# APS INTERNATIONAL SCHOOL, UJHANI
# SUMMER HOLIDAY HOMEWORK (2024-25)
# CLASS- XI (PCM)

## SUBJECT- ENGLISH

English core Project work

A. Students can choose a topic on which to do their research/ interview, e.g. a student can choose the topic : " Evolving food tastes in my neighbourhood" or "Corona pandemic and the fallout on families." Read the available literature.

B. The student can conduct interviews with a few neighbours on the topic. For an interview, with the help of the teacher, student will frame questions based on the preliminaryresearch/background.

C. The student will write an essay/ write up / report etc. up to 1000 words on his/her researchand submit it.

D. He/ She will take a viva on the research project. The project can be done in individually or inpairs/ groups)

E. Students can listen to podcasts/ interviews/radio or TV documentary on a topic and prepare a report countering or agreeing with the speakers. Write an 800 - 1000 words report and submit.

F. Students can create their own video/ Audio, after writing a script.

F. Students can write, direct and present a theatrical production, /One act play.

## SUBJECT- PHYSICS

1- Prepare a PowerPoint presentation on the Biography of Scientist & His/Her Contribution in Science.

2- Solve the worksheet given in class.

## SUBJECT- CHEMISTRY

- Students advice to prepare working model on the following topics.
a) X-rays seattering
b) Rutherford atomic model
c) Photo electric effect
d) Production & Hydrogen/Oxygen gas
e) Steam distillation
f) Adsorption Chromalography

Students are adviced to prepare one investigatory project report for class xi and one working model from above topics. For class xi.

Note: Complete classwork upto second unit with NCERT exercises.

## SUBJECT- MATHEMATICS

Activity-1 To find the number of subset of a given set verify that If a set has 'n' number of elements, then the total number of subsets is $2^n$.

Activity-2 To distinguish between a relation and a function.

Note: Practice five questions daily of chapter 1,2 & 3.

## SUBJECT- HINDI

1. हरिवंश राय बच्चन की संक्षिप्त जीवनी, कृतियाँ व साहित्यिक योगदान के बारे में लिखिए। 'आत्म परिचय' में हालावादी दर्शन की झलक मिलती है। 'हालावाद' क्या है? संक्षेप में लिखिए।
2. समय के महत्व को दर्शाते हुए 120 शब्दों में एक अनुच्छेद लिखिए।
3. आधुनिक युग की मीरा किसे कहा जाता है? उनका संक्षिप्त परिचय, रचनाएँ व साहित्यिक योगदान के बारे में लिखिए।

## SUBJECT- COMPUTER SCIENCE NEW

NOTE: Do the following in your notes copy.

### WEEK 1

1. Name the software required to make a computer functional. Write down its two primary services.
2. What is the need for secondary memory?
3. What is the need of RAM? How does it differ from ROM?
4. Arrange the memory units from smallest to biggest: Giga Byte, Tera Byte, Mega Byte, Byte, Peta Byte, Kilo Byte.
5. What is the difference between an interpreter and a compiler?
6. Write short notes on Assembler, Compiler and Interpreter.
7. Identify the category (system, application, programming tool) of the following software:
8. Compiler b) Assembler c) Ubuntu d) Text editor
9. What do you understand by flash memory?
10. What is computer hardware? Give any two examples.
11. The computer follows the IPO cycle that refers to Input-Performance-Output. (True/False)

### WEEK 2

1. What is base or radix of the number system? Give the radix of all number system.
2. Mention the different types of number system.
3. Write the following conversions.

(i) $(514)8 = (?)10$

(ii) $(4D9)16 = (?)10$

(iii) $(220)8 = (?)2$

(iv) $(11001010)2 = (?)10$

(v) $(76F)16 = (?)10$

(vi) $(1010111)2 = (?)10$

4. How does computer understand the following text? (hint: 7 bit ASCII code).

(i) HOTS

(ii) Main (iii) CaSe.

