

K.C. INTERNATIONAL SCHOOL

Jalpura, Sector 01, Greater Noida West, G.B Nagar, U.P. 201306 GRADE: 12(A) SUMMER VACATION HOLIDAY HOMEWORK (2025-26)

1	English						
-		1-Prepare the project file on given topics.					
		(I)Case study and real life of Child Labour (Roll no 1-8)					
		(I) Case study and real file of Clinic Labour (Koll 10.1-6) (II) Role of Antarctica in climate regulations and impact of human activities on					
		Environment (9-16)					
		(III)Overcoming fearA study of courage(17-24)					
		(IV)The Champaran movement A fight for justice in India (25 -onwards)					
		(1 v) The Champaran movementA right for justice in mula. (25 -onwards)					
		2-Read the drama 'On the Face of it' Write the raview and dialogue of it					
		2-Read the drama On the Face of it, write the review and dialogue of it.					
		A Povise the UT 1 syllebus					
		4-Revise the OTT Synabus.					
2	Physics	1) A liquid drop has 20 access electrons. Calculate the charge on the liquid drop.					
2) can an object have a charge of 2.8×10^{-18} coulomb? Justify your answer							
		3) A piece of polythene is rubbed wool and it has been found to acquire a negative					
		charge of $3x \ 10^{-7}$ coulomb. (1) How many electrons are transferred from wool					
		to piece of polythene? (2) Is there a transfer of mass from wool to polythene?					
		If yes, how much?					
		4) Two point charges each of 1 coulomb separated by 1 m distance experience a					
		force of $9x \ 10^9$ Newton. How much force is experience by them if they are					
		immersed in water, keeping the distance of separation between them same?					
		Dielectric constant for water= 80					
		5) The identical charges each of 1 micro coulomb are placed at the corners of a					
		equilateral triangle of side 10 cm. calculate the electric field intensity at the					
		geometric centre of the triangle					
		6) An electric dipole with dipole moment $3x \ 10^{-8}$ Cm placed with its axis making					
		an angle of 30° with a uniform electric field, experience is a torque of 1.2x 10°					
		Newton. Calculate magnitude of electric field					
		7) An electric dipole consists of two opposite charges each of magnitude 8nc					
		separated by 8 cm. The dipole is placed in an external electric field of 5 x 10^5					
		N/c. What maximum torque will the field exert on the dipole?					
		8) Two large parallel thin metallic plates are placed close to each other. The plates					
		by Two farge parametrial interaction places are placed close to each other. The places have surface charge densities of enposite sign and of magnitude 20 x 10^{-12} C/					
		may estimate that ge densities of opposite sign and of magnitude 20 x 10 ° C/ m^2 . Calculate electric field intensity (1) in the outer region of the plates and (2)					
		In . Calculate electric field intensity (1) in the outer region of the plates and (2) in the intensity massion between the plates.					
		in the interior region between the plates.					
		 9) In which orientation, a dipole placed in a uniform electric field is (1) stable (2) unstable quilibrium? 					
		(2) unstable equilibrium?					
		10) Write relation between electric flux and electric intensity					
		11) When electric flux through a close surface is negative, what type of charge it					
		contains?					
		12) What is the electric flux through a cube of side 1 cm which encloses an electric					
		dipole?					

		 13) A point charge q is rotated around a charge Q in a circle of radius r. what is the work done? 14) Can we say that the SI unit of absolute permittivity is farad per meter? 15) What is the value of capacitance of the earth? 16) What is the electrostatic potential due to an electric dipole at an equatorial point?
3	Mathematics (CORE)	1. Copy the lab activities without reading in your mathematics lab activity notebook. Activity no 2,5,13,14,15,16,21,22,26,27 only. 2. Solve the below mentioned assignment 1. Check the injectivity and surjectivity of the function f: N → N, given by f(x) = x ³ . 2 A relation R in the set A = {5, 6, 7, 8, 9} is given by R = {(x, y) : x - y is divisible by 2}. Write R in roster form and prove that R is an equivalence relation. Also, find the elements related to element 7. 3 Let A = ℝ - {3} and B = ℝ - {1} be two sets. Prove that the function f : A → B given by f(x) = $\left(\frac{x-2}{x-3}\right)$ is onto. Is the function f one-one ? Justify your answer. 4 (a) A function f: A → B defined as f(x) = 2x is both one-one and onto. If A = {1, 2, 3, 4}, then find the set B. 5 A relation R is defined on a set of real numbers ℝ as R = {(x, y) : x . y is an irrational number}. Check whether R is reflexive, symmetric and transitive or not. 6 Let N be the set of natural numbers and R be the relation in N defined as R = {(a, b) : a = b - 2, b > 6}. Then (A) (2, 4) ∈ R (B) (3, 8) ∈ R (C) (6, 8) ∈ R (D) (8, 7) ∈ R. 7 Prove that the function f is curication, where find the set find
		$f(n) = \begin{cases} \frac{n+1}{2}, & \text{if } n \text{ is odd} \\ \frac{n}{2}, & \text{if } n \text{ is even} \end{cases}$ Is the function injective? Justify your answer.



