Dwarka International School

Session 2024-25

Class-XI- Science

Full of joy is early Summer,
Growth and warmth and golden light;
Every day is crowned with beauty,
Full of loveliness the night.
Dazzling sunshine brings the roses,
Fills the whole bright world with bloom;
Day and night rejoice together,
Banished now are doubt and gloom.
-Ellwood Roberts

Dear Students and Parents,

As we embark on the summer vacation, I want to remind you of the importance of continued learning and growth during this time away from school.

To ensure that our students remain engaged and academically stimulated, we have assigned summer vacation homework for all classes. This homework is designed to reinforce concepts learned throughout the year and to prepare students for the upcoming academic term.

I urge all students to approach their summer homework with diligence and responsibility. Completing these assignments will not only enhance your academic skills but also help you start the new school year on the right foot.

Parents, your support in encouraging your children to complete their summer homework is invaluable. By working together, we can ensure that our students continue to thrive academically.

GUIDELINES FOR STUDENTS

- Ensure timely submission of holiday homework after the reopening of the school.
- Try to incorporate creativity and innovation.
- Revise all the topics that have been taught by your subject teachers in the new session.
- UT 2 syllabus is provided at the end. Kindly revise.
- UT2 will commence from 22nd July 2024

Wishing everyone a productive and enjoyable summer break!

Warm regards.

DWARKA INTERNATIONAL SCHOOL
HOLIDAY HOMEWORK
CLASS-XI SCIENCE (2024-25)

ENGLISH

Q1. Read any one English newspaper daily and cut out the classified ads (2 each) from it and paste it in your English notebook.

● For sale ● Situation wanted ● Lost and found ● Situation vacant ● Matrimonial

Q2. Write a speech in about 120-150 words in your English notebook **on any two** of the following topics:

       a. Importance of AI in education
       b. Importance of Extracurricular Activities
       c. Importance of Integrity of Character
       d. Self-restraint is the key to a happy life
       e. Care for the Elderly is the need of the hour

Q3: Read the chapter," The Summer of White Beautiful Horse" from Snapshots and answer the following questions:

1. Bring out the contrast between the characters of Mourad and Aram.
2. 'This was the part that wouldn't permit me to believe what I saw'. What 'part' does the author hint at?
3. What traits of the Garoghlanian family are highlighted in the story?
4. What conflicting thoughts passed through the narrator's mind on seeing Mourad on a beautiful white horse?
5. "A suspicious man would believe his eyes instead of his heart". In what context was this observation made and by whom?
6. Did the boys return the horse because they were conscience-stricken or because they were afraid?

Q4: **PROJECT WORK- INTERNAL ASSESSMENT -10 marks**

Choose anyone of the given topics.

1. Women empowerment in India: Analysing the changing role of women in society through literature and real-life examples.
2. Impact of social media on youth: Discussing the positive and negative effects of social media on young people's lives.
3. Climate change: Understanding the causes, effects, and possible solutions to the issue of climate change.
4.Cultural diversity in India: Exploring the rich cultural heritage of India and its importance in promoting unity in diversity.

Research on the topic and on the basis of the research work done/ interviews conducted, present a detailed Project Report as per the format given. Add pictures and materialistic evidences to make it more creative and presentable.

FORMAT

a) Cover page (with school's name, Logo and session followed by student's name, class/sec., roll no., submitted by- and submitted to-)
b) Index
c) Certificate of completion
d) Action Plan
e) Material Evidences (eg. Questionnaire and photograph)
f) Project Report-Students' reflections and learning
g) Bibliography

Q5. Revise all the syllabus done in the Month of April and May

UNIT TEST-2 SYLLABUS
ENGLISH CORE-301
READING SKILLS
Case Based Passage
LITERATURE
SNAPSHOTS

CH- The Summer of the Beautiful White Horse by William Saroyan
PO-The Tale of Melon City by Vikram Seth
HORNBILL
CH-We're not Afraid to Die............by Alan East
PO-The Laburnum Top (Poem) by Ted Hughes
WRITING SKILLS
Speech Writing
GRAMMAR
Integrated Grammar

PHYSICAL EDUCATION

A. PROJECT WORK

Suggest topics

➢ Test for CWSN (any 4 items out of 27 items. One item from each component: Aerobic Function, Body Composition, Muscular strength & Endurance, Range of Motion or Flexibility)

