

# HOLIDAY HOMEWORK

## CLASS IX (2019 – 2020)

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## Class IX Maths

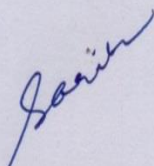
### APEEJAY SCHOOL, SHEIKH SARAI SUMMER HOLIDAY HOMEWORK

May-June, 2019

Theme-' *General Elections & Measurement*'

#### Class IX Maths

1. Prepare a portfolio of the worksheets uploaded on moodle. (Class 9<sup>th</sup> A,B,C & D)
2. Collect information on the General Election 2019. Collect newspaper articles related to statistics (in the form of data tables, pictorial representation like bar graph, pie-charts etc.) (Class 9<sup>th</sup> A,B,C & D)
3. Draw a comparison (party-wise) of the number of votes polled for each candidate of any constituency of the NCT Delhi or of your constituency. (For class IX - B, D)



## Class IX Hindi

### कक्षा – नवीं

- आज तक की सभी प्रशासनिक सरकारों का संक्षिप्त विवरण चित्र सहित दशति हुए एक राजनीतिक – पत्रिका तैयार कीजिए।
- लोकसभा चुनाव के प्रतिभागी किसी एक राजनीतिक दल से संबंधित नेता और उसकी उपलब्धियों को दशति हुए विज्ञापन हेतु एक पोस्टर तैयार कीजिए ।

## Class IX Sanskrit

१. विद्यालय द्वारा ले जाए जा रहे ; शैक्षणिक भ्रमण के प्रतिवेदनात्मक पक्ष को प्रस्तुत करें। इस हेतु छात्रों को चित्र तथा स्थान आदि का विशद वर्णन अनिवार्य होगा।

२. सन्धि परिचय

i दीर्घसन्धि: (उदाहरणवत्)

ii गुणसन्धि: (उदाहरणवत्)

iii वृद्धिसन्धि: (उदाहरणवत्)

iv यण् सन्धि: (उदाहरणवत्)

v अयादिसन्धि: (उदाहरणवत्)

३. अकारान्त, आकारान्त, उकारान्त, ऋकारान्त, नकारान्त, तकारान्त (शब्दपरिचयः)

४. पठ् धातोः रूपाणि (पञ्चलकारेषु)

## Class IX French

1. **Soulignez les verbes donnés dans votre livre et conjuguez deux verbes chaque jour à l'affirmatif et au négatif:**
  - a. au présent
  - b. au passé composé
  - c. au passé récent
  - d. au futur proche
  - e. à l'impératif
2. **Ecrivez ce que vous avez fait pendant vos vacances !**
3. **Chaque jour regardez les infos. Sur TV5.**
4. **Write as discussed on the topics below: Collect some material (articles/ documentary/ pictures...) on "ELECTIONS / ARTIFICIAL INTELLIGENCE"**



## **Class IX English**

**1. PROJECT** - Artificial Intelligence has made human life easy. Take one example of AI (Alexa, Siri, Drone delivery programs used by Amazon, Tesla making driver-less cars etc) and make a wall hanging (using cardboard and CDs) or a scrapbook depicting how AI impacts our lives.

**2. STORY WRITING** - What happens when a creative and enterprising school teacher stumbles upon Alexa? He could have used it like the rest of us do, but here is what he did instead. Rarely do we hear innovation story happening in places where you smell the heat and dust, walk through kachcha road dotted with sleepy village homes, sweat it out and get your feet dirty literally.

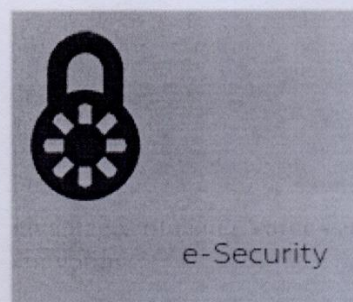
A thirty one year old school teacher is using Alexa to impart lesson to kids of farmers and laborers employed in the vicinity. Alexa naturally piques his interest and he believes that it could be a great teacher for his restless young students. Taking a cue from the above prompt, weave an interesting story around it in about 200 - 250 words. You may draw or use relevant picture cutouts to substantiate your story.

