Dwarka International School
Sector-12, Dwarka, New Delhi-110078
Holiday Assignment- Class XI
ENGLISH

Dear Students

Class XI is a delicate phase where you decide your streams which eventually decide your career. It comes after a lot of hard work in class X and the Board Examination which tests your skills as well as nerves. It is therefore human nature to be a bit lethargic and adopt a laid-back attitude after this mountainous hard work. It is okay to be easy-going during this phase but to detach oneself completely from mainstream academics will indeed be a blunder. With this perspective, the school has prepared well-planned holiday homework to enable you to devote quality time to each subject. We do hope, it will help you to boost your academic skills.

Please follow the given instructions.

1. Tutankhamun was an Egyptian pharaoh of the 18th dynasty, during the period of Egyptian history known as the New Kingdom or sometimes the New Empire Period. He has, since the discovery of his intact tomb, been referred to colloquially as King Tut. Read the extract given about the pharaoh, **'Discovering Tut: The Saga Continues'** and answer the textual questions in your note-books.
2. You are Ram/Rajani, Secretary, Social Service Club, Sun Public School, Nagpur. Your club is organizing a book fair for your school students. Draft a notice for your school notice board giving all relevant information about the event, in not more than 50 words in your note-books.
3. You are Mallika, student of class XII, Towvale Girls' School, Shimla. You are eager to enter the National Film Academy, Shimla, after her board results. Write a letter to the director of the film academy seeking information regarding admission procedure, eligibility criteria, fee structure, placement opportunities, etc. (in your note-books)
4. You have bought a washing machine from Electronics City, Gurgaon on 22nd February, 2019 with bill number CC45B8-16 with three years of onsite warranty. Unfortunately, the 3.5ton machine has starting malfunctioning. Even after your repeated calls to the customer care, you have not been given any service by the company. Write a letter of complaint to the Sales Manager, Electronics City, Gurgaon – 01. You are Ramesh Narayan of 1/D, Kailash Nagar, Palampur, New Delhi. (in your note-books)

5. You are Ayush Aggarwal/Ayushi Khanna, HoD Computer Science Dept. of D.A.V Public School, Noida, Uttar Pradesh. You wish to place an order of computer peripherals like a printer, a set of spare black and coloured cartridges etc from Arihant Computer Sevices, New Delhi. Write a letter to the Manager giving necessary details. (in your note-books)
6. Contribute articles/poems/stories/experiences for the school magazine 'Gokul Days'. (A-4 sized sheet)
7. Create a memory book with pictures along with write-ups.

- **Read newspaper and keep yourself updated.**
- **Make a habit of writing a page sharing your experiences of the day in form of diary writing.**
- **Read a book to enhance your awareness and vocabulary.**
- **Help your parents and grandparents. Converse with them the maximum and learn about their shares of struggles and sufferings.**

UT-1 SYLLABUS

M.M:50MARKS

SECTION A- READING (12)

UNSEEN PASSAGE/POEM

SECTION B ADVANCED WRITING SKILLS&GRAMMAR (18)

- NOTICE WRITING (4)
- NOTICE WRITING (4)
- BUSINESS LETTER (6)

GRAMMAR (4)

- GAP FILLING (2)
- EDITING (2)

SECTION C LITERATURE (20)

REFERENCE TO CONTEXT (4)

REFERENCE TO CONTEXT (4)
SHORT ANSWER QUESTIONS (3X2=6)
LONG ANSWER QUESTIONS (1X6=6)

CHAPTERS

- THE PORTRAIT OF A LADY
- A PHOTOGRAPH
- WE'RE NOT AFRAID TO DIE IF WE CAN ALL BE TOGETHER

HOLIDAY HOMEWORK

CLASS XI, POLITICAL SCIENCE

Q1. Very short Questions

1. What is meant by the term constitution?
2. What are the main features of the constitution
3. When was Constituent Assembly for framing the Constitution of India established?
4. Name any four member of the Constituent Assembly?
5. What is the nature of Indian policy according to the preamble?
6. What is meant by preamble?
7. What is meaning of “We the people of India”?
8. From which country have we taken preamble?

Q2. Short answer type Question

1. What is the need and importance of a constitution?
2. What is meant by the term ‘Secular”? Is India a secular state?
3. Explain the meaning of the term ‘Democratic’ with special reference to India.
4. Is India a Republic? Give some point in support of your answer.

5. What do you mean by political and economic justice?

Q3. Long answer type Question

1. “The constitution of India is a borrowing” Discuss.
2. Describe the composition and working of the Constituent Assembly of India.
3. Identify any two source of Indian Constitution. Describe in brief the provisions which ha been taken from sources.
4. Differentiate between Parliamentary and Presidential Form of Government.