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		(I) How many relations are possible from B to G?				
		(II) Among all the possible relations from B to G, how many functions can be formed from B to G ?				
		(III) Let $R : B \to B$ be defined by $R = \{(x, y) : x \text{ and } y \text{ are students of the } \}$				
		same sex}. Check if R is an equivalence relation.				
		OR				
		(III) A function $f: B \rightarrow G$ be defined by $f = \{(b_1, g_1), (b_2, g_2), (b_3, g_1)\}.$				
		Check if f is bijective. Justify your answer.				
		13				
		Let $A = \{1, 2, 3, \dots, 9\}$ and R be the relation in A x A defined by (a, b) R (c, b) if				
		a + d = b + c for (a, b), (c, d) in A × A. Prove that R is an equivalence relation and				
		a + u = v + c for (a, v), (c, u) in A × A. Prove that K is an equivalence relation and also obtain the equivalent class [(2, 5)]				
		also obtain the equivalent class [(2, 5)].				
4	Biology	Male hormone is produced in the testis by cells of				
-	Diology	a) Sertoli				
		b) Epithelial				
		a) Spormotocutos				
		d) Landia				
		d) Leydig				
		2. Seminal plasma in human males is rich in				
		a) fructose and calcium				
		b) glucose and calcium				
		c) DNA and testosterone				
		d) ribose and potassium				
		3. The part of Fallopian tube closest to the ovary is				
		a) Isthmus				
		b) Infundibulum				
		c) Cervix				
		d) ampulla				
		4. Which of the following depicts the correct pathway of transport of sperms?				
		a) Rete testis \rightarrow Efferent ductules \rightarrow Epididymis \rightarrow Vas deferens				
		b) Rete testis \rightarrow Epididymis \rightarrow Efferent ductules \rightarrow Vas deferens				
		c) Rete testis \rightarrow Vas deferens \rightarrow Efferent ductules \rightarrow Enididymis				
		d) Efferent ductules \rightarrow Rete testis \rightarrow Vas deferens \rightarrow Enididymis				
		5 Capacitation occurs in				
		a) Enididymis				
		a) Epididyiilis b) Vas deferens				
		c) Female reproductive tract				
		d) Poto tostis				
		6.Middle piece of mammalian sperm possesses				
		a) Mitochondria and centriole				
		b) Mitochondria only				
		c) Centriole only				
		d) Nucleus and mitochondria				
	1	a) mueleus una introchonaria				

		7. After ovulation Graafian follicle regresses into					
		a) corpus artesia					
		b) corpus callosum					
		c) corpus luteum					
		d) corpus albicans					
		u) corpus aioicans					
		8. Mature male gametophyte is					
		a) One-celled					
		b) Two-celled					
		c) Three celled					
		d) None of these					
		9. The point of attachment of funiculus to the body of ovule is					
		a) Placenta					
		b) Micropyle					
		c) Integument					
		d) Hilum					
		10. The gynoecium of Michelia is:					
		a) Monocarpellary					
		b) Multicarpellary, Apocarpous					
		c) Multicarpellary, Syncarpous					
		d) Bicarpellary, Syncarpous					
		11. Make a flow chart on agents of pollination.					
		12. What are the floral rewards for insects?					
		13. Write a short note on outbreeding devices.					
		14. Define the following terms:					
		a) Spermatogenesis					
		b) Spermiogenesis					
		c) Spermiation					
		d) Cleavage					
		e) Blastocyst					
5	Chemistry	1. Make the project file on the topics which were allotted to you.					
		2. Solve the assignment in your notebooks which will be shared in the					
		WhatsApp group					
6	Computer	Class 12 CBSE Computer Science (083) that covers Data Structures: Stack, Python-1,					
		and Python-2 topics:					
		Holiday Homowork Assignment Class 12 CBSE Computer Science (082)					
		Holiday Homework Assignment – Class 12 CBSE Computer Science (083)					
		1 opic: Data Structures - Stack Python-1 & Python-2					
		UDJective: To enhance understanding of Python programming and Stook data atmustures through					
		rectical implementation and analytical tasks					
1		practical implementation and analytical tasks.					
		Part A: Python - 1 & 2 (Theory + Practical)					
		1 art A. r ymon - 1 & 2 (11001y + r1acucal)					

	Python Theory Worksheet
	Write short notes on the following topics:
	Mutable vs Immutable data types
	Scope of variables in Python
	Functions vs Modules
	File handling modes in Python
	Difference between list, tuple, and dictionary
	Python Coding Practice
	Write a Python program to:
	Count the frequency of words in a text file
	Create a function that calculates factorial recursively
	Read a file and display all lines that start with a vowel
	Accept a list of integers and return a list with only even numbers.
	Topic loop program and function programs Loops and Functions in Python:
	Holiday Homework – Class 12 CBSE Computer Science (083) Topic: Loops and Function Programs in Python Part A: Loop-Based Programs (For, While, Nested Loops)
	Print patterns using loops Write Python programs to print the following patterns:
	a.
	*

	b.
	1
	12
	Mathematical Programs using Loops
	a. Program to check if a number is prime.