5. Express the following octal numbers into their equivalent decimal numbers.

(i) 145

(ii) 6760

(iii) 455

(iv) 10.75

6. Encode the word 'COMPUTER' using ASCII and convert the encoded value into binary values.

7. Add $110011_{(2)}$ to $111000_{(2)}$.

8. Convert $2567_{(10)}$ to binary, octal and hexadecimal.

9. Complete the sequence of following octal numbers : 525, 526, 527, .............. , .............. , .............. .

10. Write full form of ASCII and ISCII.

### WEEK 3

Complete the following:

(a) $A + 0 = $ ___

(b) $A + 1 = $ ___

(c) $A \cdot 0 = $ ___

(d) $A \cdot 1 = $ ___

2. What is the dual of $1+1=1$ ?

3. Draw the equivalent logic circuit for the following Boolean Expression: $A.(B+C')$

4. Name the law shown below and verify it using a truth table:

$A+B.C=(A+B).(A+C)$

5. Name the following law and verify them using a truth table:

a. $x + x' = 1$

b. $x + y = y + x$

| | c. $x + (y + z) = (x + y) + z$<br>6. Which gate returns true if both inputs are similar otherwise false.<br>7. Which of the following gate is also known as an inverter.<br>8. Draw the truth table for XOR and OR gate.<br>9. There are three fundamental operations in Boolean algebra: addition, multiplication, and inversion. Each of these operations has an equivalent logic gate function and an equivalent relay circuit configuration. Draw the corresponding gate and ladder logic diagrams for each<br>10. A riddle based on Boolean logic You are walking and arrive at a dead end with 2 doors. You must get past this, but you are told that only one door is correct, leading you on your path and the other door is not correct and leads to something perilous. In front of each door is a guard. One guard always tells the truth and the other always lies. You may ask one of the guards one question, and then you must pick your door and go through it. What question do you ask, which door do you pick based on the answer, and why? |
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## SUBJECT- PHYSICAL EDUCATION

1. SAI Khelo Fitness Test
2. 1 Major game (History of game, Terminology, Court Measurement, Rules & Regulations)
3. Practice Yoga Asanas during the summer holidays (2 sitting, 2 laying, 2 standing)= On 21 of June submit the video of these asanas while practicing.
4. Practice Surya Namaskar during the vacations Make a video of Surya Namaskar submit it by 21 of June.

## SUBJECT- FINE ART

- Five still life with pencil shading
- five painting according to your choice with water colour.

## SUBJECT- HINDUSTANI MUSIC VOCAL

दीर्घ उत्तरीय प्रश्न-

1. तीनताल का परिचय विशेषाए लिखते हुए तीनताल की ठाह लिखिए।
2. तानूपरे का सचित्र वर्णन कीजिए।
3. पं विष्णु दिगम्बर **पलुस्कर** का जीवन परिचय लिखि।
4. तानसेन का संगीत में योगदान लिखिए।
5. **तीनताल** की दुगुन तिगुन, चौगुन **लयकारी** सम से सम तक लिखिए।
6. पाठ्यक्रम में से किसी भी ताल की दुगुन, तिगुन चौगुन की **लयकारी** एक **आवर्तन** में लिखिए।

अतिलघु प्रश्न-

1. तानपूरे के किन्ही पाँच अगों के नाम लिखिए।
2. समपदी ताल का नाम बताइये।
3. सम तथा खाली का चिह्न लिखिए।
4. तीनताल की दुगुन, तिगुन तथा चौगुन एक आवर्तन मे कितनी मात्राओं मे आएगी।
5. तानसेन के पुत्र तथा पुत्री के नाम लिखिए।
6. तानसेन का **विवाह** किसके साथ हुआ।
7. पं विष्णु नारायण भातखण्डे का जन्म कब हुआ था।
8. कृमिक पुस्तक मालिका के लेखक कौन है?
9. पं. विष्णु नारायण भातखण्डे के शिष्यों के नाम लिखिए।
10. राग मियां मल्हार, दरबारी कान्हणा की रचना किसने की।
11. त्रिताल तथा आदिताल में मात्राओं की संख्या बताइये।
12. पं विष्णु दिगम्बर पतुस्कार ने सितार की शिक्षा किससे ली।
13. बन्द बोलो की तबले की ताल का नाम लिखिए।
14. विष्णु दिगम्बर पलुस्कार के द्वारा रचित पाँच ग्रन्थों के नाम लिखिए।
15. तानसेन की मृत्यु कब हुई?

प्राजक्ट कार्य-
तबले का चित्र चार्ट पेपर पर बनाइये।