CHAPTER 2

Q1. Short answer type Question

1. Define Rights.
2. Why was the Right to property deleted from the Fundamental Rights?
3. Mention any two conditions under which fundamental rights can be restricted.
4. Which Fundamental Rights are given in our Constitution?

5. Explain the term “Traffic” in human beings.

6. Define “protective Discrimination”.
7. Define “Duty”
8. Pointout any two points of importance the Fundamental Rights for the citizens.
9. Mention four differences between Directive Principles and Fundamental Rights.
10. Give two reasons for the existing economic inequality in India.
11. Give the reasons which show that rights are not absolute.
12. What do you understand by Directive Principles of State Policy?
13. How many writs can be issued under Article 32 Supreme Court and High Courts?
14. Describe the three steps that have been taken by the government in the implementatio Directive Principles of economic sphere.
15. What are the main difference between the Fundamental Rights and the Directive Principles?

Q2. Long answer type questions

1.“The Right to Freedom is actually a cluster of several rights”.Explain.

2. All fundamental rights are not absolute. There are many limitations with these rights. Explai

3. Describe some of the fundamental duties of citizens.

Q3. Prepare an informative chart on any one of the followings.

1. Preamble of India

2. Fundamenta rights

3. Fundamental duties

4. Provisions borrowed from other constitutions

1. **Chart showing Indian states with no. of constituencies.**
2. **Chart showing results of Lok Sabha elections.**

SYLLABUS FOR UNIT- TEST-1
BOOK-1 CONSTITUTION AT WORK
CHAPTER-1,2,3

XI Class Physical Education Syllabus

UNIT 1. Changing Trends and Careers in Physical Education

(1) Meaning and Definitions of Physical Education
(2) Aims and Objectives of Physical Education
(3) Career Option in Physical Education

UNIT 2. Olympic Value Education

(1) Olympic Symbol, Ideals, Objectives and Values
(2) International Olympic Committee
(3) Indian Olympic Association

UNIT 3. Physical Fitness, Wellness and Lifestyle

(1) Meaning and Importance of Physical Fitness, Wellness and Lifestyle
(2) Components of Physical Fitness
(3) Components of Health Related Fitness
(4) Components of Wellness

PHYSICAL EDUCATION H W

Complete your practical file as discussed in the class

Class – XI Assignment and project- Geography

Q.1 Mention thee direct and three indirect sources of study interior of the earth.

Q.2 What are limitation of direct sources of study interior of the earth?

Q.3 What is difference between theories of kant- laplace and chamberlin for evolution of solar system?

Q.4 What is big bang? Explain in detail.

Q.5 What are differences between jovian and terrestrial planets?

Q.6 Explain the formation of lithosphere.

Q.7 Explain the process of evolution of atmosphere.

Q.8 Explain any two branches of geography in detail.

Q.9 How geography is related to natural science and social science explain?

Project work

On a chart paper represent geological time scale

UT-1 Syllabus Chapters 1,2 and 3

SUBJECT: MATHS

UT-1 SYLLABUS

CHAPTER :2 RELATION AND FUNCTION

CHAPTER 3: TRIGNOMETRIC FUNCTIONS

CHAPTER 4: MATHEMATICAL INDUCTION

CHAPTER 5: COMPLEX NUMBERS AND QUADRATIC EQUATIONS

In our head, we hear a humming,
Summer, summer, summer's are coming
Soon we're all going on a vacation
Gearing up with wonderful sensations.

With summer vacation round the corner, let's prepare ourselves not just to relax and rejuvenate but also to utilize the time in creative and constructive ways. It is the time of the year again when we can do things which we are unable to do during the regular routine days.

• Read books! May it be fables, fairy tales, encyclopedia or comic books. Explore the imaginative world and go on a fantasy tour.
• Run, exercise, sweat! Channelize your energy, build team spirit and enjoy playing challenging sports and games.
• Enhance your communication skills by conversing with your friends and family in English.
• Explore the culture and heritage of your city by visiting heritage sites like monuments and peep into the rich history.

Have fun!

Do the assignments given on chapters-1, 2 ,3 and 8.