➢ CWSN (Children With Special Needs – Divyang): Bocce/Boccia , Sitting Volleyball, Wheel Chair Basketball, Unified Badminton, Unified Basketball, Unified Football, Blind Cricket, Goal ball, Floor ball, Wheel Chair Races and Throws, or any other Sport/Game of choice

➢ Children with Special Needs can also opt any one Sport/Game from the list as alternative to Yogic Practices. However, the Sport/Game must be different from Test - 'Proficiency in Games and Sports'

*Record Project File shall include:

➢1: Fitness tests administration. (SAI Khelo India Fitness Test)

➢ 2: Procedure for Asanas, Benefits & Contraindication for any one Asanas for each lifestyle disease.

➢ 3: Anyone one IOA recognized Sport/Game of choice. Labelled diagram of Field & Equipment. Also, mention its Rules, Terminologies & Skills.

 Including games: Basketball,Handball,Hockey,Cricket, Kabaddi, Kho-Kho,Volleyball

Guidelines:

1. The project should be done on A4 SIZE sheet.
2. Hard copy of the Project file should be prepare individually in legible handwriting.
3. Project should not be less than 30 pages
4. Students should prepare the project on the topics allotted. It is as follows:

B. Make proper notes of the chapter 2 and 3

C. Revise all the chapter completed till may

D. UT-2 SYLLABUS

 Chapter-3 &4

MATHEMATICS

Topic: Art integration with Mathematics

Art and mathematics closely related in terms of reasoning skills and pattern recognition. Artists and Mathematicians, both use geometry in their work, including shapes, symmetry, proportions and measurements.

Keeping all this in mind students will do one of the following project according to their choices:

1. **Using Golden Ratio(1:1.618) create designs of different objects**
 (Ref ; https://99designs.com/blog/tips/the-golden-ratio/)

2. **Mandala Art**
(Image for ref : https://www.art-is-fun.com/how-to-draw-a-mandala)

3. **Draw a portrait using Mathematical formulas.**
(Image for ref : https://drive.google.com/file/d/1Hvtd9jDzFHfw6Miv61jB0Ta_5QGHjoVC/view)

4. **Make a project on either Chapter Sets or Relations and Functions**

   Please note the following Specifications for the above projects:
   (i)   Page 1 should have your name ,class, section and the PROJECT NAME
   (ii)   Page 2 should have Certificate where you recognise the people and thank them for the help they have given you in putting this project together.
   (iii)   Page 3 will be the contents page
   (iv)   Page 4 should have objective
   (v)   Page 5 to 9 will cover the project itself
   (vi)   Please make a proper front and back cover for your project.
   (vii)   Submit the project in file

 CHAPTER – SETS, RELATIONS AND FUNCTIONS,COMPLEX NUMBERS& LINEAR INEQUALITIES

NOTE: <u>Do the worksheet in your school register. Work should be done neatly.</u>

Q1. Write a set in a roster form: C = { x: x = 5y - 1 , y ∈ N , y >3}

Q2. Express the set {(x, y) : x + 2y = 11, x , y ∈ N} as the set of ordered pairs.

Q3. Find the value of $2i^2 + 6i^3 + 3i^{16} – 6i^{19}$.

Q4. Let P = {5,6} , find P x P x P.

Q5. Write all the subsets of a set { 3,{2},1}

Q6. Solve the following inequations:

$$\frac{2x+3}{4} - 4 < \frac{x-4}{3} + 2$$

Q7. The smallest set a such that A ∩ {1,2} = {1,2,3,5,9} is

  a) {3,5,9}   b) { 2,3,5}   c) { 1,2,5,9)   d) None of these

Q8. Let A and B be subsets of a set , then A- B is equal to

a) $A \cap B$ b) $A' \cap B$ c) $A \cap B'$ d) $A' \cap B'$

Q9. The value of $1 + i^{22} + i^{220} + i^{400}$ is

  a) 1   b) $-i$ c) -1   d) 0

Q10. In a city 20 % of the population travels by car, 50% travels by bus and 10 % travels by both car and bus, then

    persons travelling by car or bus is

  a) 70%   b) 80 %   c) 60 %   d) 40 %

Q11. The domain of $f(x) = \sqrt{(x-1)(3-x)}$ is

  a) $1 \le x \le 3$ b) $1 < x < 3$ c) $(-\infty, 1) \cup (3, \infty)$ d) $x \ge 1$

