ADARSH VIDYA NIKETAN
SENIOR SECONDARY SCHOOL
HOLIDAYs' HOmewOrk for class Ix (2019-20)

NAME:_____

ENGLISH

1) Based on the poem 'The Road Not Taken'. Write an article on 'Importance of Taking Risks in Life'. (Fair Note book)

2) Write the critical analysis of the movie Junglee. Using the quotes of some famous critics.

3) Write your autobiography including your details of your family, childhood memories, first day in school, important events etc. in about 4 pages (A4 sheet). Also paste picture and design a beautiful cover page.

4) Write about fani cyclone which occurred in Orissa recently? What measures should be taken to minimize the damage and save the lives of people?

5) Do comprehension passage given at page no. 5, 7, 9 (Module-1), 144, 145 (Module-4), 182, 183, 184, 185 (Module-5)

HINDI

1- ^cpiu l snjj gksrscPp$ fo"k; ij ,d ikstDV A3 'khV ij r$kj dhft,A

2- inWk.k jksdusdsfy, vkidsikl D;k&D;k mik; gS o.kZu dhft,A (A4 Sheet)

3- ikB;&iqrd dsvfrfjDr dkbZ ,d dgkuh dh iqrd if<+ vkS mldh leh{kk dhft,& (A4 Sheet)

- l frkr l kj fyf[k,A
- dkSu&l k ik= vPNk yxk vkS D;ka
- ;fn ml dgkuh dk var vki djr} rks dS s djrsA
- vki dks; g iqrd D;ka vPNh yxh\

fo'k"k&

- FA-1 dh r$kjh djdsykuh gSA
- 6 l gy$k ¼ tnj y$k½ fy[kdj ykus gSA (A4 Sheet)

MATHS

1) Revise all the chapters done in the class:

Ch-1　　Number System

Ch-2　　Polynomials

Ch-3　　Co-ordinate geometry

Ch-4　　Linear equations in two variables

Ch-12　　Heron's formula

2) Do extra questions from R.D. Sharma for practice.

3) Do any one activity or project work based on 9th class.

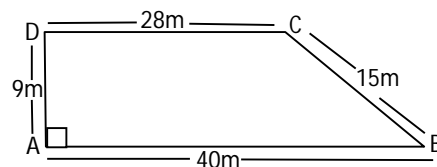4) Solve the given assignment in separate note book.

5) Revise all the chapters.

CH-2 POLYNOMIAL

1) Rationalise the denominator $\dfrac{5}{\sqrt{3} - \sqrt{5}}$

2) Expand:　(a) $\left(\sqrt{2}\, x - 3y\right)^2$　(b) $\left(2x - \dfrac{1}{3x}\right)^2$

3) Evaluate by using identities:

(a) 103 x 97　　　　　　(b) 0.54 x 0.54 – 0.46 x 0.46

4) Simplify:

(a) $\left(9x - 2y + z\right)^2$　　　　(b) $\left(-x + 2y + 32\right)^2$

5) Determine the remainder when the polynomial $p(x) = x^4 - 3x^2 + 2x + 1$ is divided by $x - 1$

6) Find the remainder when polynomial $9x^3 - 3x^2 + x - 5$ is divided by $x - \dfrac{2}{3}$

7) Show that $(x - 3)$ is a factor of polynomial $x^3 - 3x^2 + 4x - 12$

8) Find the value of 'k' if $(x - 3)$ is a factor of $3x^2 + kx + 6 = 6$

9) Divide　(i)　　$p(x) = 2x^3 - 3x^2 - 17x + 30$

$g(x) = x - 2$

(ii)　　$p(x) = 2x^4 + x^3 - 14x^2 - 19x - 6$

$g(x) = x^2 + 3x + 2$

CH-12 HERON'S FORMULA

1) Find the area of a triangle, two sides of which are 8cm and 11cm and the perimeter is 32cm.

2) An isosceles triangle has perimeter 30cm and each of equal sides is 12cm. Find the area of the triangle.

3) The perimeter of triangle field is 400m and its sides are in the ratio 13:12:15. Find the area of the triangle.

