Economics

Revision all taught lessons i.e Introduction, consumer's behavior and demand, utility analysis: cardinal utility and ordinal utility, production possibility curve and marginal opportunity cost, indifference curve.

Solve P.T.1 question paper. 20:27

Class XI English Core

Autumn break Holiday Homework

1. Learn the syllabus covered upto date.

2. Paste and solve all the questions of Periodic Test 1 Question Paper.
3. Complete your

Art-Integrated Project Work.
4. Read "The Address" by Marga Minco and write its Summary. 23:18

GEOGRAPHY

1. **COMPLEAT ART INTEGRATED PROJECT TOPIC SCRUPTURES AND MONUMENTS OF ANDHRA PRADESH.**

2. **DO CH 1,2 IN PRACTICAL FILE.**

3. **LEARN CH 4,7 FROM BOOK 1 AND CH 2 FROM BOOK 2.**

4. **DO MAP PRACTICE.**

5. **SOLVE PT 1 IN NOTE BOOK.**

कक्षा 11 हिंदी
शरदावकाश गृहकार्य

1 पाठ विदाई संभाषण के प्रश्नोत्तर लिखें तथा पढ़े गए सभी पाठ अच्छी तरह याद करें।

2 सितम्बर माह में हुई आवधिक परीक्षा 1 का प्रश्न पत्र अपनी अभ्यास पुस्तिका में हल करें।

3 कक्षा में पढाए गए सभी पाठों का कार्य पूरा करें , सुलेख कार्य का अभ्यास करें।

4 अभिव्यक्ति और माध्यम के प्रश्नोतर अलग कापी लेकर उसमे लिखें।

5 कविता 'घर की याद से सम्बंधित कवि परिचय तथा सुलेख कार्य करें।

23:19 ✓✓

HOLIDAYS HOMEWORK OF HISTORY

CLASS = 11 C

1.Read and understand lesson no . 5 and 6 of NCERT

2.Make a portrait of Sardar Vallabh Bhai Patel and also write something about him .

3.Write briefly about INA (Indian National Army) in a project file.

TRIGONOMETRIC FORMULA

TRIGONOMETRIC IDENTITIES

$sin^2\theta + cos^2\theta = 1$

$cosec^2\theta - cot^2\theta = 1$

$sec^2\theta - tan^2\theta = 1$

$1^0 = \frac{\pi}{180} radian$

$1\ radian = \frac{180}{\pi} degree$

Quadrants	I	II +	III +	IV +
T-Ratios θ	All +	Sin θ Cosec θ	Tan θ Cot θ	Cos θ sec θ

AFTER SCHOOL TO COLLEGE

θ	0	$30^0\ (\frac{\pi}{6})$	$45^0\ (\frac{\pi}{4})$	$60^0\ (\frac{\pi}{3})$	$90^0\ (\frac{\pi}{2})$	180^0
$sin\theta$	0	$\frac{1}{2}$	$\frac{1}{\sqrt{2}}$	$\frac{\sqrt{3}}{2}$	1	0
$cos\theta$	1	$\frac{\sqrt{3}}{2}$	$\frac{1}{\sqrt{2}}$	$\frac{1}{2}$	0	-1
$tan\theta$	0	$\frac{1}{\sqrt{3}}$	1	$\sqrt{3}$	∞	0
$cosec\theta$	∞	2	$\sqrt{2}$	$\frac{2}{\sqrt{3}}$	1	∞
s						
c						

$\sin(A+B) = \sin A\ cosB + cosA\ sinB$

$\sin(A-B) = \sin A\ cosB - cosA\ sinB$

$\cos(A+B) = \cos A\ cosB - sinA\ sinB$

$\cos(A-B) = \cos A\ cosB + sinA\ sinB$

$$\tan(A+B) = \frac{tanA + TanB}{1 - tanA\ tanB}$$

$$\tan(A-B) = \frac{tanA - TanB}{1 + tanA\ tanB}$$

$$sinC + sinD = 2\sin\left(\frac{C+D}{2}\right)\ cos\left(\frac{C-D}{2}\right)$$

$$sinC - sinD = 2\cos\left(\frac{C+D}{2}\right)\ sin\left(\frac{C-D}{2}\right)$$

$$cosC + cosD = 2\cos\left(\frac{C+D}{2}\right)\ cos\left(\frac{C-D}{2}\right)$$

$$cosC - cosD = -2\sin\left(\frac{C+D}{2}\right)\ sin\left(\frac{C-D}{2}\right)$$