Q12. Let A = {1,2,3,4,5,6} , B = { 1,3} , C = { 2,4,6} , D= { 7,8} which of these sets can be replaced by X , if X and B are disjoint sets.

  a) A   b) B , C   c) C,D   d) B,D

Q13. The modulus of $\frac{(5+i)(3+2i)}{(-3-2i)}$ is

  a) 26   b) $\sqrt{26}$ c) $\frac{\sqrt{85}}{3}$ d) $\frac{85}{3}$

Q14. The solution set of the inequation $3x - 4 < 0$, when x is a real number is

  a) $x > \frac{4}{3}$ b) $x > \frac{3}{4}$ c) $x < \frac{4}{3}$ d) $x < \frac{-4}{3}$

Q15. The complex number 3 - 2i lies in

  a) I quadrant   b) II quadrant   c) III quadrant   d) IV quadrant

Q16. If $\sqrt{a+ib} = x+iy$, then possible value of $\sqrt{a-ib}$ is

  a) $x^2 + y^2$ b) $\sqrt{x^2+y^2}$ c) $\sqrt{x^2-y^2}$ d) $x - iy$

Q17. Find the domain and range of the following function:

    $f(x) = \sqrt{25 - x^2}$

Q18. In a survey of 5000 persons, it was found that 2800 read Indian express , 2300 read times of India and 400 read both . How many read neither Indian express no times of India?

Q19. Find the conjugate of following complex number :

    $\frac{(3-5i)(1-i)}{(2+i)(1-2i)}$

Q20. If α and β are different complex numbers with $|\beta| = 1$, then find the value of $\left|\frac{\beta - \alpha}{1 - \bar{\alpha}\beta}\right|$.

Q21. Express the following in A + iB form

$$\frac{(a+ib)^2}{a-ib} - \frac{(a-ib)^2}{a+ib} \ , \ a,b \in R$$

Q22. Find the modulus of , $\frac{1+cos\theta+isin\theta}{1+cos\theta-i\,sin\theta}$

Q23. Find the real values of x and y if
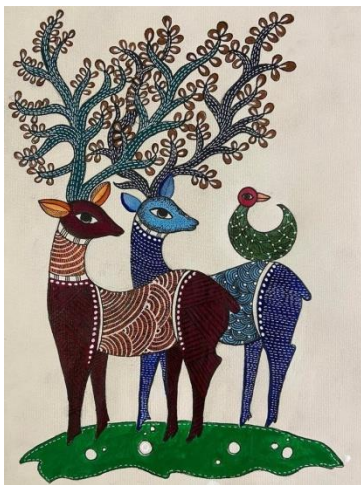
$$\frac{(1+i)x-2i}{3+i} - \frac{(2-3i)y+i}{3-i} = i$$

Q24. If R is a relation on N the set of natural numbers , defined by , R = { (x,y) : x + 2y =9} .Express

relation R in roster form . Find R^{-1} and range of R^{-1} .

NOTE: 1) Make a working Model on any topic of Mathematics.

2) UT-2 Syllabus – Chapter 2,3,5

PAINTING

Folk art on canvas.

CHEMISTRY

Kindly complete your classwork notebook.
Investigatory projects should be made according to the topics already provided and following instruction to
Be followed while preparing:
a)   Order of investigatory project
   - Cover page
   - Certificate
   - Acknowledgement

- Index
- Introduction
- Content (it would include the experiments, details about chemical used, process of experimentation, pictures and graphs)
- Conclusion
- Bibliography

b)   <u>Certificate</u>

This is to certify that ---------------- has successfully completed the project file on topic ----------------- under my guidance and supervision of Ms. Himanshi Kharb (PGT CHEMISTRY). I am satisfied with their initiative and efforts for the completion of project file as a part of curriculum of CBSE Class XI Examination.

Signature of examiner: ----------------------

Signature of HOS/ vice principal/principal: ----------------------

c)   <u>Acknowledgement</u>

I would like to express my deepest gratitude to all those who have helped me complete this school project successfully. I am extremely thankful to my project guide, Ms.Himanshi Kharb, for invaluable guidance, encouragement and support throughout this project.

