O. P. Jindal School Savitrinagar, Tamnar

SUMMER HOLIDAY HOMEWORK – 2024

CLASS – 11

Sl. No.	Subject	Holiday Homework
1.	ENGLISH CORE	**[1] Write an Essay** in 500 to 600 words on any one of the following topics in A4 paper and submit: a) One nation One Election b) Well begun is Half Done c) Journey of 1000 miles begins with a single step. **[2] Project Work** – Select any one lesson from the literature syllabus and prepare a hand written project. The project should have the following. (1) - Cover page - with Title of project, name of the School /Student's name, class & section of the student (2) - Acknowledgement. (3) - Certificate of completion under the guidance of the teacher. (4) - Statement of purpose/objectives/goals (5) – Summary of the Chapter (6) – What you have learned from that lesson after reading it. The project should be prepared in A4 size sheet/ project papers. Total number of words 800 to 1000. The following points will be considered while assessing the project portfolios: ● Quality of content of the project ● Accuracy of information ● Adherence to the specified timeline ● Content in respect of (spellings, grammar, punctuation) ● Clarity of thoughts and ideas ● Creativity ● Knowledge and experience gained

| 2. | PHYSICS | **Instruction**-All the questions written below is to be done in physics copy that he/she is using in the physics class regularly.

Q1. Find the value of 60 J per min on a system that has 100 g, 100 cm and 1 min as the base units.

Q2.Find the dimensions of a x b in the equation: $E= \dfrac{b-x^2}{at}$,where E is the energy, x is distance and t is time.
Q3.State the number of significant figures in the following :
   (i)2.000m
   (ii)5100Kg
   (iii)0.050cm

Q4. The escape velocity v of a body depends upon (i) the acceleration due to gravity of the planet and (ii) the radius of the planet R. Establish dimensionally the relationship between v, g and R.

Q5. In the equation $y = A\sin(\omega t - kx)$, t and x stand for time and distance . Obtain the dimensional formula for ω and k, where A is the amplitude.

Q6. Round off the following numbers as indicated:
   (i)18.35 upto 3 digits   (ii) 143.45 upto 4 digits   (iii) 18967 upto 3 digits (iv)12.653 upto 3 digits   (v)248337 upto 3 digits   (vi)321.135 upto 5 digits (vii)101.55 x 10^6 upto 4 digits (viii) 31.325 10^{-5} upto 4 digits

Q7. Add 7.21, 12.141 and 0.0028, and express the result to an appropriate number of significant figures.

Q8. Subtract 4.27153 from 6.807 and express the result to an appropriate number of significant figures.

Q9. State the principle of homogeneity of dimensions. Test the dimensional homogeneity of following equation: $h=h_0 +v_0t+ \tfrac{1}{2}\ gt^2$

Q10. A gas bubble, from an explosion under water, oscillates with a period T proportional to
P^a, d^b ,E^c, where P is the static pressure, d is the density of water and E is the total energy of the explosion. Find the values of a, b and c. (IIT-81) |
| 3. | CHEMISTRY | **Q-1.**The empirical formula and molecular mass of a compound are CH_2O and 180 respectively. What will be the molecular formula of the compound?
Q-2. An organic compound containing C and H has 80% carbon.If the molecular mass is 30, then what is its molecular formula?
Q-3. 2.8g of KOH is dissolved in water to give 200 mL solution.Calculate the molarity of KOH in the solution.
Q-4. A sugar syrup of weight 214.2 g contains 34.2g of sugar($C_{12}H_{22}O_{11}$). Calculate (i) molality and (ii) mole fraction of sugar in the syrup.
Q-5. What is the molarity of the solution which contains 5.85 g of NaCl per 500 mL?
Q-6.Calculate the number of atoms of oxygen present in 10.6 g Na_2CO_3 .
Q-7. Calculate the molality of the solution containing 20.7 g of potassium carbonate dissolved in 500 mL solution.(density of the solution = 1 g mL^{-1}) . |