HOLIDAY HOMEWORK , SESSION 2019-20

SUBJECT – MATHEMATICS , CLASS – XI

Complex Numbers and Quadratic Equations

Q. No. 1 - 5 are very short answer type questions:

1. Find the value of x and y $(x, y \in R)$ if : $2y + (3x - y)i = 5 - 2i$
2. Express $3i^3 + 6i^{16} - 7i^{29} + 4i^{27}$ in the form $x + iy$ where $x, y \in R$.
3. Evaluate : $\left(i^{41} + \frac{1}{i^{257}}\right)^9$
4. If $Z_1 = 1 - i, Z_2 = -2 + 4i,$ find $\text{Im}\left(\frac{Z_1 Z_2}{\overline{Z_1}}\right)$.
5. Find the conjugate of the complex number: $\frac{1}{2 - 3i}$
6. Write the following complex numbers in the polar form:

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

7. Find the complex conjugate of $\frac{(8 - 3i)(6 - i)}{2 - 2i}$.
8. Find the multiplicative inverse of $\left(\frac{3 + 4i}{4 - 5i}\right)$
9. Find the modulus and argument of $\frac{1 + 2i}{1 - 3i}$
10. If $(a + ib)^2 = (x + iy)$, prove that $(a^2 + b^2)^2 = (x^2 + y^2)$
11. Find x and y if $\frac{(1 + i)x - 2i}{3 + i} + \frac{(2 - 3i)y + i}{3 - i} = i$
12. For what values of x and y are the numbers $-3 + ix^2 y$ and $x^2 + y + 4i$ complex conjugates? (x, y are real numbers.)

13. Solve the following quadratic equations:

(i) $6x^2 - 17ix - 12 = 0$

(ii) $3x^2 + 7ix + 6 = 0$

$(iii) x^2 - (7 - i)x + 18 - i = 0$

$(iv) x^2 - (3\sqrt{2} - 2i)x - 6\sqrt{2}i = 0$

$(v) 2x^2 - (3 + 7ix)x + 9i - 3 = 0$

14. Find the square root of: $(i) -8 - 6i, (ii) -5 + 12i, (iii) -i$

Chapter – 4 (Principle of Mathematical Induction)

Using the principle of mathematical induction prove the following for all $n \in N$:

1. $3.6 + 6.9 + 9.12 + \ldots\ldots\ldots + 3n\,(3n + 3) = 3n(n + 1)(n + 2)$
2. $\left(1 - \frac{1}{2}\right)\left(1 - \frac{1}{3}\right)\left(1 - \frac{1}{4}\right) - - - \left(1 - \frac{1}{n+1}\right) = \frac{1}{n+1}$
3. $n^2 + n$ is an even natural number.
4. $2^{3n} - 1$ is divisible by 7
5. 3^{2n} when divided by 8 leaves the remainder 1.

6. $4^n + 15n - 1$ is divisible by 9

7. $n^3 + (n + 1)^3 + (n + 2)^3$ is a multiple of 9.

8. $x^{2n-1} - 1$ is divisible by $x - 1$, $x \neq 1$

9. $3^n > n$

10. If x and y are any two distinct integers then $x^n - y^n$ is divisible by $(x - y)$

11. $n < 2^n$

12. $a + (a + d) + (a + 2d) + \ldots\ldots\ldots + [a + (n - 1)d] = \frac{n}{2}[2a + (n - 1)d]$

13. $3x + 6x + 9x + \ldots\ldots\ldots$ to n terms $= \frac{3}{2}n(n + 1)x$

14. $\frac{n^5}{5} + \frac{n^3}{3} + \frac{7n}{15}$ is a positive integer

15. $11^{n+2} + 12^{2n+1}$ is divisible by 133.

Chapter – 3 (Trigonometric Functions)

Q1. The difference between two acute angles of a right triangle is $\frac{\pi}{9}$. Find the angles in degree.

Q2. A horse is tied to a post by a rope. If the horse moves along a circular path always keeping the rope tight an metres when it was traced out 72^0 at the centre, find the length of the rope.

Q3. The angles of a triangle are A.P. such that the greatest is 5 times the least. Find the angles in radians.

Q4. Prove that (i) $(1 + \tan\alpha \ \tan\beta)^2 + (\tan\alpha - \tan\beta)^2 = \sec^2\alpha \ \sec^2\beta$

(ii) $\frac{\tan A}{1 - CotA} + \frac{CotA}{1 - \tan A} = \sec A \operatorname{cosec} A + 1$

Q5. If $\sin\theta = \frac{12}{13}$ and θ lies in 2nd quad, then find the value of $8\tan\theta - \sqrt{5}\sec\theta$

Q6. Prove that :-

(i) $$\frac{Cos\ (2\pi + \theta) Co\sec(2\pi + \theta)\tan\left(\frac{\pi}{2} + \theta\right)}{\sec\left(\frac{\pi}{2} + \theta\right) Cos\ \theta Cot\ (\pi + \theta)} = 1$$