Student signature: ----------------------

d)   <u>Topics:</u>

- Study of the presence of oxalate ions in guava fruit at different stages of ripening.
- Study of quantity of casein present in different samples of milk.
- Preparation of soybean milk and its comparison with the natural milk with respect to curd formation, effect of temperature, etc.
- Study of the effect of Potassium Bisulphate as food preservative under various conditions (temperature, concentration, time, etc.)
- Study of digestion of starch by salivary amylase and effect of pH and temperature on it.
- Comparative study of the rate of fermentation of following materials: wheat flour, gram flour, potato juice, carrot juice, etc.
- Extraction of essential oils present in Saunf (aniseed), Ajwain (carum), Illaichi (cardamom).
- Study of common food adulterants in fat, oil, butter, sugar, turmeric power, chilli powder and pepper.

e)   Total pages of investigatory project: 20-30

4. Complete chemistry practical file from the pdf provided on whatsapp groups.
5. **UT-II SYLLABUS**:
   STRUCTURE OF ATOM
   CLASSIFICATION OF ELEMENTS AND PERIODICITY IN PROPERTIES

BIOLOGY

I.   **Prepare a herbarium on A4 sheet consisting:**
   A. Types of leaf –   Simple and compound (Pinnate and Palmate)

   Petiolate and sessile

   Dicot and Monocot

   Arrangement – Alternate, Opposite (decussate & superposed) and Whorled.
   B. One complete dicot and monocot plant.
   C. One flower of family *Solanaceae* (*Datura*, China rose etc.)

II. **Write Common and scientific names of examples of plant groups given in NCERT** (Algae, Bryophyte, Pteridophyte, Gymnosperm and Angiosperm) **on A4 sheet.**

III. **Write Common and scientific names of examples of animal groups given in NCERT** (Non – Chordates and Chordates) **on A4 sheet.**

IV. **Do the following experiments in the practical file**
   1. Parts of a compound microscope.
   2. Specimens/slides/models and identification with reasons - Bacteria, Spirogyra, Rhizopus, yeast, liverwort (Riccia), moss (Funaria), fern (Pteris), pine, one monocotyledonous plant, one dicotyledonous plant and one lichen.
   3. Virtual specimens/slides/models and identifying features of - Amoeba, Hydra, Ascaris, earthworm, prawn, honey bee, snail, starfish, Scoliodon, rohu, frog, lizard.
   4. Mitosis in onion root tip cells from permanent slides.
   5. Different types of inflorescences (cymose and racemose).
   6. Study and describe locally available common flowering plants, from family **Solanaceae** (floral formulae and floral diagrams), type of root (tap and adventitious); type of stem (herbaceous and woody); leaf (arrangement, shape, venation, simple and compound).

UNIT TEST II SYLLABUS

CHAPTER: **ANIMAL KINGDOM**

                          MORPHOLOGY OF FLOWERING PLANTS

PHYSICS

1. What is principle of homogeneity? Explain with suitable examples.

2. Find the no of significant figures

a)3.00000   b)5670090000   c)000745000   d)0.000008920000   e)5326000   f)1.052300

3. 5.74 g of a substance occupies 1.2 cm3. Express its density by keeping the significant figures in view.

4. Let us consider an equation $1/2mv^2$ = mgh. where m is the mass of the body, v its velocity, g is the acceleration due to gravity and h is the height. Check whether this equation is dimensionally correct.

5. The SI unit of energy is J = kg m2 s –2; that of speed v is m s–1 and of acceleration a is m s–2. Which of the formulae for kinetic energy (K) given below can you rule out on the basis of dimensional arguments (m stands for the mass of the body) :

(a) K = m2 v3   (b) K = (1/2)mv2   (c) K = ma   (d) K = (3/16)mv2   (e) K = (1/2)mv2 + ma

6. Consider a simple pendulum, having a bob attached to a string, that oscillates under the action of the force of gravity. Suppose that the period of oscillation of the simple pendulum depends on its length (l), mass of the bob (m) and acceleration due to gravity (g). Derive the expression for its time period using method of dimensions.

7. A physical quantity P is related to four observables a, b, c and d as follows: $p=a^4b^3/c^1d^2$. The percentage errors of measurement in a, b, c and d are 1%, 3%, 4% and 2%, respectively. What is the percentage error in the quantity P? If the value of P calculated using the above relation turns out to be 3.763, to what value should you round off the result?

