THE RAJASTHAN INTERNATIONAL SCHOOL ,KOTPUTLI
SUBJECT: INFORMATICS PRACTICES
Class 11

Make Power point presentation

1). Explain with Examples how E commerce has affected Commercial market

2). Explain why E learning is an essential need of today's student.

3). Benefits and drawbacks of using facebook and watsapp/ social networking websites/ apps?

The Rajasthan International, Kotputli
Holiday Homework, Session – 2018-19
(English)

Class – XI

1. Advertisements (collect 10 Ad-clippings from newspaper/s and paste in the notebook.)
2. Film Review (write Film Review on the following movies:
    i. Bahubali – 2
    ii. Hichki (Rani Mukharji Starer)
    iii. Raid
    iv. Chalk and Duster
    v. Gangajal
3. First 5 worksheets on Reading Comprehension from Evergreen worksheets.
4. 5 Debates on the following topics:
    i. Do school uniforms make school a more effective place to learn?
    ii. Should cell phones be used during class?
    iii. Are video games containing violence appropriate for children?
    iv. Are single sex schools more effective than co-ed schools?
    v. Does school detention do any good in high schools?
5. Define the following poetic devices and give 5 examples for each:
    i. Personification
    ii. Simile
    iii. Metaphor
    iv. Hyperbole
    v. Alliteration

The Rajasthan International School, Kotputli

SUMMER VACATION HOMEWORK

SUBJECT: MATHEMATICS

CLASS: XI (2018-2019)

Q1 A = {x: x $\in$ N and (x – 1) (x – 2) = 0} in roster form}.

Q2 Identify Finite and infinite sets from the following sets:

(i) { x: x $\in$ N and 2x – 1 = 0}
(ii) { x: x $\in$ N and x is prime number}

Q3 A = {a, e, i, e, o} b = {a, b, c, d,}. Is set A $\subset$ B? Write A$\cap$B also.

Q4 Let X = { Ram, Geeta, Akbar} be the set of class XI, who are in school hockey team. Let Y = { Geeta, David, Ashok} be the set of students from class XI who are in school football team. Find X$\cup$Y and interpret the set. Find X$\cap$Y also.

Q5 If A and B are two sets such that A$\cup$B has 40 elements, A has 20 elements and B has 30 elements, how many elements does A$\cap$B has?

Q6 Let U = {1, 2, 3, 4, 5, 6, 7, 8, 9, 10}, A = {1, 2, 3, 4} and B = {3, 4, 5, 6}. Then verify that (i) $(A \cup B)^c = A^c \cap B^c$ (ii) $(A \cap B)^c = A^c \cup B^c$

Q7 If V = {a, e, i, o, u} and B {a, i, k, u}, then find V – B and B – V.

Q8 Let U = be universal set of all students of class XI of a co-educational school and A be set of girls in class XI. Find A^c.

Q9 For all sets A and B prove that: (A – B) $\cup$ (A$\cap$B) = A

Q10 If A, B, C are sub sets of universal set U. A = { 2,4 , 6, 8, 12, 20}, B ={3, 6, 9, 12, 15}, C = {5, 10, 15, 20} and U is the set of all whole numbers , draw a Venn diagram showing the relation U, A, B, C.

Q11 List all sub sets of A= { 2, 0, -1}, write P(A) and no of elements of P(A) also.

Q12 In a school there are 20 teachers who teach Mathematics or Physics. Of these, 12 teach Mathematics and 4 teach both Physics and Mathematics. How many teach Physics?

Q13 In a class of 35 students, 24 likes to play cricket and 16 like to play football. Also, each student likes to play atleast one of the two games. How many students like to play both cricket and football?

Q14 In a survey of 400 students in a school, 110 were listed as taking Apple juice, 140 as taking Orange Juice and 85 were listed as talking both Apple as well orange Juice. Find how many students were taking neither Apple juice nor Orange juice.