(ii) $$\frac{\tan(90^0 - \theta)\sec(180^\circ - \theta)\sin(-\theta)}{\sin(180^0 + \theta) Cot\ (360^0 - \theta)\cos ec\ (90^0 - \theta)} = 1$$

(iii) $$\frac{\tan 69^0 + \tan 66^0}{1 - \tan 69^0 \tan 66^0} = -1$$

(iv) $$\frac{Cos\ 11^0 + \sin 11^0}{Cos\ 11^0 - \sin 11^0} = \tan 56^0$$

Q7. If $\tan\alpha = \frac{m}{m+1}$, $\tan\beta = \frac{1}{2m+1}$ then prove that $\alpha + \beta = \frac{\pi}{4}$

Q8. Prove that (i) $\tan 3A \tan 2A \tan A = \tan 3A - \tan 2A - \tan A$

(ii) $(1 + \tan A)(1 + \tan B) = 2$ when $A + B = \frac{\pi}{4}$

Q9. Draw the graph of

(i) $y = 3\sin x$ (ii) $y = \operatorname{cosec} x$ (iii) $y = \sec x$

(iv) $y = \sin x + \cos x$

Q10. Solve the following trigonometric equations ;-

(i) $\tan\left(\frac{2}{3}\vartheta\right) = \sqrt{3}$

(ii) $7\cos^2\theta + 3\sin^2\theta = 4$

Q11. If $\tan A = x \tan B$ then prove that $\frac{\sin(A - B)}{\sin(A + B)} = \frac{x - 1}{x + 1}$

Q12. If $\sin A = \frac{3}{5}$, $0 < A < \frac{\pi}{2}$, $\cos B = \frac{-12}{13}$, $\pi < B < 3\frac{\pi}{2}$,find $\sin(A+B)$

Summer vacation HOLIDAY HOMEWORK-ECONOMICS

Points to Remember

* Economics:
* Economics is a science that studies human behavior as a relationship between ends scare means which have alternative uses.
* Scarcity means shortage of goods and resources in relation to their demand
* Resources are
  (A) Scare / limited and
  (B) have alternative uses

ACTIVITIES

Economic Activities	Non-Economic Activities
1. Production	1. Social
2. Consumption	2. Religious
3. Investment	3. Political
4. Exchange	4. Charitable
5. Distribution	5. Parental

* Economic activities are those activities which are associated to earn money and wealth for life. These activities generate new income and increase the flow of goods and services.

* Non economic activities are those activities which are not related to earn money and wealth. These activities neither generate income nor increase the flow of goods & services.
* Consumer : Consumer is an economic agent who buys the goods.

and services to satisfy his wants.

* Producer: is one who produces goods and services for the generation of income.
* Service holder: A person who is in job and gives his services as a factor of production to earn wage or salary. e.g. Govt. teacher.
* Service Provider: A person who provides services to final consumer to earn money e.g. transporter, auto driver.
* Statistics: Statistics is a method of taking decisions on the basis of numerical data.
* Statistics can be defined in two ways

STATISTICS

Singular Sense	Plural Sense Statistic
Means methods classification and collected.	Statistics means Statistical Numerical facts Such as collection, Which have been Presentation, analysis systematically Interpretation of data.

Scope of Statistics

In the olden days the use of statistics was restricted to deal with the affairs of the state. But now-a-days the scope of statistics has spread to all those areas where numerical facts are used such as economics, business, industry, medicine, physics, chemistry and numerous other fields of knowledge.

Importance of Statistics in Economics

1. It enables an economist to present economic facts in a precise and definite form.

2. Helps in condensing mass data into a few numerical measures.
3. Statistics is used in finding relationship between different economic factors.
4. Economic forecasting through statistical studies.
5. Helpful to formulate appropriate economic policies that solve economic problems.
6. Help to analyze the performance of policies applied before.

Function of Statistics

1. Statistics simplified complexities.
2. Statistics expresses facts in numbers.
3. Statistics presents data in condensed form.
4. Statistics compares different phenomena and reassures relationship between them.
5. Statistics is helpful in formation of policies.
6. Statistics is helpful in economic forecasting's.

Limitations of Statistics

1. Statistics does not study individuals.
2. Statistics results might lead to fallacious conclusions.
3. Statistics deals with quantitative facts only.
4. Statistics laws are true only on averages.
5. Only experts can make the best possible use of statistics.
6. Uniformity and homogeneity of data is essential.

