CLASS XI

ENGLISH

1. Read any English Newspaper of your choice daily.

2. Write a report on any two events/programs/trips you participated in the summer vacation. (Minimum 100 Words)

3. Write factual description of any two places (hill station/museum/malls etc) you visited during the vacation. (Minimum 100 words)

4. Read the "letter to the editor column" in the news paper, cut and paste any five letters of complaint.

5. Referring to the newspaper write any five reports on accidents/bomb scare/global warming/wild life conservation/heat wave etc in your own words. (Word limit 125 words)

6. Watch debates on TV like 'We The People' and 'The Big Fight' and write a debate on any one topic which impressed you the most.

BIOLOGY

1. Collect news items related to the field of biology and paste clippings in a file.
2. Complete the record file.
3. Learn the chapters studied in class and come prepared for a class test.

Chemistry

Q1. Solve the assignment as well as NCERT questions of the following chapters in your assignment register:

   i.   Unit 1 - Some Basic Concepts of Chemistry
   ii. Unit 2 - Structure of Atom

Q2. Prepare a project on the topic : Environmental Chemistry. Refer Ch-14 of your textbook.

POLITICAL SCIENCE

CLASS XI

1. Prepare a project report on any one of the following topics, using newspaper clippings, photographs, statistical data, and factual information:
a) Booth capturing in recent elections and the need and role of Election Commission in conducting free and fair elections.

    OR

b) Preventive Detention is a tool which can be misused by the ruling party to take political revenge in India.

2. Study the Indian Constitution and prepare a model of the same in a summarised manner.

Computer Science

PYTHON FUNDAMENTALS

1. What are data types. Explain various data types?

2. Define a variable.

3.Explain input()

 4. what are logical,relational and arithmetic operator?

5. Give examples of integer and float.

6. What is the difference between keyword and identifier?

Note: practice soved/unsolved questions/programs of chapter 3 based on if statement in your comp. sci. notebook

SUBJECT – ECONOMICS

CLASS – XI

Q1.Following data relate to the construction of a house in Delhi. Present the information in the form of a pie diagram.

Items	% expenditure
Labour	60
Bricks	15
Cement	10

Steel	12
Timber	3
Total	100

Q2. Present the following data in the form of 'Less than' and ' more than' ogive.

Weekly wages (rs)	20 -39	40 -59	60 -79	80 -99	100-119	120 -139
No of workers	6	10	20	14	10	5

Q3. Present the data in the form of a multiple bar diagram.

Faculty	No of students		
	2011-12	2013-14	2015-16
Arts	450	750	900
Science	300	500	700
commerce	200	350	500

Q4.Following table shows estimates of cost of production of certain commodities. Present the data in the form of a sub-divided bar diagram.

Estimate of cost	Good A	Good B	Good C	Good D
Raw material	50	40	45	50
Wages	40	40	40	40
Fixed costs	10	12	15	15
Office expenses	10	8	10	5

Q5. Present the data in the form of a multiple/ sub-divided bar diagram.

Faculty	No of students		
	2004-05	2005-06	2006-07
Arts	600	550	500
Science	400	500	600
commerce	200	250	300

Q6. The percentage distribution of exports from India of engineering products by regions of destination for two years is given below. Present the data in the form of a sub-divided bar diagram.

REGION OF DISTRIBUTION	2013—14	2015--16
S.E. ASIA	42	23
WEST ASIA	19	22
AFRICA	16	28
OTHER REGIONS	23	27
TOTAL	100	100

Q7.Following data relate to the construction of a house in Delhi. Present the information in the form of a pie diagram.

Items	% expenditure
Labour	30
Bricks	25
Cement	20
Steel	15
Timber	10
Total	100

Q8. Draw a Histogram from the following data.

Weekly wages (rs)	10-15	15-20	20-25	25-30	30-40	40-60	60-80
No of workers	4	10	25	15	12	12	8

Q9. Draw a Histogram AND Frequency polygon from the following data.

Marks	0 – 5	5 – 10	10 – 15	15 – 20	20 – 25	25 – 30	30 – 35	35 - 40
Students	7	10	20	13	17	10	14	9

Q10. Prepare a pie diagram to represent the following.

Items of expenditure of a family	% of expenditure
Food	75
Housing	20
Fuel & others	5

Subject-Geography
Class-XI

Q 1 There can be no Geography without Physical Geography nor there can be one without Human Geography. Elaborate the statement.

Q 2 Is Pluto and 2003UB313 a planet? Justify your answer

Q 3 What is the basic difference in the arguments related to origin of planets as given by:

1. Chamberlain and Moulton
2. Otto Schmidt and Carl Weizascar

Q 4 Bring out the basic difference between Continental drift theory and Plate Tectonic theory.

