D.A.V. NANDRAJ PUBLIC SCHOOL

Affiliated to CBSE, New Delhi (10+2)
Marwari Arogya Bhawan No-3, Bariatu, Ranchi

CLASS : XII

HOLIDAY ASSIGNMENT
SESSION 2024-25

ENGLISH

1. Make a project on the life and work of JOHN KEATS highlighting the explanation of the poem "A Thing of Beauty".

2. In India, the urban poor live in subhuman conditions in slums.Make a project on "Slums of India" with the reference to the chapter " Lost Spring". Students can add different data, newspaper reports, current status etc.You can take help from the following visual:-

PHYSICS

Experiments

1. To find resistance of a given wire using metre bridge.
2. To verify the laws of combination (series and parallel) of resistances using a metre bridge.
3. To determine resistance of a galvanometer by half deflection method and to find its figure of merit.
4. To determine resistivity of two /three wires by plotting a graph for potential difference versus current.

Activities

1. To assemble a house hold circuit comprising three bulbs, three (on/off) switches, a fuse and a power source.
2. To assemble the components of a given electrical curcuit.
3. To show the diagram of a given open curcuit comprising at least a battery, register/rheostat, key, ammeter and voltmeter. Mark the components that are not connected in proper order and correct the circuit and also the circuit diagram.
4. To identify a diode, an LED, a register and a capacitor from a mixed collection of such items.

5. To observe diffraction of light due to a thin slit.
6. To obtain a lens combination with the specified focal length by using two lenses from the given set of lenses.

*Note- a*bove mentioned assignment will be done in the prescribed practical notebook.

CHEMISTRY

Write the answers of NCERT Exercise of the chapter SOLUTIONS AND ELECTROCHEMISTRY in a separate copy.

MATHEMATICS

Solve Exercises - 1(A) , 1(B) , 2(A), 2(B) from R S Agarwal Maths Book.
Solve the Miscellaneous Exercises of Chapter 2 and Chapter 3 from NCERT Maths book.
Note: Solve these exercises in a separate copy.

BIOLOGY

List of Experiments
1. Prepare a temporary mount to observe pollen germination.
2. Prepare a temporary mount of onion root tip to study mitosis.
   Study and observe the following (Spotting)
3. Flowers adapted to pollination by different agencies (wind, insects, birds).
4. Pollen germination on stigma through a permanent slide or scanning electron micrograph.
5. Identification of stages of gamete development, i.e., T.S. of testis and T.S. of ovary through permanent slides (from grasshopper/mice).
6. Meiosis in onion bud cell or grasshopper testis through permanent slides.
7. T.S. of blastula through permanent slides (Mammalian).
8. Controlled pollination - emasculation, tagging and bagging.
9. Common disease-causing organisms like Ascaris, Entamoeba, Plasmodium,
through permanent slides, models or virtual images or specimens.
Comment on symptoms of diseases that they cause.
Note - All experiments and spotting must be done in prescribed
PRACTICAL FILE.
*INVESTIGATORY PROJECT IN STICK FILE

ACCOUNTANCY

1. Define partnership.
2. List any four essential features of partnership.
3. Is there any limit on number of partners in a firm?
4. Define partnership deed.
5. Write the provision in absence of partnership deed.
6. Explain fixed capital and fluctuating capital and differentiate.
7. What is a profit and loss appropriation account.
8. Write differences between profit/loss a/c and profit/loss appropriation a/c.
9. X and Y contributed Rs.20, 000 and 10,000 respectively. they decide to allow interest on capital @ 6% p.a. Their respective share of profits is 2:3 and the business profit (before interest) for the year is Rs.1,500. Show the distribution of profits (i) where there is no agreement except for interest on capitals and (ii) where there is a clear agreement that the interest on capitals will be allowed even if it involves the firm in loss. Show your answer by preparing P/L Appropriation A/c.
10. The capital of A and B stood a t Rs. 400,000 and Rs.300,000 respectively after necessary

adjustments in respect of the drawings and the net profits for the year ended 31st March, 2012. It was ascertained that 5% p.a. interest on capital and drawings were not taken into account in arriving at the net profit. The drawings of the partners had been. For A Rs.12,000 drawn at the end of each quarter and for B Rs. 18,000 drawn at the end of each half year. The profits for the year as adjusted amounted to Rs. 2,00,000. The partners share profits in the ratio of 3:2.

11. Calculate Interest on drawings of the partner A, B AND C. where A with withdrew 500 at the end of each quarter. B withdrew 1000 at the beginning of each month and C withdrew 10000 during the year. Charge interest on capital @ 6% p.a.