4) Find the area of the quadrilateral ABCD in which AB=7cm, BC=6cm, CD=12cm, DA=15cm and AC=9cm.

5) Find the area of a trapezium whose parallel sides 25cm, 13cm and other sides are 15cm and 15cm.

6) A hand fan is made by stitching 10 equal size triangular strips of two different types of paper. The dimensions of equal of two different types of paper. The dimensions of equal strips are 25cm, 25cm and 14cm. Find the area of each type of paper needed to make the hand fan.

7) The base and hypotenuse of right triangle are 5cm and 13cm respectively. Find its area.

8) Find the area of a triangle whose sides are 13cm, 12cm, 5cm respectively.

9) In fig. ABCD is a field in the form of quadrilateral whose sides are indicated in the fig. If $\angle DAB = 90^o$. Find area of the field.

10) The adjacent sides of a parallelogram ABCD measure 34cm and 20cm and the diagonal AC measure 42cm. Find the area of the parallogram.

SOCIAL SCIENCE

1) On an outline physical map of India locate northernmost & southernmost in degree & eastern & western most longitudes in degree.

2) On an outline political map of India mark all states with capitals and mark neighbouring countries.

3) Make a poster on the life & struggle of Nelson Mandela.

4) Write a short note on changing pattern of agricultural production & methods of irrigation in India.

5) Write a short note on Napoleon Bonaparte & paste picture also.

6) Prepare for U.T. learn lesson-1 (History) and lesson-1 (Geography)

CHEMISTRY

1) Why do wet clothes dry quickly in the sun than in shade?

2) Why do we feel comfortable under a fan when we are perspiring?

3) How do aquatic animals breathe under water?

4) Substance A has high compressibility and can easily be liquefied. It can take shape of its container. Predict the nature of substance and write its properties.

5) Classify the following into osmosis or diffusion.

   (a) Swelling up of a resin in keeping in water

   (b) Spreading of virus on sneezing.

   (c) Earthworm dying

   (d) Shrinking of grapes kept in thick sugar syrup

   (e) Presuming pickles in salt

6) Why do solids have a regular geometrical shape?

7) Why do thus acquire more leaves during summers?

8) Differentiate between evaporation & cooling.

9) Convert following in to k

   (i) 20ºC   (ii) 373ºC   (iii) -273ºC   (iv) -10ºC

10) Convert the following in to ºC

   (i) 298k   (ii) 646k   (iii) 0 k   (iv) 273k

Project / Model

IXA-Physics

IXB- Chemistry

IXC- Biology

BIOLOGY

1) Describe the structure and function of nucleus?

2) What do you mean by passive and active transport? Write a note on diffusion?

3) What is Endoplasmic reticulum? Give its types and functions.

4) What are lysosomes? How are they formed? Give their functions.

5) Discuss the structure and function of Mitochondria?

6) Describe structure and function of plasma membrane.

7) What is apical meristem and write down its function.

8) What are conducting elements of xylem?

9) What are permanent tissue of the plants? Give their characteristics.

10) Describe component of phloem. Define translocation.

11) Draw a well labelled diagram of neuron.

12) What is osmosis? Describe different type of osmosis?

13) Difference between:

(a) Active transport & passive transport

(b) Diffusion & facilitated diffusion

(c) Endocytosis and Exocytosis

14) Difference between animal cell and plant cell?

15) What is permanent tissue? How many types of permanent tissues are present in plant?

PHYSICS

1) Write the definition of distance & displacement.

2) Write the differences between distance & displacement with the help of examples?

3) What is speed? Is speed a scalar or a vector quantity?

4) What is velocity? Is velocity a scalar or a vector quantity?

5) Write the differences between speed & velocity.

6) If a body increases its speed from 36km/hr to 72km/hr in 5 minutes. What will be the acceleration of the body?

7) Define acceleration, Uniform & Non-Uniform acceleration with the help of diagrams.

8) Draw all the distance time & speed time graphs?

9) Derive three equations of motion algebraically & graphically.

COMPUTER

- Do your Homework in your Computer Practical File, it should be colourful and decorative with Pictures.

  1. Explain types of Operating System.

     - Linux
     - Unix
     - Windows
     - Mac OS
     - Android

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