## **Class IX Computer**

**TOPIC :** Process of elections in India highlighting the advantages of using **Voter verifiable paper audit trail (VVPAT)** or **verifiable paper record (VPR)** in voting

**TASK:** Design an attractive E-Newsletter on the above topic using any E-Newsletter Software

**NOTE:** Email the newsletter at Email-Id [apjss.hw@gmail.com](mailto:apjss.hw@gmail.com)



# Class IX Science

## THE FUNDAMENTAL UNIT OF LIFE CLASS-IX WORKSHEET

### 1 MARK QUESTION

1. Name the cell organelle which is commonly called suicidal bag of the cell.
2. Which cell organelle are termed the power house or storage batteries of the cell?
3. Name the organelle which is associated with protein synthesis.
4. Name the longest human body cell.
5. Is the plant cell wall living or dead?
6. Define osmosis.
7. Define diffusion.
8. Give full form of ATP and ADP.
9. Name the two cellular components that are absent in an animal cell but present in plant cell.
10. Which cell organelle is absent in plant cell but is present in animal cell?
11. Why is plasma membrane termed selectively permeable?
12. What are chromosomes?
13. What are leucoplast? Give their function.
14. What happens when fresh grapes are kept in concentrated sugar solution?
15. What will happen when plant leaves are boiled and then drop of concentrated sugar solution is added on the boiled leaves?

### 2 MARK QUESTION

1. Give two major differences between prokaryotes and eukaryotes.
2. What will happen to animal cell when it is placed in
  - i. hypotonic solution
  - ii. Hypertonic solution
3. Define the terms plasmolysis and membrane biogenesis.
4. Give important points of modern cell theory.
5. List two similarities between mitochondria and plastids.
6. Why does a plant cell, when placed in a hypotonic solution, not burst?
7. Why does the skin of your finger shrink when you wash clothes for a long time?
8. A person takes concentrated solution of salt, after sometime, he starts vomiting. What is the phenomenon responsible for such situation? Explain.
9. If you are provided with some vegetables to cook. You generally add salt into the vegetables during cooking process. After adding salt, vegetables release water. What mechanism is responsible for this?
10. How is bacterial cell different from an onion peel cell?
11. Name two cell organelles in a plant cell that contain their own genetic material and ribosomes.
12. What are the consequences of the following conditions?
  - (a) A cell containing higher water concentration than the surrounding medium.
  - (b) A cell having low water concentration than the surrounding medium.



(c) A cell having equal water concentration to its surrounding medium.

#### 5 MARK QUESTION

1. Draw a plant cell and label the parts which:
  - (a) Determines the function and development of the cell.
  - (b) Power house of the cell
  - (c) Site of protein synthesis
  - (d) Is a fluid contained inside the nucleus
2. Draw a well labelled diagram of ultra structure of animal cell and as revealed by electron microscope.

#### HOTS

1. Why do raisins and apricots swell up when placed in water? Name the phenomenon involved.
  2. When swollen raisins and apricots are put in concentrated sugar solution, what will happen to them?
  3. What happens when a fully turgid plant cell is placed in a hypertonic solution? Name the phenomenon.
  4. Give reasons for the following:
    - (a) Bacteria are prokaryotic cells.
    - (b) Mitochondria are also called semiautonomous organelles.
    - (c) Division of labour is seen in cell organelles.
    - (d) Cell is known as structural and functional unit of life.
  5. How is endoplasmic reticulum important for membrane biogenesis?
  6. If cells of onion peel and RBCs are kept separately in hypertonic solution, what among the following will take place? Explain the reason for your answer.
    - a) Both the cells will swell.
    - b) RBC will burst easily while cells of onion peel will not burst.
    - c) (a) and (b) both are correct.
    - d) RBC and onion peel cells will behave similarly.
3. How are chromatin, chromosomes and DNA related?
4. What part of chromatin is associated with the control of characteristic in living organisms?