8. The position of an object moving along x-axis is given by x = a + bt2 where a = 8.5 m, b = 2.5 m s–2 and t is measured in seconds. What is its velocity at t = 0 s and t = 2.0 s. What is the average velocity between t = 2.0 s and t = 4.0 s ?

9. A ball is thrown vertically upwards with a velocity of 20 m s–1 from the top of a multistorey building. The height of the point from where the ball is thrown is 25.0 m from the ground. (a) How high will the ball rise ? and (b) how long will it be before the ball hits the ground? Take g = 10 m s–2.

10. A woman starts from her home at 9.00 am, walks with a speed of 5 km h–1 on a straight road up to her office 2.5 km away, stays at the office up to 5.00 pm, and returns home by an auto with a speed of 25 km h–1. Choose suitable scales and plot the x-t graph of her motion.

11. A car moving along a straight highway with speed of 126 km h–1 is brought to a stop within a distance of 200 m. What is the retardation of the car (assumed uniform), and how long does it take for the car to stop ?

12. A police van moving on a highway with a speed of 30 km h–1 fires a bullet at a thief's car speeding away in the same direction with a speed of 192 km h–1. If the muzzle speed of the bullet is 150 m s–1, with what speed does the bullet hit the thief's car ? (Note: Obtain that speed which is relevant for damaging the thief's car).

13. Derive the kinematic equations of motion by calculus method

a) v=u+at   b) s=ut+1/2 at^2 c) v^2=u^2+2as

14. What is free fall? Write the conditions of free fall.

15. a) $\int (4x^5+6x+9)dx$ b) find dy/dx if y=3x^{-5}+6x^3+2

COMPUTER SCIENCE

Note : Do the following questions in a homework copy

CHAPTER: GETTING STARTED WITH PYTHON

WORKSHEET

1. Is Python case sensitive when dealing with identifiers?

a) yes

b) no

c) machine dependent

d) none of the mentioned

2. What is the maximum possible length of an identifier?

a) 31 characters

b) 63 characters

c) 79 characters

d) none of the mentioned

3. Which of the following is invalid?

a) _a = 1

b) __a = 1

c) __str__ = 1

d) none of the mentioned

4. Which of the following is an invalid variable?

a) my_string_1

b) 1st_string

c) foo

d) _

5. Why are local variable names beginning with an underscore discouraged?

a) they are used to indicate a private variables of a class

b) they confuse the interpreter

c) they are used to indicate global variables

d) they slow down execution

6. Which of the following is not a keyword?

a) eval

b) assert

c) nonlocal

d) pass

7. All keywords in Python are in

a) lower case

b) UPPER CASE

c) Capitalized

d) None of the mentioned

8. Which of the following is true for variable names in Python?

a) unlimited length

b) all private members must have leading and trailing underscores

c) underscore and ampersand are the only two special characters allowed

d) none of the mentioned

9. Which of the following is an invalid statement?

a) abc = 1,000,000

b) a b c = 1000 2000 3000

c) a,b,c = 1000, 2000, 3000

d) a_b_c = 1,000,000

10. Which of the following cannot be a variable?

a) __init__

b) in

c) it

d) on

CHAPTER : PYTHON FUNDAMENTALS

WORKSHEET

1. Which is the correct operator for power(xy)?

a) X^y

b) X**y

c) X^^y

d) None of the mentioned

2. Which one of these is floor division?

a) /

b) //

c) %

d) None of the mentioned

3. What is the order of precedence in python?

i) Parentheses

ii) Exponential

iii) Multiplication

iv) Division

v) Addition

vi) Subtraction

a) i,ii,iii,iv,v,vi

b) ii,i,iii,iv,v,vi

c) ii,i,iv,iii,v,vi

d) i,ii,iii,iv,vi,v

4. What is answer of this expression, 22 % 3 is?

a) 7

b) 1

c) 0

d) 5

5. Mathematical operations can be performed on a string. State whether true or false.

a) True

b) False

6. Operators with the same precedence are evaluated in which manner?

a) Left to Right

b) Right to Left

c) Can't say

d) None of the mentioned

7. What is the output of this expression, 3*1**3?

a) 27

b) 9

c) 3

d) 1

8. Which one of the following have the same precedence?

a) Addition and Subtraction

b) Multiplication and Division

c) Both Addition and Subtraction AND Multiplication and Division

d) None of the mentioned

9. The expression Int(x) implies that the variable x is converted to integer. State

whether true or false.