12. K and P are partners in a firm sharing profits in 4:3 ratio. Their capitals on 1.4.2009 were 80,000 and 60,000 respectively. The partnership deed provide:-
    i) interest on capital and drawings will be allowed and charged @12% p.a. and 10% p.a. respectively.
    ii) K and P entitled to get monthly salary of 2,000 and 3,000 resp. the profits for year ended 31.03.2010 were 1,00,300. The drawings of K and P were Rs. 40,000 and Rs. 50,000 resp. interest on K's drawings was Rs. 2,000 and P's drawings Rs. 2,500.
    Prepare Profit and loss appropriation account for the year ended 31.03.2010.

13. A, B and C were partners in a firm having capitals of Rs. 60,000, 60,000 and 80,000 respectively. Their current a/c balance were A; Rs. 10,000, B Rs. 5,000 and C 2,000(dr.). according to the deed the partners were entitled to interest on capital @5% p.a. C being the working partner was also entitled to a salary of Rs.6,000 p.a. the profits were to be divided as follows:
    a. The first 20,000 in proportion to their capital
    b. Next 30,000 in the ratio 5:3:2
    c. Remaining profit to be shared equally
        The firm made a profit of Rs. 1,56,000 before charging any of the above items.
        Prepare the profit & loss appropriation a/c.

14. Pass the journal entries for the below adjustments while preparing p/l appropriation a/c
    a. For transferring the profit into p/l appropriation a/c
    b. For allowing interest on capital
    c. For charging interest on drawing
    d. For salary and commission
    e. For profit or loss transfer to partners capital

BUSSINESS STUDIES

1. Define the term Management.
2. What is meant by 'efficiency' in management?
3. What is meant by effectiveness in management?
4. How does management help in achieving personal objectives? State.
5. Explain the Nature of management.
6. Explain any four features of management.
7. State any two function to be performed at supervisory level of management.
8. How is the principle of Unity of command useful management? Explain briefly
9. Explain the principle of scalar chain and gang plank.
10. what do you mean by time study.
11. With the help of diagram explain Functional foremanship as a technique of scientific management.
12. Write Centralizations and Decentralization.
13. Explain any five points of significance of principle of Management.

14. Define environment scanning.
15. State any three importance of business environment.
16. Explain social and technological environment.
17. Explain the process of planning.
18. Write the definition of planning.
19. Explain fatigue study and motion study.
20. Explain Science not rule of thumb.

ECONOMICS

Very short Answer type Questions
1. When will the domestic income exceed the national income?
2. If NDPFC is Rs.1,000 crores and NFIA is (-) RS. 5 Crores, how much will be the national income?
3. If the domestic income is Rs. 200 crores and the national income is Rs. 190 crores, how much will be the net factor income from abroad?
4. In which type of economy, domestic income will be equal to national income?
5. Define national income.

Short Answer type Questions

1. Distinquish between Gross Domestic Product at Market Price and National Income.

2. Distinquish between domestic product and national product.

3. Is it necessary that Domestic Income is always less than National Income.

Long Answer type Questions
1. Explain the precautions that should be taken while estimating national income by expenditure method.
2. Explain any four limitations of using GDP as a measure/Index of welfare of a country.
3. Explain in brief the various components of expenditure method.

Answer the following questions.
1. Name some notable economists who estimated India's per capital income during the colonial period.
2. What were the main cause of India's agricultural stagnation during the colonial period?
3. Crtically appraise some of the shortfalls of the industrial policy pursued by the British colonial administration.
4. Discuss the positive contributions of colonial government in India.

Project work
a. Import Substitution vs Export Promotion
b. How will Russia-Ukraine war impact the Indian Economy?
   (Any one topic assigned to you).
Note - Students having odd roll no. will prepare project on option 'A' and even roll no. will do option 'B'.

HISTORY

Project Work

1. Make a project file based on the topics with reference to chapters from NCERT book (already explained in the classroom). It should be hand written only.

   Roll No. 1- to 3 – Chapter 1 – Bricks, Beads and Bones (The Indus Valley Civilisation-Archaeological Excavations)

   Roll No. 4 to 6 - Chapter 2 - Kings, Farmers & Towns (The History & Legacy of Mauryan Empire)

   Roll No. 7 to 9 – Chapter 3 – Kinship, Caste & Class (Mahabharata – the Great Epic of India)

   Roll No. 10 to 12 – Chapter 4 – Thinkers, Beliefs & Buildings (History of Buddhism & Jainism)

   Roll No. 13 to 15 – Chapter 6 – Bhakti & Sufi Traditions (The Vision and Philosophy of Kabir & Guru Nanak Dev)

   Roll No. 16 to 18 – Chapter 7 – An Imperial Capital: Vijayanagara Empire (The Architectural Culture)

   Roll No. 19 to 21– Chapter 11- Rebels and the Raj (Revolt of 1857 & its Representations)

   Roll No. 22 to 23 – Chapter 13 – Mahatma Gandhi & the Nationalist Movement Legacy of Gandhian Ideas).