Unit-I

One- Mark-Questions

1. Define economics.
2. State the meaning of scarcity.
3. Write the meaning of statistics in plural sense.
4. Give meaning of statistics in singular sense.
5. State one limitation of statistics.
6. What do you mean by economic activity?
7. What are non-economic activities?
8. Write one function of statistics.
9. Define consumer.
10. Who is a producer?

3 Marks Questions

1. Briefly explain the term service holder and service provider with an example each.
2. What is the scope of statistics now a day?
3. Explain the importance of statistics in economics.
4. Distinguish between quantitative' and qualitative' data with example.
5. Production, consumption and distribution are economic activities. Explain.
6. Why do you want to study economics? Give reasons.
7. Which one of the following is economic activity? Give reason. (i) Transporting sand from river bank to a town.

(ii) Attending marriage party.

(iii) Parental love and affection towards their children.

8. Which one of the following is non-economic activity? Give reason.

(i) Production of printing press machines to print newspapers. (ii) Service of doctor in a hospital.

(iii) Organization of free medical checkup camp.

CLASS-XI

UNIT-II Consumer's Equilibrium

Very short type of questions (1 mark each)

1.What is utility?

2.Define indifference curve.

3.What is meant by consumer's equilibrium?

4.State the conditions of consumer's equilibrium in case of single commodity.

5.What do you mean by rational consumer?

6.Define budget line.

Short type of questions – Average type questions: (3 to 4 marks)

1.Explain consumer's equilibrium with single commodity.

2.Define Marginal utility. State the Law of Diminishing Marginal utility.

3.Why is an Indifference curve is convex to the origin?

4.What is the relationship between marginal utility and total utility?

5.Give two properties of indifference curve.

6.When budget line rotates and shifts? Explain by using diagram.

7.State the Law of diminishing utility and its assumptions.

Long answer type questions(HOTS) (6 marks)

1.Explain the conditions of consumer's equilibrium by IC analysis.

2. Briefly explain consumer's equilibrium in case of two commodities.

3. Explain Marginal rate of substitution with the help of diagram and schedule.

Project work

- All students are advised to prepare your practice files during your SUMMER BREAK.

Ut-1 Datesheet

DATE	UT-1
15-Jul-19	CHEMISTRY/ ECONOMICS
16-Jul-19	PE / PAINTING/ I.P / C .SCIENCE
17-Jul-19	PHYSICS/ B.STUDIES/GEOGRAPHY
18-Jul-19	MATHEMATICS/ BIOLOGY
19-Jul-19	ENGLISH
22-Jul-19	B. STUDIES/POL.SCIENCE

UT-1
Syllabus of INFORMATICS PRACTICES

Chap-1 Computer System Organization
Chap-2 Getting started with Python
Chap-3 Python programming fundamentals
Chap-4 Conditional Constructs

PRTHON 3.0

Using the Python interpreter In our first code we are going to print “Hello World!” using the interpreter. To generate the output, type the following: **>>>** print("Hello World!") Hello World!

Variables and Assignment: In algebra, variables represent numbers. The same is true in Python, except Python variables also can represent values other than numbers.

Identifiers: While mathematicians are content with giving their variables one-letter names like x, programmers should

use longer, more descriptive variable names. Names such as sum, height, and sub_total are much better than the equally permissible s, h, and st. A variable’s name should be related to its purpose within the program. Good variable names make programs more readable by humans. Since programs often contain many variables, well-chosen variable names can render an otherwise obscure collection of symbols more understandable. Identifiers have the

1. following form:
   - Identifiers must contain at least one character.
   - The first character must be an alphabetic letter (upper or lower case) or the underscore ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz_
2. The remaining characters (if any) may be alphabetic characters (upper or lower case), the underscore, or a digit ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz_0123456789
   - No other characters (including spaces) are permitted in identifiers.
   - A reserved word cannot be used as an identifier (see Table 2.1).
3. Here are some examples of valid and invalid identifiers:
4. All of the following words are valid identifiers and so can be used as variable names: x, x2, total,port_22, and FLAG.
   - None of the following words are valid identifiers: sub-total (dash is not a legal symbol in an
5. identifier), first entry (space is not a legal symbol in an identifier), 4all (begins with a digit), #2(pound sign is not a legal symbol in an identifier), and class (class is a reserved word).