Q 5 Make a list of important Earthquakes and Volcanoes of the world that have occurred in the recent past and mention the places where they have occurred.

Q 6 On the political map of World locate:

1. Important Volcanoes
2. Important Earthquakes

Q 7 Discuss the following natural disasters with respect to India:

1. Cyclones
2. Floods
3. Tsunami
4. Droughts
5. Landslides
6. Earthquakes

By focussing attention on their definition, areas prone, causes, consequences, and preventive measures.

- Revise the syllabus covered so far for upcoming exam

ACCOUNTANCY

(1) **Prepare Accounting Equation from the given transactions. Also prepare Balance sheet on the basis of the final equation.**
(2) **Analyse the following transactions. State the nature of account. Also mention which account is to be debited and which is to be credited.**

Q1.

2019

April 1   Commenced business with cash Rs.40,000 and furniture worth Rs. 60,000.

April 2   Deposited into bank Rs.30,000.

April 5   Bought goods for cash Rs.5,000.

April 7   Sold goods to Amit Rs.2,500.

April 9   Bought goods from Satya Rs.5,100.

April 12   Received cash from Amit Rs.1,950 and discount allowed Rs.50

April 14   Received cash for goods sold Rs.2,750

April 15   Bought goods from Dinesh Rs.3,350.

April 16   Withdrew cash for private expenses Rs. 2,000.

April 17   Received cash from Amit and deposited into bank Rs.1,500.

April 20   Paid sundry trade expenses Rs.500.

April 25   Paid Rent Rs.450

April 28   Paid cash to Dinesh Rs.3,300

              Discount Received Rs.50.

April 29   Goods sold to Rohit Rs.4,050

April 30   Paid for carriage Rs.500.

April 30   Interest due but not paid Rs. 600.

Q2. Shri S.K. Gupta commenced business on 1st April,2015 with a capital of Rs.1,00,000 of which Rs.60,000 was paid into his bank account and Rs.40,000 retained as cash. His other transactions during the month were as follows:

April 2 Bought office furniture and fittings Rs.20,000

April 5 Purchased goods Rs.16,000

April 8 Purchased goods from Ramesh Rs.1,100

April 12   Sold to Sameer Rs.2,100

April 13   Paid Ramesh in cash Rs.1,000 and discount Received Rs.100

April 17   Withdrawn cash for office use Rs.4,000

April 18   Sen sold goods to us Rs.3,000

April 19   Received cash from SameerRs.2,000; Allowed him discount Rs.100

April 20   Sold to Raj Rs.4,000

April 28   Cash sales Rs.1,400

April 30   Paid Salary Rs.800

April 30   Paid Rent Rs.500

April 30   Paid general trade expenses Rs.200

April 30   Paid cash into bank Rs.2,000

Q 3. Define:

(1) Accounting	(19)	Income
(2) Assets	(20)	Outstanding Expense
(3) Liabilities	(21)	Prepaid Expense

(4) Capital		(22)	Income Received in advance
(5) Drawings		(23)	Accrued Income
(6) Current Assets		(24)	Bad Debts
(7) Current Liabilities		(25)	Depreciation
(8) Creditors		(26)	Goods
(9) Debtors		(27)	Purchases
(10)	Bills payable	(28)	Sales
(11)	Bills Receivable	(29)	Purchase returns
(12)	Trade Receivable	(30)	Sales returns
(13)	Trade Payable	(31)	Closing stock
(14)	Money Measurement Concept	(32)	Journal
(15)	Accounting Entity Concept	(33)	Ledger
(16)	Accounting Period Concept	(34)	Trial Balance
(17)	Going Concern Concept	(35)	Balance Sheet
(18)	Expense		

PHYSICAL EDUCATION-XI

Practice questions-

Q1. Define physical education and explain its aim and explain its aim and objectives in detail.

Q2. What are the various career options in physical education? Discuss the teaching career in detail.

Q3. Write short notes on any two of the following:

a) Career in book writing.
b) Career in sports photography.
c) Career in sports industry.

Q4. What is Khelo India School Games.

Q5. Elucidate the importance of physical fitness and wellness in brief.

Q6. Define strength and discuss its types in brief.

Q7. What is flexibility? Discuss the various types of flexibility in brief.

Q8. Briefly discuss about coordinative abilities.

Q9. Define wellness and explain the components of wellness in detail.

Q10. Define Khelo India Programme and explain its objectives.

Q11. What do you mean by physical fitness? Elucidate any two components of physical fitness.

Q12. Write a short note on the Olympic Flag.

Q13. Briefly explain about International Olympic Committee.

Q14. Briefly elucidate about the award of Ancient Olympic Games.

Q15. Discuss about closing ceremony of Modern Olympic Games.

Q16. Discuss about opening ceremony of Modern Olympic Games.

