

JB ACADEMY, AYODHYA
HOLIDAY HOME WORK
CLASS XI- SCI

HINDI:

1. वार्षिक परियोजना हेतु शीर्षक का चयन कर प्रारम्भिक भाग पूर्ण करें।
2. 'देश के प्रति हमारा उत्तरदायित्व' अथवा 'शांति-सद्भावना' विषय पर गीत रचना। (अभ्यास-पुस्तिका में, न्यूनतम 12 पंक्तियाँ)

ENGLISH:

Digital Time Capsule (Portfolio)

- 1) Letter to Future Self
- 2) No Screen Day – Excerpt Writing
- 3) 5 Current Trends (in any field)
- 4) Fav Song / Movie / Book (Review)
- 5) Biggest World Issue (A Brief)
- 6) Towards Personal Goals

MATHS:

Applied Mathematics -

Project given on the chapter Quantitative aptitude.

4 groups are made of 5 students each with one leader allotted.

Group 1- clock

Group 2- calendar

Group 3- time, work and distance

Group 4- seating arrangement.

Each group has to go through the concept thoroughly, make a project file, prepare a questionnaire and later on every Thursday (block period) when school reopens they have to do peer teaching.

Additionally, a worksheet has been given on the topic Relations as recently they have been taught this chapter.

PHYSICS:

1. Scientist biography for first quarter
2. Solve 10 numericals from chapter 1 and 2
3. Prepare a project synopsis of Physics.

CHEMISTRY:

1. Do the worksheet of Basic concepts.
2. Do the ncert questions of Basic concept.
3. Complete the observation sheet for an activity “ IMPORTANT CHEMICALS IN LIFE”

BIOLOGY:

1. Scientist Biography Q-1
2. Synopsis on project topic
3. Study chapter 8 Cell: The unit of life and prepare notes.

ECONOMICS (030)

1. Prepare the Economics Project File neatly and creatively on any one topic related to Indian Economy, Consumer Awareness, Budget, Sustainable Development, Digital Economy or Current Economic Issues.
2. Revise Chapter–1 “Introduction to Microeconomics” and Chapter–1 “Introduction to Statistics” thoroughly for the Quarter–1 Test scheduled on Monday.
3. Write an original article in about 200 words on any one of the following interesting topics:
 - “Economics in Everyday Life”
 - “Why Data is Called the New Oil?”
 - “Can Money Buy Happiness?”
 - “Digital India and Changing Lifestyle”
 - “Social Media and Consumer Behaviour”
 - “Importance of Statistics in Daily Life”
 - “Unlimited Wants but Limited Resources”
4. Observe any school activity such as morning attendance, sports selection, survey, election, feedback collection or examination result analysis. Identify whether the method used is Census or Sample method. Give reasons for your answer with suitable examples.

Yoga Skill Subject (841)

Prepare notes for given topics below

Part A : Unit I - Communication skill-

- Communication and introduction
- 7Cs of Communication
- Factors affecting communication
- Methods of communication

Part B : Units I - Introduction to Yoga and Yogic practices -

- Sukshama Vyayama
- Sthula Vyayama
- Surya Namaskar
- Basic Type of asana
- Common terminology used in yoga and their meaning. Introduction of yoga.
- Objectives of yoga
- Misconceptions of yoga

PSYCHOLOGY

1. “Psychology in Everyday Life” Scrapbook -

Students collect examples from newspapers, advertisements, movies, sports, or social media showing psychological concepts.

Include:

Emotions

Motivation

Learning

Intelligence

Stress

Behaviour changes

Task:

Paste pictures/cuttings and explain:

What behaviour is shown?

Which psychological concept is involved?

PHYSICAL EDUCATION (048)

Changing Trends & Career in Physical Education

Write about in your assignment copy.

1. Career options in Physical Education

Changing trends in sports (fitness, yoga, technology)

2. Olympic Movement

Write a short note on your assignment.

Ancient Olympic Games

Mathematics:

1) If

$A = \{1, 2, 3, 4, 5\}$ and $B = \{2, 4, 6, 8\}$, then $A \cap B$ is:

- A) $\{1, 3, 5\}$
- B) $\{2, 4\}$
- C) $\{6, 8\}$
- D) $\{1, 2, 3, 4\}$

2) If $n(A) = 20$, $n(B) = 15$, and $n(A \cap B) = 5$, then $n(A \cup B) =$

- A) 25
- B) 30
- C) 35
- D) 40

3) If $A = \{a, e, i, o, u\}$, then the set A represents:

- A) Consonants
- B) Prime numbers
- C) Vowels of English alphabet
- D) Natural numbers

4) If $A = \{1, 2, 3\}$, then the number of subsets of A is:

- A) 3
- B) 6
- C) 8
- D) 9

5) If $U = \{1, 2, 3, 4, 5, 6\}$ and $A = \{2, 4, 6\}$, then A^c is:

A) $\{1, 3, 5\}$

B) $\{2, 4, 6\}$

C) $\{1, 2, 3\}$

D) ϕ

6) Which of the following is an empty set?