		Q-8. 5.64 g of glucose (molar mass=180) are dissolved in 30 g of water. Calculate the mole fraction of glucose and water. **Q-9.** What is the molality of pure water ? **Q-10.** How many moles of methane are required to produce 22 g of CO_2 after combustion? **Q-11.** Calculate the mass of sugar and mass of water are required to make 250 g of 15% solution of sugar. **Q-12**. Practice the Periodic Table on regular basis and remember symbol, atomic number, atomic mass, group number and period number of elements up to atomic number 50.
4.	**MATHEMATICS**	1) Solve daily 5 questions of maths in a separate notebook from the chapters given below from the book of class X. i) Quadratic Equation ii) Trigonometry iii) Arithmetic progression And from 'Set theory' of your present book.
5.	**BIOLOGY**	Q1,What are imperfect fungi ? Q2.Describe the four major groups of protozoa briefly. Q3.Find out what the terms 'algal bloom' and 'red tides' signify. Q4Give an example of a fungus as a source of antibiotics. Q5.Compare salient features of Monera and Protista. Q6.Explain the salient features of the virus with the help of a diagram. Q7.Write a note on methanogens. Q8.Write a short note on Mycoplasma. Q9.What are the different groups of fungi ? Q10.What are the characteristic features of euglenoids ?
6.	**ACCOUNTANCY**	**1.Prepare a project file on the following:** 1.Draw a Flow chart on the topic- Accounting Process. Prepare a comprehensive Business Plan that includes detailed accounting information and record the business transactions in **'Journal'**. 2. What is Accounting? Explain any four advantages of financial accounting. 3. Pawan, a consultant, during the financial year 2018-19 earned Rs. 4,00,000. Out of which he received Rs.3,50,000. He incurred an expense of Rs.1,70,000 out of which Rs.40,000 are outstanding. He also received consultancy fee relating to previous year Rs.45,000 and also paid Rs.20,000 expenses of last year. Determine

his income for the year if:

a) He follows Cash Basis of Accounting.

b) He follows Accrual Basis of Accounting.
4. Resignation by a marketing manager is not recorded in the books of accounts. Comment.
5. Proprietor of the firm has taken goods for his personal use. The accountant has accounted it as sale in the books of account. Is he correct in his accounting?
6. Dr. Neeraj jain, a homeopathy doctor in practice has been advised by his Accountant to maintain his accounts on Accrual Basis instead of the presently followed Cash Basis of accounting. Do you agree with the advice of the Accountant? Give reason.
7. Classify the accounts according to Traditional Approach and Modern Approach.
8. Name and explain the principles of accounting in the following cases:

a) Value of an asset is not charged according to change in its market value.

 b) Caliber or quality of management team is not directly disclosed in the Balance Sheet.
9.Give an example of each of the following types of Accounts:

  (i) Representative Personal Account

  (ii) Real Account

  (iii) Asset Account

  (iv) Nominal Account

  (v) Revenue Account

10.(i) Journalize the following transactions:

On April 01, 2018 Mr. A started business with Rs. 100,000 and other transactions

for the month are:

April 03 Purchase furniture for Cash Rs. 7,000.

April 05 Purchase Goods for Cash Rs. 2,000 and for Credit Rs. 1,000 from Khalid

Retail Store.

April 06 Sold Goods to Khan Brothers Rs. 12,000 and Cash Sales Rs. 5,000.

April 09 Owner withdrew of worth Rs. 2,000 for personal use.

April 10 Paid Khalid Retail Store Rs. 500.

April 12 Received Rs. 10,000 from Khan Brothers.