## **CLASS 9 Science**

### ***A polling booth***

***What it takes to design, what is the "TOLL IN A POLL"***

***EVMS of EVMS -Every Valid Matter in polling on Electronic Voting Machines***

***Their designs, their functionalities, their authenticities that lead to the success verdict of a Poll.***

You can express in the form of wonderful art in charts, photographs, layouts, models, slogans and even as poems if you can!!

*You can even make some games to enrich your ideas*

You can construct a working model of a EVM, or a statistical data of the pre and post evm era and the world countries that have pioneered in this venture

# Class IX Social Studies

## Holiday Homework – Class IX Social Studies

As per CBSE guidelines class IX has to do a project on Disaster Management as part of their internal evaluation. Every Student has to compulsorily undertake any one of the following projects on the mitigation and preparedness measures to be taken with regard to any one of the following hazards taking help of the guidelines given for each.

### 1 Earthquake

- a) Earthquake at risk
- b) Typical effects
- c) Main Mitigation Strategies
- d) Preparedness measures
- e) A case study

OR

### 2 Floods

- a) Elements at risk
- b) Typical effects
- c) Main Mitigation Strategies
- d) Preparedness measures
- e) How flood forecasting and warning is done
- f) A case study

OR

### 3 Cyclone

- a) Characteristics of tropical cyclones
- b) Predictability of tropical cyclone and use of warning system
- c) Elements at risk
- d) Typical effects
- e) Main Mitigation Strategies
- f) Preparedness measures
- g) Case study on the impact of 1999 Odisha Super Cyclone or any other recent case study.

OR

Delhi falls in high risk Seismic Zone. Make a project on mitigation and preparedness measures to be taken with regard to:

- (a) Seismic retrofitting of old structures.
- (b) Measures to be taken in designing of new buildings to make them earthquake resistant.

OR

Make layouts of models based on structured development in buildings in a rural/urban community in coastal areas prone to flood/cyclones or in areas prone to earthquake/landslides. Show the special features of the buildings and indicate the early warning system that could be best used in that community.

The project should be hand written by the students themselves and use eco friendly products without incurring too much expenditure.

The distribution of marks over different aspects relating to project work is as follows:

- |  |         |
|--|---------|
| (a) Content accuracy, originality and analysis | 2 marks |
| (b) Presentation and Creativity                | 2 marks |
| (c) Viva Voce                                  | 1 mark  |





# Class IX Home Science

## HOLIDAY HOME WORK CLASS IX HOME SCIENCE SURVEY REPORT

To survey your local market for the fabrics available and present a comparative pictures on basis of cost, durability, appearance and suitability.

Guidelines:

- It should be in a table format.
- Name of the market and date should be mentioned.
- Sample should be pasted on the left hand side.

S.NO	Types of Fabric	Cost (per meter)	Apperance	Durability	Suitability
1.	Cotton				
2.	Terrycot				
3.	Silk				
4.	Wool				
5.	Cotton Silk				
6.	Crepe				
7.	Chiffon				
8.	Georgette				

*Handwritten signature*



**HOLIDAY HOME WORK**  
**CLASS X**  
**HOME SCIENCE**  
**PROJECT REPORT**

1. List five areas of agreement and disagreement of self with:
  - Parents
  - Siblings
  - Friends.

2. Make a suitable play material for a child between birth to 3 years.

Method and Material required to be mentioned on right



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**HOLIDAY HOME WORK**  
**CLASS XI**  
**HOME SCIENCE.**

1. Study of physical self with reference to:

- a) Age, Height, weight, hip size, round chest/bust, round waist.
- b) Growth of beard, change in voice - boys.
- c) Age at menarche: Girls.
- d) colour of eyes and hair.



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**HOLIDAY HOME WORK**  
**CLASS XII**  
**HOME SCIENCE**  
**PROJECT REPORT**

1. List and discuss 5 areas of agreement and disagreement of self with:
  - a) Mother
  - b) Father
  - c) Siblings
  - d) Friends
  - e) Teacher.

How would you resolve the disagreement to reach a state of harmony and mutual acceptance.

2. Spend a day with an aged person and observe their needs and problems. write a report.