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		b. Program to print the Fibonacci series up to n terms.				
		c. Program to find the factorial of a number using a loop.				
		Menu-driven loop program				
		Create a menu-driven program using a while loop for a basic calculator (Add, Subtract,				
		Multiply, Divide).				
		Part B: Function-Based Programs				
		Basic Function Examples				
		a. Function to calculate the square of a number.				
		b. Function to check if a number is even or odd.				
		c. Function to return the larger of two numbers.				
		Function with List Arguments				
		a. Function to return the sum of elements in a list.				
		b. Function to remove duplicates from a list.				
		Function with Recursion				
		a. Recursive function to calculate factorial.				
		b. Recursive function to find nth Fibonacci number.				
		Part A: Python - 1 & 2 (Theory + Practical)				
		Python Theory Worksheet				
		Write short notes on the following topics:				
		while short notes on the following topics.				
		Mutable vs Immutable data types				
		Scope of variables in Python				
		Functions vs Modules				
		File handling modes in Python				
		Difference between list, tuple, and dictionary				
7	Dhysical					
/	rilysical	1. Revise 1, 2 and 5 chapter.				
	education 2. Write about the causes of diabetes and aasans for its prevention.					
		5. \Box Study in detail about Temate athletes triad				
		4. \Box Make your physical education practical file.				
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SYLLABUS OF UNIT TEST - 1(2025-26)

CLASS-XIIthA

	Unit- I: Electrostatics
	Chapter- 1; Electric Charges and Fields
PHYSICS	Chapter- 2; Electrostatic Potential and
	Capacitance Unit 2: Current Electricity
	Ch-1; Solutions
CHEMISTRY	Ch-2; Electro chemistry
CHEMISTRI	Ch-3; Chemical kinetics
	Ch-1 Sexual Reproduction in Flowering plant
	Ch-2 Human Reproduction
BIOLOGY	Ch-3 Reproductive health

Literature:

	 The last lesson Lost spring Third level The tiger king My mother Keeping quiet 	
ENGLISH	Writing skills	
	1- Notice writing	
	2- Job application 3- Letter to the Editor	
	4- Article writing	
	5- Report writing	
MATHEMATICS Ch.1; Relations and Functions		
	Ch-3 Matrices	
	Ch 4 Determinants	
	Chapter- 1 Management of sport in events	
FDUCATION	Chapter- 2 Children and women in sports Chapter- 3 Yoga as preventive measure for lifestyle disease	
EDUCATION	Chapter- 5 Toga as preventive measure for mestyle disease	
COMPUTER	Unit1; Python 1	
SCIENCE	Unit2; Python 2	



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JALPURA, SECTOR-1, GREATER NOIDA WEST, G. B NAGAR, U.P 201306 **DATESHEET FOR UNIT TEST-1 EXAMINATION (2025-26)**

DAY/DATE	IX	X	XI	XII
07-07-2025 MONDAY	ENGLISH LANGUAGE AND LITERATURE	SCIENCE	ENGLISH CORE	CHEMISTRY / ECONOMICS
08-07-2025 TUESDAY	SOCIAL SCIENCE	ENGLISH LANGUAGE AND LITERATURE	PHYSICS / HISTORY / BUSINESS STUDIES	ACCOUNTANCY
09-07-2025 WEDNESDAY	MATHS	HINDI	PHYSICAL EDUCATION	ENGLISH CORE
10-07-2025 THURSDAY	HINDI	SOCIAL SCIENCE	MATHS/BIOLOGY/POLITICAL SCIENCE	COMPUTER SCIENCE / HINDI / SOCIOLOGY
11-07-2025 FRIDAY	SCIENCE	INFORMATION TECHNOLOGY	CHEMISTRY / ECONOMICS	PHYSICS / HISTORY / BUSINESS STUDIES
14-07-2025 MONDAY	INFORMATION TECHNOLOGY	MATHS	COMPUTER SCIENCE / HINDI / SOCIOLOGY	PHYSICAL EDUCATION
15-07-2025 TUESDAY			ACCOUNTANCY	MATHS / BIOLOGY / POLITICAL SCIENCE

NOTE:

- · Wearing of school uniform and ID card is mandatory to write the exam.
- In case of non-clearance of fees students shall not be allowed to appear in exam.
- Dates which are not mentioned in the date sheet will be considered as holidays.
- Use of any kind of unfair means during examination will lead to cancellation of the paper. ۰
- You must have admit-card for examination. Exam will not be rescheduled for any reason for any student. Medical certificate will be required in case of medical leave.
- PTM will be held on 26th July, 2025. .

EXAMINATION Adio

Examination Department

Co-ordinator