a) True

b) False

10. Which one of the following have the highest precedence in the expression?

a) Exponential

b) Addition

c) Multiplication

d) Parentheses

CHAPTER : DATA HANDLING

WORKSHEET

1. Which of these in not a core data type?

a) Lists

b) Dictionary

c) Tuples

d) Class

2. Given a function that does not return any value, What value is thrown by default

when executed in shell.

a) int

b) bool

c) void

d) None

3. Following set of commands are executed in shell, what will be the output?

```
>>>str="hello"
>>>str[:2]
>>>
```

a) he

b) lo

c) olleh

d) hello

4. Which of the following will run without errors ?

a) round(45.8)

b) round(6352.898,2,5)

c) round()

d) round(7463.123,2,1)

5. What is the return type of function id ?

a) int

b) float

c) bool

d) dict

6. In python we do not specify types,it is directly interpreted by the compiler, so
consider the following operation to be performed.

>>>x = 13 ? 2

objective is to make sure x has a integer value, select all that apply (python 3.xx)

a) x = 13 // 2

b) x = int(13 / 2)

c) x = 13 % 2

d) All of the mentioned

7. What error occurs when you execute?

apple = mango

a) SyntaxError

b) NameError

c) ValueError

d) TypeError

8. Carefully observe the code and give the answer.

def example(a):

a = a + '2'

a = a*2

 return a

>>>example("hello")

a) indentation Error

b) cannot perform mathematical operation on strings

c) hello2

d) hello2hello2

9. What data type is the object below ?

L = [1, 23, 'hello', 1].

a) list

b) dictionary

c) array

d) tuple

10. In order to store values in terms of key and value we use what core data type.

a) list

b) tuple

c) class

d) dictionary

11. Which of the following results in a SyntaxError ?

a) '"Once upon a time…", she said.'

b) "He said, 'Yes!'"

c) '3\'

d) '''That's okay'''

12. What is the average value of the code that is executed below ?

>>>grade1 = 80

>>>grade2 = 90

>>>average = (grade1 + grade2) / 2

a) 85

b) 85.1

c) 95

d) 95.1

13. Select all options that print

hello-how-are-you

a) print('hello', 'how', 'are', 'you')

b) print('hello', 'how', 'are', 'you' + '-' * 4)

c) print('hello-' + 'how-are-you')

d) print('hello' + '-' + 'how' + '-' + 'are' + 'you')

14. What is the return value of trunc() ?

a) int

b) bool

c) float

d) None

15. What is the output of print 0.1 + 0.2 == 0.3?

a) True

b) False

c) Machine dependent

d) Error

16. Which of the following is not a complex number?

a) k = 2 + 3j

b) k = complex(2, 3)

c) k = 2 + 3l

d) k = 2 + 3J

17. What is the type of inf?

a) Boolean

b) Integer

c) Float

d) Complex

18. What does ~4 evaluate to?

a) -5

b) -4

c) -3

d) +3

19. What does ~~~~~~5 evaluate to?

a) +5

b) -11

c) +11

d) -5

20. Which of the following is incorrect?

a) x = 0b101

b) x = 0x4f5

c) x = 19023

d) x = 03964

Answer the Following Questions (LongAnswers)

1. What is the difference between a keyword and an identifier?

2. How many ways are there in Python to represent an integer literal.

3. Which of the following identifier names are invalid and why?

i	Serial_no.	v	Total_Marks
ii	1st_Room	vi	total-Marks
iii	Hundred$	vii	_Percentage
iv	Total Marks	viii	True

4. Write logical expressions corresponding to the following statements in Python

and evaluate the expressions (assuming variables num1, num2, num3, first,

middle, last are already having meaningful values):

a) The sum of 20 and –10 is less than 12.

b) num3 is not more than 24

c) 6.75 is between the values of integers num1 and num2.

d) The string 'middle' is larger than the string 'first' and smaller than the string

'last'

e) List Stationery is empty

5. Add a pair of parentheses to each expression so that it evaluates to True.

a) 0 == 1 == 2

b) 2 + 3 == 4 + 5 == 7

c) 1 < -1 == 3 > 4

6. Write the output of the following.

a) num1 = 4

num2 = num1 + 1

num1 = 2

print (num1, num2)

b) num1, num2 = 2, 6

num1, num2 = num2, num1 + 2

print (num1, num2)

c) num1, num2 = 2, 3

num3, num2 = num1, num3 + 1

print (num1, num2, num3)