A) Set of even prime numbers

B) Set of odd natural numbers

C) Set of natural numbers less than 0

D) Set of vowels

7) For any set A ,

A) $A \cup \phi = \phi$

B) $A \cap \phi = A$

C) $A \cup \phi = A$

D) $A \cap A = A^c$

8) If $A \subseteq B$ and $B \subseteq A$, then:

A) $A = B$

B) $A \neq B$

C) $A \cap B = \phi$

D) None of these

9) De Morgan's law is:

A) $(A \cup B)' = A' \cup B'$

B) $(A \cap B)' = A' \cap B'$

C) $(A \cup B)' = A' \cap B'$

D) $A \cup A' = A$

10) If $A = \{1, 2, 3, 4\}$ and $B = \{2, 4\}$, then $A - B$ is:

A) $\{2, 4\}$

B) $\{1, 3\}$

C) $\{1, 2, 3\}$

D) ϕ

11) A relation from set A to set B is a subset of:

A) $A \cup B$

B) $A \times B$

C) $A \cap B$

D) $B \times A$

12) Which of the following is a function?

A) One input has two outputs

B) Every input has exactly one output

C) Every output has one input only

D) No input has output

13) The domain of the function

$$f(x) = \frac{1}{x+2}$$
 is:

A) All real numbers

B) $x \neq -2$

C) $x = -2$

D) $x > 0$

14) The range of the function

$$f(x) = x^2$$
 is:

A) $y \in R$

B) $y \leq 0$

C) $y \geq 0$

D) $y < 0$

15) The graph of the modulus function $y=|x|$ is:

A) Circular

B) Straight line

C) V-shaped

D) Parabolic

16) For the signum function $f(x) = \text{sgn}(x)$ the value of $f(-7)$ is:

A) 1

B) 0

C) -1

D) 7

17) The graph of the signum function contains which values only?

A) All real numbers

B) Positive integers only

C) -1, 0 and 1

D) Fractions only

18) The vertex of the graph $y=|x-3|$ is:

A) (0, 0)

B) (3, 0)

C) (0, 3)

D) (-3, 0)

19) If $f(x) = 3x - 2$, then $f(4) =$

A) 10

B) 12

C) 14

D) 8

20) Which of the following is NOT a function?

A) $y = x^2$

B) $y = |x|$

C) $x = y^2$

D) $y = 2x + 1$

21) Draw the Graph of the following Functions with condition:

i) Identity ii) constant iii) polynomial iv) rational v) modulus

vi) signum vii) greatest integer

22) From the given Venn digram find:

a) from figure 1

(i) $(A \cap B)^c$

(ii) $A \cap B^c$

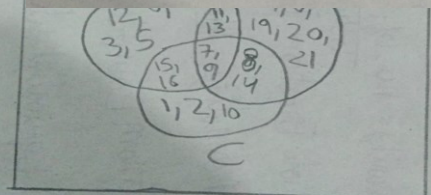
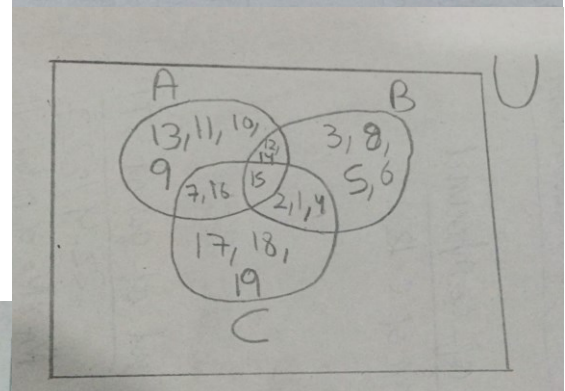
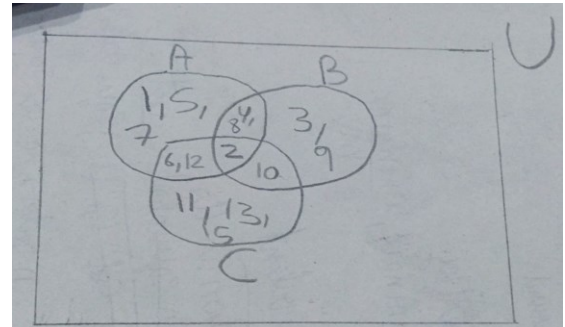
(iii) $(A - B)^c$

b) from figure 2

(i) $(A \cup B) \cap C$

(ii) $A \cap (B \cup C)$

(iii) $(A - B)^c$



c)from figure 3

(i) $(A \cap B)^c$

(ii) $A^c \cap B^c$ (iii) $(A \cup B) \cap C^c$

Hindustani Music vocal code (034)

- 1.Hand beat practice of Teen Tal with Dugun, Tigun And Chauguni Layakari .
- 2.Hand beat practice of Chartaal with Dugun, Tigun And Chauguni Layakari.
- 3.Hand beat practice of ektaal With Dugun , Tigun And Chauguni Layakari

Mass Media Studies

Create a video after visiting any heritage site. The video should be of good quality and after using some editing software, compile your shots and make it into one video with your voice over. The time limit of the video is 1minute 30 seconds. Also click several photos of it and make a collage of good and neat photos with your experiences added to that collage.

Political Science

Make a project file on recently conducted five State Assembly election -2026

Computer Science and AI- Do any certification course online on Python programming and submit its corticate.

Web Application: - Do online certification course on Canva and submit its certificate.

Food production

Make a short note on various types of allied areas in the hospitality industry with an example. Make it on a file-based thesis.