHAPTER – 1(SETS)
WORKSHEET(HOTS)

1. Each set X_r contains 5 elements and each $set Y_r$ contains 2 elements and $\cup_{r=1}^{20} X_r = S = \cup_{r=1}^{n} Y_r$. If each element of S belong to exactly 10 of the $X_r's$ and to exactly 4 of the Y_r's then n is
   (a) 10 (b) 20 (c) 100 (d) 50
2. Two finite sets have m and n elements respectively. The total number of subsets of first set is 56 more than the total number of subsets of the second set. The values of m and n respectively are
   (a)7, 6 (b) 5, 1 (c) 6, 3 (d) 8, 7
3. Let $A = \{x: x \in R, |x| < 2\}, B = \{x: x \in R, |x - 2| \geq 2\}$ and $A \cup B = R - C$, then the set C equals
   $(a)\{x: -2 < x \leq 2\}$, (b)$\{x: -2 \leq x \leq 4\}$
   (c) $\{x: 2 \leq x < 4\}$ (d) None of these

Fill in the blanks: (2× 1 = 2)

4. If $A\ and\ B$ are finite sets such that $A \subset B$, then $n(A \cup B) =$ _____.
5. If A is a finite set containing n elements, then number of nonempty subsets of A is _____.

Answer the following: (3× 1 = 3)

6. Show that $A \cup B = A \cap B\ implies\ A = B.$

7. A survey shows that 63% of the people watch a News channelwhereas 76% watch another channel. If $x\%$ of the people watch both channel, then findthe interval in which x lies.
8. In a town of 840 persons, 450 persons read Hindi, 300 readEnglish and 200 read both. Then find the number of persons who read neither Hindi nor English.

Short Answer Type questions: (2× 2 = 4)

9. Is it true that for any sets A and B,
$$P(A) \cup P(B) = P(A \cup B)? Justify\ your\ answer$$
10. In a group of 65 peoples, 40 like cricket, 10 like both cricket and tennis. How many like tennis only but not cricket? How many like tennis?

Long Answer Type - I Questions: (2× 4 = 8)

11. In a survey it was found that 21 people liked product A, 26 liked product B and 29 liked product C. If 14 people liked products A & B, 12 people liked products C & A, 14 people liked products B & C and 8 liked all the three products. Find how many liked product C only.
12. In a survey of 25 students, it was found that 15 had taken mathematics, 12 had taken physics and 11 had taken chemistry, 5 had taken mathematics and chemistry, 9 had taken mathematics and physics, 4 had taken physics and chemistry and 3 had taken all the 3 subjects. Find the number of students that had (i) only chemistry,(ii) physics and chemistry, but not mathematics, (iii) only one of the subjects, (iv) at least one of the three subjects, (v) none of the subjects.

ACCOUNTANCY

Assignment 1.

Explain two characteristics of accounting.
2. Define accounting . State any three objectives of accounting.
3. List any four users who have indirect interest in accounting.
4. Explain four qualitative characteristics of accounting.
5. Explain the following accounting terms:

(Current assets , liabilities, Discount, Debtors, Profit, Intangible assets, Expenses, sales, creditors, purchases)

6. Prepare the accounting equation to show the effect of following transactions in the books of M/s Goenka Enterprises: Rs.

1. Started business with cash Rs. 50000 and goods Rs. 30000
2. Purchase goods for cash Rs. 40000 and on credit 20,000
3. Life insurance premium paid in cash 10,000
4. Paid rent 4,000
5. salary paid Rs 200 and Due Rs. 500
6. Sold goods to jony with 20% profit (costing Rs.4000)
7. Sold goods for cash.(cost price Rs. 8,00) 1,200
8. Payment made to creditors in full settlement 18,200
9. Purchase Machinery 1,00,000
10. Paid three months advance fire insurance premium 3,000
11. commission received in advance 1000

12. Cash paid For electricity bill Rs.10000.
13. interest on capital Rs. 1000 and Interest on drawing Rs. 600

7. **Prepare accounting equation for the following transactions:**
January 2018.
1: Business started with Cash Rs. 20,000.
3: Received cash from Raj on credit Rs.5,000.
6: Purchased machinery Rs 8000.
6: Purchased goods Rs 8000.
12: Sold goods(costing Rs 6000) for cash Rs.10,000.
13: Received commission Rs.2,000.