7. Give the output of the following when num1 = 4, num2 = 3, num3 = 2

a) num1 += num2 + num3

 print (num1)

b) num1 = num1 ** (num2 + num3)

print (num1)

c) num1 **= num2 + num3

d) num1 = '5' + '5'

print(num1)

e) print(4.00/(2.0+2.0))

f) num1 = 2+9*((3*12)-8)/10

print(num1)

g) num1 = 24 // 4 // 2

print(num1)

h) num1 = float(10)

 print (num1)

i) num1 = int('3.14')

print (num1)

j) print('Bye' == 'BYE')

k) print(10 != 9 and 20 >= 20)

l) print(10 + 6 * 2 ** 2 != 9//4 -3 and 29>= 29/9)

m) print(5 % 10 + 10 < 50 and 29 <= 29)

n) print((0 < 6) or (not (10 == 6) and (10<0)))

8. Categorize the following as syntax error, logical error or runtime error:

a) 25 / 0

b) num1 = 25; num2 = 0; num1 / num2

9. Write a Python program to convert temperature in degree Celsius to degree Fahrenheit. If water boils at 100 degree C and freezes as 0 degree C, use the program to find out what is the boiling point and freezing point of water on the Fahrenheit scale. (Hint: $T(°F) = T(°C) \times 9/5 + 32$)

10. Write a Python program to calculate the amount payable if money has been lent on simple interest.

Principal or money lent = P, Rate of interest = R% per annum and Time = T years. Then Simple Interest (SI) = (P x R x T)/ 100. Amount payable = Principal + SI. P, R and T are given as input to the program.

11. Write a program to enter two integers and perform all arithmetic operations on them.

12. Write a program to swap two numbers without using a third variable.

1. CH 6 – Python Fundamental
2. Ch 7 - Data Handling
3. Ch 8 – Flow of Control

PSYCHOLOGY

A. Prepare a project file.

General Instructions:

1. The project should be simple, brief and easy.

2. It should be handwritten. The cover page should be neat and simple in presentation. No glitters etc. should be used.

3. More credit will be given to original drawings, illustrations, mind maps and articles from magazines and newspapers.

4. It is mandatory to have case studies / questionnaires in the project but if the topic demands, it may be included.

5. While choosing the topic, the student should keep in mind that he can be questioned on what, when how etc. of the topic during viva.

6. By July11th, 2024 the project has to be submitted.

7. The PROJECT will be evaluated for 20 marks during the FIRST TERMINAL EXAMINATION, 2024 and the marking will be done as per the CBSE guidelines given below.

The project should contain:

- Cover Page
- Acknowledgement and certificate
- Index
- Content (Real Examples, Real forms)
- Conclusion
- Bibliography

COVER PAGE

PROJECT REPORT ON --------------------------------- (TOPIC) Submitted in the partial fulfillment of the project work of Class XI Psychology Session: 2024 – 25

By - -- Under the supervision Ms. Radhika Sharma (PGT Psychology} ----------------------------School ------------- --- ------------------------------- ---------

 ACKNOWLEDGEMENT

I would like to specially thank Ms.--------------------------Principal of---------------- --- for her support and encouragement in every endeavour of ours. I would also like to express my gratitude towards my teacher Ms. Radhika Sharma for her extended guidance and support throughout the project work. Last but not the least I would like to thank my parents for their love and support. ------------------------------------ --------------- --

CERTIFICATE

This is to certify that the project report of Psychology titled---------------------- Submitted by --of class ---------------------------- --- This project is to be considered as a part of practical Examination conducted by the School. It is a record of project work carried out under our guidance and supervision at ------------------------------------School. The project has been evaluated on --------------------------------

Head of the institution's Name & Signature -- ------------

Examiner's Name & Signature -- ----------------

Note: Do the Project work as assigned below:

1. Write a project on methods of enquiry in psychology as mentioned in Chapter 2 NCERT Textbook.
2. Complete Chapter 1,2 and 3 back question answers of NCERT textbook.

UT-II SYLLABUS

CH-2 METHODS OF ENQUIRY IN PSYCHOLOGY

CH-3 HUMAN DEVELOPMENT