2. Read Chapters 1, 2 & 3 thoroughly and revise given notes and questions/answers.
3. Learn and revise different terms & sources of these chapters.
4. Revise Map Based questions of Chapters 1 & 2.

GEOGRAPHY

1. Prepare a project on Current Environmental Issues with appropriate data and suggest some ideas to overcome from those problems by the help of newspaper, magazine, text book, internet and other sources of information.

2. **Practical work:-**

   Chapter : 1

   Topic: Data - It's source and compilation.

3. **An outline political map of the world in your notebook, locate and label the following major sea ports of the world, with appropriate symbols:-**

   a. Europe :- North Cape, London, Hamburg
   b. North America: Vancouver, San Francisco, New Orleans
   c. South America: Rio De Janerio, Valparaiso
   d. Africa : Suez and Cape Town
   e. Asia : Yokohama, Shanghai, Hong Kong, Aden, Karachi, Kolkata

POLITICAL SCIENCE

Project to be made from following chapters according to Roll Numbers:

- Challenges of Nation Building (Roll No. 1 to 4)
- The Era of One Party Dominance (Roll No.5 to 8)
- The End of Bipolarity(Roll No.9 to 12)
- Alternative Centres of Power (Roll No. 13 to 16)
- Contemporary South Asia Roll No. 17 to 20)
- International Organisations(Roll No. 21 to 23)

- **Learn all the Assignment done in the Class and practice Case Based Questions, Map Based Questions.**

COMPUTER SCIENCE

Report file:
Minimum 10 Python programs.
Python Programming

1. Write a Python program to perform bubble sort.
2. Write a Python program to perform insertion sort.
3. Read a text file line by line and display each word separated by a #.
4. Read a text file and display the number of vowels/consonants/uppercase/lowercase characters in the file.
5. Remove all the lines that contain the character 'a' in a file and write it to another file.
6. Create a binary file with name and roll number. Search for a given roll number and display the name, if not found display appropriate message.
7. Create a binary file with roll number, name and marks. Input a roll number and update the marks.
8. Write a random number generator that generates random numbers between 1 and 6 (simulates a dice).
9. Write a Python program to implement a stack using list.
10. Create a CSV file by entering user-id and password, read and search the password for given user id.

Note- above mentioned assignment will be done in the prescribed practical notebook.

HINDI

किसी एक विषय पर परियोजना कार्य करें

1. हिंदी साहित्य के विभिन्न कालों में तुलसी, जायसी, मतिराम , द्विज देव, मैथिलीशरण गुप्त आदि कवियों ने भी शरद ऋतु का सुंदर वर्णन किया है, आप उसे लिखे और बताएं कि आलोक धन्वा की कविता पतंग उन से कैसे भिन्न है

2. प्राचीन भारत में स्त्रियों की स्थिति, कर्तव्य और अधिकार का वर्णन करते हुए मध्यकालीन भारत में और वर्तमान में क्या परिवर्तन आया है जिसका असर समाज पर कैसा दिख रहा है वर्णन करें‌।

3. बिगड़ते पर्यावरण ने मानव जाति को धीरे-धीरे जीना कठिन बना दिया है‌। जल और वायु की समस्या इतनी गंभीर हो रही है कि 21वीं सदी का विश्व युद्ध पानी के लिए होगा‌। आप इसे ठीक करने के लिए क्या सुझाव देंगे ? स्पष्ट करें‌।

PHYSICAL EDUCATION

1. Draw a fixture of 29 teams on a knock out basis.
2. Draw a fixture of 33 teams on a knock out basis were four teams are kept in special seeding.
3. Draw a fixture of 8 and 11 teams on a league basis according to cyclic method.
4. Draw a fixture of 14 and 19 teams on a league basis according to staircase method.
5. Draw a fixture of 10 and 13 teams on a league basis according to Tabular method.
6. Complete your all three practical.
   a) Fitness tests administration : (SAI Khelo India test)
   b) Procedure for Asana, benefits and contraindication for any two asana for each lifestyle disease.
   c) Any one IOA recognized sports/game of choice. Labelled diagram of field and equipment. Also mention its rules, terminologies and skills.

MUSIC

1. Practice Raga Bhairav
2. Write all the topics that have been covered in class and make proper notes of each of them.
3. Learn the Swar Malika of raga Bhairav.
4. Draw a picture of Tanpura on A4 size paper and describe all the parts in detail.