Project Work: Prepare art integration activity with the help any following topic :
1. Accounting equation.
2. Debit and Credit Rules
3. Users of Accounting informations
4. Basic Accounting terms.

*project should be neatly hand written and properly formatted.

BUSINESS STUDIES

Assignment Work: Complete the assignment (shared on whatsapp group or link given below) in your fair notebook. Assignment link: XI BUSINESS STUDIES ASSIGNMENT
Complete your notes and mind maps of Ch-1 and 2 in your fair notebook.

Learning Work: Learn and Revise Ch-1 (Nature and Purpose of Business) & ch-2 (Forms of Business Organisations) done till date in class for the upcoming exams.

Field Work:
Note: Visit only if the lockdown opens and the current situation gets normal.
Visit to a mall, observe the following and prepare a summary:
1. No. of floors, shops occupied and shops unoccupied.
2. Nature of shops and their ownership status.
3. Nature of goods dealt in: local brands, international brands, etc.
4. No. of service business shops: spas, saloons, gym, etc.
5. Rented spaces, Owned spaces
6. Different types of promotional schemes, offers and advertisements.
7. Most visited shops and brands.
8. Special attraction of the Mall: Food courts, cinema, gaming zone, etc.
9. Parking facilities
10. Innovative facilities

Art Integration Project Work: Make an innovative and creative project/model on ***any one*** of the following topics:
1. Aids/Auxiliaries to trade.
2. Business Risk
3. Sole-proprietorship organization
4. Partnership form of business organization

ECONOMICS

Assignment Work: Complete the assignment (shared on whatsapp group OR below given link) in your fair notebook. Assignment link: XI Economics Assignment
Complete your notes of microeconomics Ch-1, 2 & 3 shared in class whatsapp group in your fair notebook.

Learning Work: Learn and Revise Ch-1, 2 & 3 of microeconomics done in class for the upcoming exams.

Art Integration Project Work: Make an innovative and creative project/model on ***any one*** of the following topics:

1. Production Possibility Curve
2. Consumer Equilibrium
3. Effects of COVID-19 on the Indian Economy
4. Opportunity cost as an Economic tool (taking real life situations)
5. Effect on PPC due to various government policies

HISTORY

Learning Work-
Ch.1 From the beginning
Ch.2 Writing in the Early cities
Writing Work:
Solve an assignment in your fair note book
Creative Work:
Prepare a project report in 12-15 pages about "Making and unmaking of Mesopotamia"
Assignment
1.How was Neanderthal man's skull discovered?
2.Differences B/W Homonid and Homonide.
3.How did early man obtained their food?
4.What do you know about the progress of painting in the early Era?
5.Explain some changes in the life of early man by farming and Pastoralsm.
6.Which rivers benifited the cities in Mesopotamia?
7.Mention some main items of trade in Mesopotamia.
8.Explain some features of Uruk.
9.Marriage relations were uniqe in Mesopotamia" Justify the statement with suitable Reasons.
10.Why do we say that it was not natural fertility and high levels of food production that were the causes of early urbanisation?
11.Which of the following were necessary conditions and which the causes, of early urbanization , and which would you say were the outcome of the growth of cities:
12.Why were mobile animal herders not necessarily a threat to town life?
13.Why would the early temple have been much like a house?
14.What were the main features of urbanization in Mesopotamia?
15.How can you say that efficient transport play a curtial role in the development of Mesopotamia?

COMPUTER SCIENCE

ASSIGNMENT WORK: Complete the notes/assignment of Unit -1 in fair notebook as discussed in class.
LEARNING WORK : Learn (Ch-1,Ch-2) covered in Unit -1.
PROJECT WORK: 1).Create documentation in MS Word about Corona Virus (COVID-19) (Minimum 10 Pages)
2).Design a Cover Page of School Magazine according to your imagination.