Q15 There are 200 individuals with a skin disorder. 120 had been exposed to chemical A and 50 to chemical B and 30 to both the chemical A and B. Find the number of individuals exposed to:

(i)   Chemical A but not Chemical B
(ii)   Chemical B but not Chemical A
(iii)   Chemical A or Chemical B

Q16   If (2x, x + y) = (6, 2), then find x and y.

Q17   Let A = (a, b), B = (a, b, c), what is A x B?

Q18   Let A and B be two sets such that n (A) = 5 and n (B) = 2. If $(a_1, 2)$, $(a_2, 3)$, $(a_3, 2)$, $(a_4, 3)$, $(a_5, 2)$ are in Ax B and a_1, a_2, a_3, a_4 and a_5 are distinct, find A and B.

Q19   Determine the domain and range of the relation R defined by:

R = {(x, x+5): x $\in$ {0, 1, 2, 3, 4, 5}.

Q20   If A = {4, 9, 16, 25}, B = {1, 2, 3, 4} and R is the relation "is square of" from A to B, write down the set corresponding to R. Also find the domain and range of R.

Q21   If R is a relation "is divisor of" from the set A = {1, 2, 3} to B = {4, 10, 15}, write the set of ordered pairs corresponding to R.

Q22   Which of the following relations are functions? Give reasons. If it is a function determine its domain and range.

(i)   R = {(2, 1), (3, 1), (4, 2), (5, 7) (6, 9)
(ii)   R = {(2,2), (2, 4), (3, 3), (4, 4), (5, 8)}
(iii)   R = {(1, 3), (1, 5), (2, 5), (3, 6), (3, 7)}

Q23   Find the domain and range of $\sqrt{49 - x^2}$.

Q24   If f and g are two real valued functions defined as: f(x) = 2x + 1 and g(x) = x^2 + 1, then find (i) f + g (ii) f − g

(iii) fg (iv) $\dfrac{f}{g}$

Q25   Find the domain of the function f(x) = $\dfrac{x^2 - 8x + 1}{x^2 + 7x + 10}$.

THE RAJASTHAN INTERNATIONAL SCHOOL, KOTPUTLI

SUMMER VACATION HOME WORK (2018-19)

SUBJECT – BIOLOGY

Class-XI

I.Write the answers of the following questions-

1.Give four common features of root.

2.Mention one main difference between tap root and adventitious root.

3.Enlist three basic functions of root.

4.Show the various regions of root with the help of diagram.

5.State the importance of prop root and stilt root in some plants.

6.Give five main features of stem.

7.Write the origin and function of stem tendrils.Give examples.

8.Leaves are the life-line of plant.Justify the statement with suitable reasons.

9.Show the parts of a typical leaf with the help of diagram.

10.What is the leaf with swollen leaf base called in technical term?

11.Define venation. Describe its various types.

12.Define inflorescence.Give a short details of its varieties.

13.What is phyllotaxy? Describe its types.

14.Define flower in your own best way.What are the whorls commonly present in a typical flower.

15.Explain the following terms used to describe the morphology of plants-

Pedicel,

Actinomorphic,

Zygomorphic,

Asymmetrical,

Pentamerous,

Hypogynous,

Perigynous,

Epigynous

Gamosepalous

Polysepalous

Gamopetalous

Polypetalous

Staminode flower

Epipetalous

Epiphyllous

Monodelphous

Apocarpous

Syncarpous

16.What is stamen? Write its components.

17. Describe the components of a carpel .

18.What is meant by placentation? Compare various types of placentations with the help of suitable sketch.

19.Define parthenocarpy.Give one example.

20.Give three points of difference between monocotyledonous and dicotylednous seeds.

21.Write the important symbols used to describe the floral characters of a flower.

22..Give the floral formula ,floral diagram and the economic impotance of families-Fabaceae,Solanaceae and Liliaceae.

II.Make a herbarium collecting the leaves of at least five categories of plant belonging to the categories-ornamental,cereal,fruit giving,pulses and vegetables.