Keywords and Identifiers: The following identifiers are used as reserved words, or keywords of the language, and cannot be used as ordinary

identifiers. They must be typed exactly as written here:

False	class	finally	is	return
None	continue	for	lambda	try
True	def	from	nonlocal	while
and	del	global	not	with
as	elif	if	or	yield
assert	else	import	pass	
break	except	in	raise	

Reading input from the Keyboard input(“String to show”) // number = int(input("Enter an integer: "))

The eval Function : The input function produces a string from the user’s keyboard input. If we wish to treat that input as a number, we can use the int or float function to make the necessary conversion:

x = float(input('Please enter a number'))

Operators: Operators are the symbols which tells the Python interpreter to do some mathematical or logical operation. Few basic examples of mathematical operators are given below:

>>> 2 + 3 5 **>>>** 23 – 3 20

Expressions: Generally while writing expressions we put spaces before and after every operator so that the code becomes clearer to: read, like a = 234 * (45 - 56.0 / 34)

Identifiers/variables -Names given to any variable, function, class, union etc. Naming convention(rule) for writing identifier is as under:

1. Names of functions **2. Names of arrays** **3. Names of variables** **4. Names of classes**

i) First letter of identifier is always alphabet.
ii) Reserve word cannot be taken as identifier name.
iii) No special character in the name of identifier except under score sign '_'.

Here are some examples of acceptable identifiers:

1. mohd	**5.** a_123	**9.** J	**12.** **abc_rr**
2. zara	**6.** mynam	**10.** a23b9	
3. abc	**7.** e50	**11.** retVal	
4. move_na	**8.** _temp		

Some Facts About Identifier :

1. It is name given to program element.
2. Identifier is the names are given by the programmer.
3. We can give any valid name to the identifier.
4. Keywords cannot be used as Identifier.
5. Only Alphabets, Digits and Underscores are permitted.
6. Identifier name cannot start with a digit.
7. Key words cannot be used as a name.
8. Upper case and lower case letters are distinct.
9. Special Characters are not allowed
10. Global Identifier cannot be used as "Identifier".
11. An identifier is used for any variable, function, data definition etc.
12. Other special characters are not allowed for naming a variable / identifier
13. PYTHON is case-sensitive so that Uppercase Letters and Lower Case letters are different
14. The name of identifier cannot begin with a digit. However, Underscore can be used as first character while declaring the identifier.
15. Only alphabetic characters, digits and underscore (_) are permitted in PYTHON language for declaring identifier.

Q1. Classify each of the following as either a legal or illegal Python identifier:

1. fred	#Keywords	8. #sum total	#Invalid	15. xTwo	#identifier
2. #if	# Invalid	9. Sumtotal	#identifier	16. _static	#identifier
3. #2x	#Invalid	10. While	#identifier	17. _4	#identifier
4. -4	#Constant	11. x2	#identifier	18. ___	#identifier
5. sum_total	#identifier	12. Private	#Keywords	19. #10%	#Invalid
6. sumTotal	#identifier	13. public	#Keywords	20. a27834	#identifier
7. sum-total	#Expression	14. #$16	#Invalid	21. #wilma's	#Invalid

Q2. If x = 2 Indicate what each of the following Python statements would print.

print("x")	1. x
print('x')	2. x
print(x)	3. 2
print("x + 1")	4. x + 1
print('x' + 1)	5. #Invalid
print(x + 1)	6. 3

Q3. Find Output: if *i1 = 2,i2 = 5,i3 = -3,d1 = 2.0,d2 = 5.0,d3 = -0.5;*

1. i1 + i2	1. print(i1 + i2)	1. 7
2. i1 / i2	2. print(i1 / i2)	2. 0.4
3. i1 // i2	3. print(i1 // i2)	3. 0
4. i2 / i1	4. print(i2 / i1)	4. 2.5
5. i2 // i1	5. print(i2 // i1)	5. 2
6. i1 * i3	6. print(i1 * i3)	6. -6
7. d1 + d2	7. print(d1 + d2)	7. 7.0
8. d1 / d2	8. print(d1 / d2)	8. 0.4
9. d2 / d1	9. print(d2 / d1)	9. 2.5
10. d3 * d1	10. print(d3 * d1)	10. -1.0
11. d1 + i2	11. print(d1 + i2)	11. 7.0
12. i1 / d2	12. print(i1 / d2)	12. 0.4
13. d2 / i1	13. print(d2 / i1)	13. 2.5
14. i2 / d1	14. print(i2 / d1)	14. 2.5
15. i1/i2*d1	15. print(i1/i2*d1)	15. 0.8
16. d1*i1/i2	16. print(d1*i1/i2)	16. 0.8
17. d1/d2*i1	17. print(d1/d2*i1)	17. 0.8
18. i1*d1/d2	18. print(i1*d1/d2)	18. 0.8
19. i2/i1*d1	19. print(i2/i1*d1)	19. 5.0
20. d1*i2/i1	20. print(d1*i2/i1)	20. 5.0
21. d2/d1*i1	21. print(d2/d1*i1)	21. 5.0
22. i1*d2/d1	22. print(i1*d2/d1)	22. 5.0