Q17. Discuss about the symbol and motto of Modern Olympic Games.

Q18. Discuss the objectives of Indian Olympic Association.

Q19. Explain the origin of Modern Olympic Games.

Q20. Elucidate about the development of values through Olympic movement.

Q21. Write a short note in brief on the following:

a) Olympic Motto
b) Olympic Flag
c) Olympic Flame
d) Olympic Award
e) Olympic Oath

Q22. Write a detailed note on Indian Olympic Association.

Q23. Describe in detail the various physical education courses available in India.

Q24. Describe the changing trends and careers in physical education in detail.

CLASS-XI
PHYSICS

Q1. Define Astronomical Unit.
Q2. How many kg are there in 1 a.m.u?
Q3. Given: Wavelength=6000 Å. Express it in nm.
Q4. The density of a material is 0.8 g/cm^3, express it in kg/m^3. Q5. What is the difference between mN, Nm , nm?
Q6. How many parsecs are there in 1 Light Year? Q7. How many Astronomical units are there in 1 m?
Q8. A dust particle weighs 6.7 x 10^{-10} kg. How many such dust particles would weigh 6.7 kg?

SIGNIFICANT FIGURES AND ERROR ANALYSIS

Q1. Find the number of significant figures in the following: i) 9.11 x 10^{-31} kg   iv) 7.0030 cc vii)

123.7 m
ii) 6371 km   v) 80.0 s   viii) 0.23 x 10^{-3}
iii) 0.53 Å   vi) 0.00427 g   ix) 80.0

Q2. Round of the following to three significant figures:
i) 20.968 m   iii) 2.914 m/s
ii) 0.003156 kg   iv) 411.27 m^2

Q3. State the rules for significant figures followed in the mathematical operations of:
i) Multiplication or Division
ii) Addition or Subtraction

Q4. Find the value of the following upto appropriate significant
figures: i) 3.27+33.5472   iii) 53.312-53.3
ii) 2.02 x 23   iv) 3.908 x 5.5

Q5. A cubic millimeter of blood sample on microscopic examination is found to have   5 x
10^6 corpuscles. If an adult person contains 2.5 litres of blood, find the order of total number of red corpuscles in it.
Q6. The diameter of a sphere is 2.34 cm. Calculate its surface area and the volume with due regard significant figures given that π = 3.14.
Q7. A bus covered a distance of 182 km from Delhi to Roorkee in 5.5 hours. What is the average speed? Express it in appropriate number of significant figures.
Q8. What is the difference in writing a length as 3.2 cm and 3.200 cm?
Q9. In an experiment, Refractive Index of glass was observed to be 1.45, 1.56, 1.54, 1.44, 1.54, 1.53. Calculate:
 i) Mean Value of Refractive Index,   ii) Absolute Error, iii) Fractional Error, iv) Percentage Error.

Q10. A physical quantity 'q' is given by , $Q = A^2B^2 / C\sqrt{D}$
The Percentage Error in A, B ,C, D are in 1%, 2%, 4%, 2% respectively. Find the Percentage Error in Q.

Q11. The radius of curvature of a Concave Mirror, measured by Spherometer is given by R. The values of 'l' and 'h' are 4 cm and 0.65 cm respectively. Compute the error in measurement of radius of curvature. Where $R = (l^2 / 6h) + (h / 2)$

Q12. If two resistances of values R_1= (2.0 $\pm$ 0.1)Ω and R_2= (12.3 $\pm$ 0.2)Ω are put in,
 (i) parallel and ii) series. Find the error in equivalent resistance. Use, R_3 =
   R_1+R_2, 1/RP = 1/R_1 + 1/R_2 and DRP/R2 = DR$_1$/R_2 + DR$_2$/R_2

Q13. The following observations were actually made during an experiment to find the value of 'g' using a Simple Pendulum:
Length of Pendulum = 100
cm Time for 20 Oscillations
= 40 s
Calculate the maximum possible error if the length was measured by a meter scale having least count 0.1 cm and time was measured by a stopwatch having least count 0.1 s.

Q14. A capacitor of capacitance c=(100+.2) uf v=(2.0±0.1) Volt. What will be the charge 'Q' on the capacitor? Use Q =CV.

Q15. Which of the following readings is the most accurate i)7000 m   ii) 7×10^2 m iii) 7×10^3 m

Q16. If $f = x^2$, then what is the relative error in f?

DIMENSIONS

Q1. Time period of an oscillation of drop of radius 'r', density 'ð' and surface tension 's' is

$$t = k \frac{\eth r^3}{c}$$

Check the correctness of the equation.

Q2. Check the accuracy of the equation $h = \frac{h}{N v^2}$.

Where letters have their usual meanings.