April 15 Paid Salaries Expense Rs. 2,000

(ii) Journalise the following transactions: 2017

Dec. 01 Hema started business with cash 1,00,000

Dec. 02 Open a bank account with SBI 30,000

Dec. 04 Purchased goods from Ashu 20,000

		Dec.06 Sold goods to Rahul for cash 15,000
		Dec.10 Bought goods from Tara for cash 40,000
		Dec.13 Sold goods to Suman 20,000
		Dec.16 Received cheque from Suman 19,500 Discount allowed 500
		Dec.20 Cheque given to Ashu on account 10,000
		Dec.22 Rent paid by cheque 2,000
		Dec.23 Deposited into bank 16,000
		Dec.25 Machine purchased from Parigya 10,000
		Dec.26 Trade expenses 2,000
		Dec.28 Cheque issued to Parigya 10,000
		Dec.29 Paid telephone expenses by cheque 1,200 Dec.31 Paid salary 4,500
7.	BUSINESS STUDIES	General instructions: i. The assignment is divided into two parts. ii. Part A contains a set of questions to be attempted in the business studies class register. Part B has to be done in a project file. **PART A-** **1.** Classify the following into economic and non-economic activities: a) Smita cooks food for her family. b) A person selling cold drinks on the railway station. c) A student praying in a temple for good marks in the test. d) A doctor treating patients at his clinic. e) An old lady attending a 'Satsung'. f) A person teaching his daughter for her Board Exams. **2.** Give examples of various types of industries. (three each). **3.** Identify the services detailed below: (a) The service which helps in removing hindrance of knowledge. (b) The service which helps in removing hindrance of exchange. (c) The service which helps in removing hindrance of place. (d) The service which helps in removing hindrance of time. (e) The service which helps in removing hindrance of risk. **5.** 'Risk in an inherent element of a business'. Do you agree? Give reasons. **6.** Which type of business risk involves both the possibility of gain as well as the possibility of loss? **7.** Differentiate between Business and Profession. **8.** "Profit is an essential objective of business due to certain reasons". Comment. **9.** Differentiate between Economic and Non-Economic Activities. **10.** "Is Profit maximization the sole objective of a business." Comment **PART B-** **Project: Prepare Report on Mall Visit.** **Purpose of Visit:** The purpose of the mall visit was to assess various aspects such as consumer behavior, mall infrastructure, tenant mix, and overall ambiance.
8.	ECONOMICS	1. Prepare a PPT on these two topics:

		i. The economics consequence of war.
		ii. Important of statistics in formulation of social welfare policies.
9.	**GEOGRAPHY**	1. Make a PPT from fundamental geography 2. Make PPT from environmental geography (Select one chapter from each, you like the most) * At least 25 slides required for each PPT.
10.	**COMPUTER SCIENCE**	Q1. Which part interprets program instructions and initiate control operations? Q2. Define primary memory. Q3. What is RAM? Why it is called as volatile memory? Q4.Expand EEPROM Q5. What is the difference between data and information? Q6. Mention any two limitations or weaknesses of a computer. Q7. What is booting? What are the types of booting? Q8. What are the basic units of computer? Give two names of sub-units of CPU and also give the functions of each unit. Q9. Do as directed: (a) Convert Decimal number 78451 to its Binary equivalent. (b) Convert Binary number 101101001 to its decimal equivalent. (c) Convert Octal number 32170 into its Binary equivalent. (d) Convert Hexadecimal number ACE34 into its decimal equivalent. (e) Convert Binary number 11100000111 to its hexadecimal equivalent. Q10. Write about Android operating system.
11.	**I. P. (065)**	Artificial Intelligence Tools like Power BI etc. Q. 1 - What is Power BI? Q. 2 - Name some Artificial Intelligence tools? Q. 3 - What are different software for Artificial Intelligence? Q. 4 - Artificial Intelligence Tools has become a buzzword in the field of Information Technology and Computer Science. Search more about AI Tools with the help of internet, newspaper and computer magazines. Make a PowerPoint presentation on the topic – Development and Advantages of Artificial Intelligence Tools. Set a beautiful background. Apply nice formatting and animation effects on it.
12.	**HINDI**	1 dof;=h ehjk ij vk/kkfjr ,d MkD;wesaVah ohfM;ks cukdj esy dhft,A 2 eq a'kh iz sepan th dk thou ifjp;] dk;Z'kSyh] jpuk,¡ ,oa muds l a?k'kZ dk o.kZu dhft,A ¼yxHkx nl ist esa½
13.	**PHYSICAL EDUCATION**	1. Write Definition of Physical Education? How Physical education transform the health of the Nation? 2. Describe how Technology is helpful in development of sports. 3. Write in details about aims & objectives of Physical Education. 4. Draw the diagram of three Yoga Asans of your choice and give details of therapeutic use of the Asans. 5. Explain the Objectives of Khelo India Programme.