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CLASS: XI (physics)

(Holiday Homework)

1. Preeti reached the metro station and found that the escalator was not working .She walked up the stationary escalator in time t_1 . On other days, if she remains stationary on the moving escalator, then the escalator takes her up in time t_1. the time taken by her to walk up on the moving escalator will be

   (1) $t_1t_2/t_2\text{-}t_1$ (2) $t_1t_2/t_2\text{+}t_1$ (3) $t_2\text{-}t_1$ (4) $t_2\text{+}t_1$ /2

2. If the velocity of a particle is $V=At+Bt^2$, where A and B are the constants , then the distance travelled by it between 1 s and 2 sec is

   (1) $3A/2$ (2) $A/2 +B/3$ (3) $3A/2 +4B$ (4) $3A+7B$

3. A stone falls freely under gravity. It covers distance h_1, h_2 and h_3 in the first 5 sec, the next 5 sec and the next 5 seconds respectively. the relation between h_1, h_2 and h_3 is

   (1) $h_2 = 3 h_1$ (2) $h_1 = h_2 = h_3$ (3) $h_1 = 2 h_2 = 3h_3$ (4) $h_1 = h_2/3 = h_3/5$

4. A ball is dropped from a high rise platform at t = 0 starting from rest. after 6 seconds another ball is thrown downward from the same platform with a speed v. the two balls meet at t = 18 sec . What is the value of v? (take g = 10 m/sec^2)

   (1) 75 m/sec   (2) 55 m/sec   (3) 40 m/sec   (4) 60 m/sec

Which of the following dimensions will be same as that of time
   (1) L/R   (2) C/L   (3) LC   (4) R/L

A stone falls from the top of a tower traverses a distance of 24.5m in the last second of its fall. Find the height of the tower.

5. A car moves the first 1/3rd of a distance x at a speed of 10km/h and the second 1/3rd at a speed of 20km/h and the last 1/3rd at a speed of 60km/h. determine the average speed of the car over the entire distance x.

6. Find the dimensions of (a/b)in the relation $F=a\sqrt{x} +bt^2$ where F is the force , x is the distance and t is time.

7. What is the order of the magnitude found by a meter scale , vernier caliper and screw gauge.

8. Do the integration for the following functions w.r.t. x

   i) $(3x^2\text{-}4)^2$ ii)$\sqrt{(ax+b)}$ iii) $(a/x^2+b/x)$ iv) $(4e^{3x}+1)$

9. From the top of a tower 100m in height , a ball is dropped and at the same time , another ball is projected in vertically upward direction from the ground with a velocity of 25m/s . Find when and where the two balls meet.(g=9.8m/s^2)

10. The time period of oscillation of a simple pendulum is given by $t=2\pi\sqrt{(L/g)}$

    L is about 10cm and is known to 1mm accuracy. the time period of oscillation is about 0.5s. The time of 100 oscillations is measured with a wrist watch of 1s resolution. What is the accuracy in determination of g?

11. The length and breadth of a rectangular object area 25.2cm and 16.8cm respectively and have been measured to an accuracy of 0.1cm. Find the percentage error in the area of the object.

12. Find the dimensional formula for these quantities

    i) Universal Gravitational constant, G   ii) Planck's constant
    iii) Impulse   iv) moment of inertia, I

13. Time period of an oscillating drop of radius r, density ρ and surface tension S is

    $t = k\sqrt{(\rho r^3/S)}$. Check the correctness.
14. Derive an expression for the energy of body executing S.H.M. assuming that it depend upon mass (m), frequency (v) and the amplitude of vibration (r) .