Q3. Find the dimensions of $\frac{\alpha}{\beta}$ in the equation $p = \frac{\alpha - t^2}{\beta s}$

where 'p' is the pressure, ' 'x' is the distance and 't' is the time.

Q4. In the equation $F = \frac{\alpha}{\beta + d}$, find the dimensions of α and β, where 'F' is force and 'd' is

density.

Q5. If the velocity of light 'c', the constant of gravitation 'g' and planck's constant 'h' be chosen as the fundamental units, find the dimensions of mass, length and time in the new system.

Q6. Show dimensionally that the frequency 'n' of a transverse waves in a string of length 'l' and mass per unit length 'm' and under tension 'T' is given by $n = \frac{k}{S} \sqrt{\frac{T}{N}}$.

Q7. The coefficient of viscosity (n) of a gas depends on the mass 'm' , the effective diameter 'd' and mean speed 'υ′' of the gas molecules. Use dimensional analysis to find n.

METHODS OF MEASUREMENT

Q1. What is the value of one i) 1° ii) 1' and iii) 1" in radian?

Q2. Angular diameter of sun, as observed by a scientist from the surface of earth is 32'. What is the diameter of Sun? Given that mean distance of earth from the sun is 1 AU having a   value of 1.5×10^{11} m.

Q3. A Laser signal is beamed towards the planet Venus from Earth and it's echo is received
8.2 minutes later. Calculate the distance of Venus from the Earth at that time.

Q4. When the planet Jupiter is at a distance of 824.7 million km from the Earth, the angular diameter is measured to be 35.72" of arc. Calculate the diameter of the Jupiter.

Q5. Light from the Sun takes 8 minutes and 20 seconds to reach the Earth. Calculate the radius of Earth's orbit round the sun in light years.

Q6. The angle subtended by moon at a point on Earth is 0 31'. If the distance of moon from Earth is 3.84×10^8 m, find the diameter of the moon.

Q7. When the observations are taken at an intervals of 6 months, the angle of parallax for a   star is 0.4". Find the distance of the star in Parsec.

DIMENSIONAL ANALYSIS

Q1. Find the dimensional formulae of,

i) Kinetic Energy,   ii) Pressure

Q2. Find the dimensions of constants 'a' and 'b' occurring in the Vander-Wall's equation,
$(P + a/v^2) (v - b) = RT$, where P is pressure, v is volume, T is temperature and R is gas constant.

Q3. The Rotational Kinetic Energy of a body is given by $E = (1/2) I W^2$, where 'W' is the angular velocity of the body. Use the equation to obtain dimensional formulae for moment of inertia . Also write it's SI Unit.

Q4. Find the value of 60 W on a system having 100 g, 20 cm and 1 min as the Fundamental Units.

Q5. By the method of dimensions, find the value of acceleration of 8 m/s^2 into km/h^2 .

Q6. Assuming that escape velocity v_e from a planet depends upon Gravitational Constant 'G', Radius 'R' of the planet and also it's density 'δ', establish a relation for escape velocity.

INFORMATICS PRACTICES

CLASS XI

1. Create/Make an A4 size Poster on any one of the given topics:

    a) Trouble shooting with parts of computer
    b) I/O devices
    c) Netiquettes
    d) Cyber Safety

2. Also create a PowerPoint Presentation on any one of the above topics.

3. Answer the following in your practical register.
    a) What is the advantage of using RDBMS?
    b) Define the following terms:
        Relation , attribute, tuple, candidate key , degree, cardinality of a table
    c) Differentiate between DDL and DML commands
    d) Solve ques. 16,21 on page 316

4. Revise chapter 10 – Relational Databases and SQL
5. Read chapter 2,3- Getting started with Python.

ग्रीष्मावकाश गृहकार्य , २०१९——२०

हिन्दी — कक्षा ।।.

1. अपनी पुस्तक में संकलित किसी एक साहित्यकार पर विस्तृत परियोजना तैयार कीजिए ।

2. परिवार संग किसी पर्यटन स्थल पर जाकर वहाँ के अनुभव यात्रावृत्तांत के रूप में लिखिए ।

3. प्रति सप्ताह 'एक - डायरी का पन्ना' लिखिए ।

4. किसी सामाजिक सेवा कार्य से जुड़कर समय का सदुपयोग कीजिए ।

5. मई माह तक पढ़ाए गए सभी पाठों को समझकर याद कीजिए ।

6. अपनी रूचि के किन्हीं दस विषयों पर ३5०-५० शब्दों में निबंध लिखिए ।

Note- परियोजना कार्य के अतिरिक्त शेष कार्य अपने हिंदी के रजिस्टर में ही कीजिए ।

HOLIDAY HOMEWORK

BUSINESS STUDIES

CLASS XI

➢ Develop project on the following topics:

1. Visit to a mall.
2. Visit to a departmental store.
3. Visit to a bank.