Q4. Find Output: if i2 = 5,i3 = -3,1 = 2.0,d2 = 5.0,d3 = -0.5

1. i1 + (i2 * i3)	1. print(i1 + (i2 * i3))	1. -13
2. i1 * (i2 + i3)	2. print(i1 * (i2 + i3))	2. 4
3. i1 / (i2 + i3)	3. print(i1 / (i2 + i3))	3. 1.0
4. i1 // (i2 + i3)	4. print(i1 // (i2 + i3))	4. 1
5. i1 / i2 + i3	5. print(i1 / i2 + i3))	5. -2.6
6. i1 // i2 + i3	6. print(i1 // i2 + i3)	6. -3
7. 3 + 4 + 5 / 3	7. print(3 + 4 + 5 / 3)	7. 8.666666666666666
8. 3 + 4 + 5 // 3	8. print(3 + 4 + 5 // 3)	8. 8
9. (3 + 4 + 5) / 3	9. print((3 + 4 + 5) / 3)	9. 4.0
10. (3 + 4 + 5) // 3	10. print((3 + 4 + 5) // 3)	10. 4
11. d1 + (d2 * d3)	11. print(d1 + (d2 * d3))	11. -0.5
12. d1 + d2 * d3	12. print(d1 + d2 * d3)	12. -0.5
13. d1 / d2 - d3	13. print(d1 / d2 - d3)	13. 0.9
14. d1 / (d2 - d3)	14. print(d1 / (d2 - d3))	14. 0.36363636363636365
15. d1 + d2 + d3 / 3	15. print(d1 + d2 + d3 / 3)	15. 6.833333333333333
16. (d1 + d2 + d3) / 3	16. print((d1 + d2 + d3) / 3)	16. 2.1666666666666665
17. d1 + d2 + (d3 / 3)	17. print(d1 + d2 + (d3 / 3))	17. 6.833333333333333
18. 3 * (d1 + d2) * (d1 - d3)	18. print(3 * (d1 + d2) * (d1 - d3))	18. 52.5

Q5. Write the shortest way to express each of the following statements.

1. x = x + 1	X+=1
2. x = x / 2	x/=2
3. x = x - 1	x-=1
4. x = x + y	x+=y
5. x = x - (y + 7)	x-=y+7

6. x = 2*x	x*=2
Q6. Program with Output:	
pi = 3.14159; print("Pi =", pi) print("or", 3.14, "for short") avogadros_number = 6.022e23 c = 2.998e8 print("Avogadro's number =", avogadros_number) print("Speed of light =", c)	Pi = 3.14159 or 3.14 for short Avogadro's number = 6.022e+23 Speed of light = 299800000.0
print('A\nB\nC') print('D\tE\tF') print('WX\bYZ') print('1\a2\a3\a4\a5\a6')	A B C D E F W X Y Z 1 2 3 4 5 6
print("Did you know that 'word' is a word?") print('Did you know that "word" is a word?') print('Did you know that \'word\' is a word?') print("Did you know that \"word\" is a word?")	Did you know that 'word' is a word? Did you know that "word" is a word? Did you know that 'word' is a word? Did you know that "word" is a word?
filename = 'C:\\Users\\rick' print(filename)	C:\Users\rick Please enter some text:
print('Please enter some text:') x = input() print('Text entered:', x) print('Type:', type(x))	Hi Mr Ravi Text entered: Hi Mr Ravi Type: <class 'str'>
print('Please enter an integer value:') x = input() print('Please enter another integer value:') y = input() num1 = int(x) num2 = int(y) print(num1, '+', num2, '=', num1 + num2)	Please enter an integer value: 91 Please enter another integer value: 32 91 + 32 = 123
x = input('Please enter an integer value: ') y = input('Please enter another integer value: ') num1 = int(x) num2 = int(y) print(num1, '+', num2, '=', num1 + num2)	Please enter an integer value: 23 Please enter another integer value: 43 23 + 43 = 66
num1 = int(input('Please enter an integer value: ')) num2 = int(input('Please enter another integer value: ')) print(num1, '+', num2, '=', num1 + num2)	Please enter an integer value: 12 Please enter another integer value: 45 12 + 45 = 57
x1 = eval(input('Entry x1? ')) print('x1 =', x1, ' type:', type(x1)) x2 = eval(input('Entry x2? ')) print('x2 =', x2, ' type:', type(x2)) x3 = eval(input('Entry x3? ')) print('x3 =', x3, ' type:', type(x3)) x4 = eval(input('Entry x4? '))	Entry x1? 12 x1 = 12 type: <class 'int'> Entry x2? 21 x2 = 21 type: <class 'int'> Entry x3? 122 x3 = 122 type: <class 'int'> Entry x4? 43