$2\ sinA\ cosB = \sin(A+B) + \sin(A-B)$

$2\ cosA\ sinB = \sin(A+B) - \sin(A-B)$

$2\ cosA\ cosB = \cos(A+B) + cos(A-B)$

$2\ sinA\ sinB = \cos(A-B) - cos(A+B)$

Negative angles

$sin(-\theta) = -sin\theta$ $\qquad$ $cosec(-\theta) = -cosec\theta$

$tan(-\theta) = -tan\theta$ $\qquad$ $cot(-\theta) = -cot\theta$

$cos(-\theta) = cos\theta$ $\qquad$ $sec(-\theta) = sec\theta$

MULTIPLE ANGLES

$$\sin 2\theta = 2\sin\theta\cos\theta = \frac{2\tan\theta}{1+\tan^2\theta}$$

$$\cos 2\theta = \cos^2\theta - \sin^2\theta = 2\cos^2\theta - 1 = 1 - 2\sin^2\theta = \frac{1-\tan^2\theta}{1+\tan^2\theta}$$

$$\tan 2\theta = \frac{2\tan\theta}{1-\tan^2\theta}$$

$\sin3\theta = 3\sin\theta - 4\sin^3\theta$

$\cos3\theta = 4\cos^3\theta - 3\cos\theta$

$$\tan3\theta = \frac{3\tan\theta - \tan^3\theta}{1-3\tan^2\theta}$$

$1 - cos2\theta = 2sin^2\theta$

$1 - cos\theta = 2sin^2\theta/2$

$1 + cos2\theta = 2cos^2\theta$

$1 + cos\theta = 2cos^2\theta/2$

GENERAL SOLUTIONS

$sin\ \theta = 0 \Rightarrow \theta = n\pi\ \ ; n\epsilon\ Z$

$tan\ \theta = 0 \Rightarrow \theta = n\pi\ \ ; n\epsilon\ Z$

$cos\ \theta = 0 \Rightarrow \theta = (2n+1)\frac{\pi}{2}\ ; n\epsilon\ Z$

$\sin\theta = \sin\alpha\ \Rightarrow\ \theta = n\pi + (-1)^n\ \alpha : n \in Z$

$\cos\theta = \cos\alpha\ \Rightarrow\ \theta = 2n\pi \pm \alpha : n \in Z$

$tan\theta = \tan\alpha\ \Rightarrow\ \theta = n\pi + \alpha : n \in Z$

Computer system and organization:

1) Define computer.
2) How does an ALU work?
3) Briefly explain the working of a control unit.
4) Define hardware and software.
5) What is an operating system? Explain types of OS.
6) Specify the measuring units of memory.
7) Differentiate between RAM and ROM.
8) Name any 4 input devices and output devices.
9) Differentiate between Interpreter and compiler.
10) List the differences between a CD and A DVD.
11) List and briefly explain all the components of a CPU.
12) Compare data and information.
13) Compare volatile memory and nonvolatile memory.
14) Discuss the classification of digital computers.

Features of Python

1) What is python?
2) Why is python interpreted?
3) Who developed python?
4) What is IDLE?
5) Write features of python.
6) In how many modes python IDLE works?
7) Python is a free and open source language. What do you understand by this feature?
8) What is pseudo code? What is flow chart?
9) Write a pseudo code to calculate area and perimeter of rectangle.
10) Differentiate between Interactive mode and scripting mode.

Python Fundamentals:

1) Define Token. Name different types of it.
2) Differentiate between Keyword and Identifiers.
3) Write Identifier forming rules.
4) What is variable. What are the different components of a variable.
5) Is python case sensitive? What is meant by the term 'case-sensitive' in programming language.
6) Differentiate between mutable and immutable object.
7) Ritu is confused between 3*2 and 3**2. Help her to know the difference between the twoexpressions.
8) How many types of string are supported in python?
9) Differentiate between explicit and implicit type conversion.
10) What is None in python?
11) Identify the types of the following literals:
23.789, 23789 , True, {4:'four', 5:'five'}, 'True', (1,2,3), None, [100,200,300]
12) Find the output generated by the following:

(1)	(2)
x=2 y=3 x+=y print(x,y)	x=8 y=2 x+=y y-=x print(x,y)

x = 2
y = 3
x + = y

3) a=5
b=10
a+=a+b
b*=a+b
print(a,b)

4) p=10
q=20
p*=q//3 q+=p+q**2
print(p,q)

13) differentiate between Expression and statement in python?

14) Write the output of the following:x,y=2,6
x,y=y,x+2
print(x,y)

15) What output will be produced by the following code:
A,B,C,D = 9.2,2.0,4,21
print(A/4)
print(A//4)
print(B**C)
print(A%C)

16) Evaluate the following expression:a.
(2+3)**3-6/2
b. 12*3%5+2*6/4

17) Identify the invalid variable names from the following giving reason for each:Group, if, total marks, S.I. , volume, tot_strength, #tag, tag$, 9a,for

18) Write python expression equivalent to the following:

a. $A = P(1 + \frac{r}{n})^{nt}$ b. $\sqrt{a} + \frac{a+2}{b}$

19) What are operators? Give some examples of unary and binary operators.

20) Write a code to calculate area of triangle. Accept input from the user.

21) Write a python code to accept radius of a circle nad print its area.

22) Write a python program that accepts marks in 5 subjects and outputs averagemarks.

23) Write a code to find area and perimeter of rectangle.

24) Write a code to find Simple Interest and Compound interest.

25) Write a code accept temperature in Celcius and covert it into Fahrenheit.