HOLIDAY HOMEWORK CLASS – XI

1. PHYSICAL EDUCATION

Write a notes on unit IX and Unit X I.e. Sports psychology and sports training.

1. MATHS
2. 1. Revise the basic concepts of each chapter (Ch.1-9)
3. 2. Solve the miscellaneous exercises of each chapter (Ch.1-9).
4. 3.you have to write 10 practicals on your notebook details of which will be provided on your class whats app group.

3. CHEMISTRY

PREVIOUS YEARS PAPERS TO BE SOLVED.

2.REVISION OF ALL CHAPTERS.

3.MCQ OF ALL CHAPTERS/REASONING .

4.ONE WORD QUESTION OF EACH CHAPTERS.

4. BIOLOGY

I. SOLVE ALL NCERT EXERCISES OF CHAPTERS 1 TO 22 ON SEPARATE NOTE BOOK.

II. DRAW FLOW CHART OF FIVE KINGDOM CLASSIFICATION, PLANT AND ANIMAL KINGDOM CLASSIFICATION, ROOT, PLACENTATION, MONOCOT AND DICOT SEED, ANATOMY OF T.S. OF MONOCOT, DICOT ROOT, LEAF AND STEM, ANATOMY OF SECONDARY GROWTH OF ROOT AND STEM, MEIOSIS AND MITOSIS, STRUCTURE OF CILIA AND FLAGELLA, CHROMOSOMES ON BASIS OF POSITION OF CENTROMERE, HUMAN DIGESTIVE SYSTEM, HUMAN EYE AND EAR, HUMAN EXCRETORY SYSTEM, HUMAN BRAIN.

III. REVISE ALL CLASS NOTES.

IV. SOLVE QUESTION PAPERS OF PERIODIC TEST-1, HALF YEARLY EXAM AGAIN.

5 PHYSICS

**MOTION IN A PLANE**

* A projectile is projected with a velocity u making an angle θ with the horizontal direction. Find:

(a) time of flight (b) maximum height (c) horizontal range

* Justify the statement that a uniform circular motion is an accelerated motion.
* What is centripetal acceleration? Derive its expression.

**LAWS OF MOTION**

* What is inertia? Discuss its types giving one example in each case.
* State Newton’s 2nd law of motion. Hence define 1 N.
* State Newton’s laws of motion.
* State the law of conservation of momentum.
* Define the term impulse. Write its SI unit.
* What is friction? Explain the cause of friction.
* Define static friction, limiting friction, kinetic friction and rolling friction.
* Define angle of friction and angle of repose. Establish a relation between them.
* Why does a cyclist lean inward while negotiating a curve? Explain with a diagram.
* What is banking of road? Why is it essential? Derive the equation for the angle of banking ignoring friction between the tyres and the road.
* What do you mean by ball bearings? How sliding friction is converted into rolling friction?

**WORK, ENERGY AND POWER**

* Name and define SI unit of work.
* Which physical quantity does the area under force-displacement curve represents?
* What are conservative and non-conservative forces? Give example of each.
* State work-energy theorm.
* State and prove the law of conservation of mechanical energy for a freely falling body.
* What is meant by mass-energy equivalence? Discuss its significance in physics.
* What is the meaning of collision in physics? Define the terms elastic and inelastic collisions.

**SYSTEM OF PARTICLES & ROTATIONAL MOTION**

* Define centre of mass. Write an expression for the centre of mass of a two particle system.
* What is torque or moment of force? Give its SI unit.
* State and explain the principle of moments.
* Define a couple.
* Define angular momentum of a particle. State its SI unit.
* Write the relation between angular momentum and torque.
* Define moment of inertia of a body. Give its SI unit and dimensions.
* State the factors on which moment of inertia of a body depends.
* Write the relation between rotational kinetic energy and moment of inertia of a body.
* State the principle of conservation of angular momentum.
* State the theorem of parallel axis.
* State the theorem of perpendicular axis.

**GRAVITATION**

* State Newton’s law of gravitation. Give the value and dimension of gravitational constant G.
* Show that the value of g decreases with height.
* Show that the value of g decreases with depth.
* Define gravitational potential energy.
* Define escape velocity. Derive an expression for escape velocity of an object from the surface of a planet.
* What are geostationary satellites? Where are they used?
* State Kepler’s law of planetary motion.

1. ENGLISH
2. WRITE THE SUMMARY OF ALL THE CHAPTERS THAT HAVE BEEN COVERED FOR HALF-YEARLY.
3. PREPARE A PPT ON TENSES
4. PREPARE A PPT ON MODALS
5. WRITE ARTICLES ON GIVEN TOPIC – ‘IMPORTANCE OF DUCATION FOR WOMEN’ OR ‘CHILD LABOUR- A BIG PROBLEM’

HINDI

1.परियोजना कार्य में हिंदी साहित्य का इतिहास और दस रचनात्मक लेख लिखेंl

2.अपनी इच्छा अनुसार दस औपचारिक पत्र और दस अनौपचारिक पत्र लिखेंl 3.व्यावहारिक लेखन में (प्रतिवेदन, प्रेस विज्ञापन, परिपत्र, कार्यसूची/कार्यवृत्त का अध्ययन करें और उन्हें अपनी अपनी उत्तर पुस्तिका में लिखेंl

4.जनसंचार माध्यम और पत्रकारिता के विविध आयामों का और शब्दकोश का अध्ययन करेंl 5.संपूर्ण पाठ्यक्रम को याद करें और प्रतिदिन एक पृष्ठ अपनी- अपनी उत्तर पुस्तिका में लिखेंl 6. राजस्थान की रजत बूंदें और भारतीय गायिकाओं में बेजोड़ लता पाठ का सारांश प्रश्न उत्तर सहित परियोजना कार्य लिखेंl

**COMPUTER SCIENCE**

1. Solve all the unsolved assignment questions (code snippets) from back exercise chapter wise.
2. Write at least 30 programs in Python programming language from the concepts that we have studied so far.
3. Write a python application that can be based on real time scenario and should be of at least 100 lines of code.