print('x4 =', x4, ' type:', type(x4)) x5 = eval(input('Entry x5? ')) print('x5 =', x5, ' type:', type(x5))	x4 = 43 type: <class 'int'> Entry x5? 2.2 x5 = 2.2 type: <class 'float'> Please enter number 1, number 2: 12
num1, num2 = eval(input('Please enter number 1, number 2: ')) print(num1, '+', num2, '=', num1 + num2)	Please enter number 1, number 2: 12,12 12 + 12 = 24
print(eval(input())) print('A', end='') print('B', end='') print('C', end='') print() print('X') print('Y') print('Z')	2 A B C X Y Z
w, x, y, z = 10, 15, 20, 25 print(w, x, y, z) print(w, x, y, z, sep=',') print(w, x, y, z, sep='') print(w, x, y, z, sep=':') print(w, x, y, z, sep='-----')	10 15 20 25 10,15,20,25 10152025 10:15:20:25 10-----15-----20-----25
x = 6 print(6) print("6")	6 6
x = 7 print(x) print("x")	7 x
value1 = eval(input('Please enter a number: ')) value2 = eval(input('Please enter another number: ')) sum = value1 + value2 print(value1, '+', value2, '=', sum)	Please enter a number: 3 Please enter another number: 2 3 + 2 = 5
x, y, z = 3, -4, 0 x = -x y = -y z = -z print(x, y, z)	-3 4 0
print(-(4 - 5)) print(10/3, 3/10, 10//3, 3//10) print(10%3, 3%10) print(10.0/3.0, 3.0/10.0, 10.0//3.0, 3//10.0)	1 3.3333333333333335 0.3 3 0 1 1 3 3.3333333333333335 0.3 3.0 0.0
one = 1.0 one_third = 1.0/3.0 zero = one - one_third - one_third - one_third print('one =', one, ' one_third =', one_third, ' zero =', zero)	one = 1.0 one_third = 0.3333333333333333 zero = 1.1102230246251565e-16
one = 1.0	one = 1.0 one_tenth = 0.1 zero =

one_tenth = 1.0/10.0 print('one =', one, ' one_tenth =', one_tenth, ' zero =', zero)	1.1102230246251565e-16
print(-3 + 2) print(-(3 + 2))	-1 -5
dividend, divisor = eval(input('Please enter two numbers to divide: ')) print(dividend, '/', divisor, "=", dividend/divisor)	Please enter two numbers to divide: 3,5 3 / 5 = 0.6
value = eval(input('Please enter a number to cut in half: ')) print(value/2)	Please enter a number to cut in half: 32 16.0
degreesF = eval(input('Enter the temperature in degrees F: ')) degreesC = 5/9*(degreesF - 32); print(degreesF, "degrees F =", degreesC, 'degrees C')	Enter the temperature in degrees F: 23 23 degrees F = -5.0 degrees C
seconds = eval(input("Please enter the number of seconds:")) hours = seconds // 3600 # 3600 seconds = 1 hours seconds = seconds % 3600 minutes = seconds // 60 # 60 seconds = 1 minute seconds = seconds % 60 print(hours, "hr,", minutes, "min,", seconds, "sec")	Please enter the number of seconds:43 0 hr, 0 min, 43 sec
seconds = eval(input("Please enter the number of seconds:")) hours = seconds // 3600 # 3600 seconds = 1 hours seconds = seconds % 3600 minutes = seconds // 60 # 60 seconds = 1 minute seconds = seconds % 60 print(hours, ":", sep="", end="")	Please enter the number of seconds:45
tens = minutes // 10 ones = minutes % 10 print(tens, ones, ":", sep="", end="")	0:00:45
tens = seconds // 10 ones = seconds % 10 print(tens, ones, sep ="") degreesF, degreesC = 0, 0 degreesC = 5/9*(degreesF - 32) degreesF = eval(input('Enter the temperature in degrees F: ')) print(degreesF, "degrees F =", degreesC, 'degrees C')	Enter the temperature in degrees F: 24 24 degrees F = -17.77777777777778 degrees C
x1 = 2 x2 = 2 x1 += 1 x2 -= 1 print(x1) print(x2)	3 1