15. Find the expression for the distance covered in the nth sec.

16. Prove all the equations of motion by the calculus method.

17. Which of the following dimensions will be same as that of time

18. A balloon is ascending at the rate of 12 m/sec . At a height of 65 m above the ground , when a food packet is dropped from the balloon find

    1. Time in which it hits the ground.

    2. height of the packet from the ground

19. do question no 3 to 10 from the exercise of chapter 3

THE RAJASTHAN INTERNATIONAL SCHOOL ,KOTPUTLI

SUMMER HOLIDAY HOMEWORK

SESSION- 2018-2019

SUBJECT: ACCOUNTANCY
CLASS: XI Commerce

- ❖ **DO 35 Practical Questions Of Chapter- Accounting Equation.**
- ❖ **Write All Basic Accounting Terms of Accountancy Related to chapter-2.**

The Rajasthan International School, Kotputli

SUMMER VACATION HOME WORK

CLASS: 11-C

SUBJECT: BUSINESS STUDIES

Project work : Banking service :- introduction, certificate, acknowledgement, introduction of bank, categories of bank, types of account, form use by bank , services provided by bank , conclusion.

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SUMMER HOLIDAY HOMEWORK

SESSION- 2018-2019

SUBJECT: ECONOMICS
CLASS: XI Arts

- ❖ **Do all HOTS Questions of Chapter 1,2,3.**
- ❖ **Also Prepare All the Diagrams of Chapter-1,2,3. In the fair copy.**

THE RAJASTHAN INTERNATIONAL SCHOOL, KOTPUTLI

SUMMER VACATION HOME WORK 2018-19

CLASS-XI

SUB- GEOGRAPHY

1. On a graph paper plot the number of districts in Madhya Pradesh, Karnataka, Meghalaya, Goa, Kerala and Haryana. Do the number of districts have some relationship with the area of the state ?
2. Which state amongst UP, West Bengal, Gujarat, Arunachal Pradesh, Tamil Nadu, Tripura, Rajasthan and Jammu and Kashmir is the most thickly populated and which one is the most least densely populated ?
3. Find out the relationship between the area of the state and the number of districts ?
4. Make a list of major Himalayan peaks from the west to the east with the help of an atlas ?
5. Identify the major landform of your state and analyse the major economic activity practiced by the people in each land form ?
6. On an outline map of India, show the following
   1. Areas of winter rain
   2. Wind direction during the summer vacation
   3. Areas having variability of rainfall over 50 %.
   4. Areas having less than 15 degree celsius temperature in January
   5. Isopyte of 100 cm
7. Learn and write all the Asian and African countries with their Monetary unit.
8. Explain the river system of the Himalayan drainage ?
9. Explain the river system of the Peninsular drainage ?

THE RAJASTHAN INTERNATIONAL SCHOOL, KOTPUTLI

SUMMER VACATION HOME WORK 2018-19

CLASS-XI

SUB- HISTORY

1. Write a short note on the story of Human Evolution ?
2. Write a detailed note on the Discovery of Australopithecus, 17 July 1959 ?
3. With the help of a flow – chart show the positive feedback mechanism ?
4. Draw a chart and write about the "Peopling of the World".
5. Write a note on 'Early Human Making Tools".
6. Briefly explain about the cave painting of Altamira ?
7. What do you know about 'The Hadza" ?
8. What do you know about Mesopotamia and its Geography ?
9. Write a note on 'The Seal, An Urban Artefact ?
10. What do you know about the 'Excavating Mesopotamian Towns' ?
11. Project work
    Make a project from any one of your syllabus. It should be handwritten and not less than 25 pages. Paste map, pictures etc. according to the quality of the project.

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HOLIDAY HOMEWORK

CLASS-XI

SUBJECT-POLITICAL SCIENCE

1)Who is the custodian of fundamental rights?

2)What is the importance of DPSP?

3)What do you know about the constituent assembly?

4)Define the term freedom?

5)How many fundamental rights are there in Indian constitution?

6)How the vigilant citizens are essential for success of democracy?

7)What were the suggestions of cabinet mission?

8)What is right to freedom?

9)Why did we adopt the FPTP system of election in India?

10)Why do we need a constitution?

11)Compare both the system of elections, the FPTP system and PR system .

12)Give at least four examples, where you think the rights to equality is violated in daytoday working of Indian constitution.

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Creative Work For Summer Vacation - 2018

Subject – Fine Art

Class XI

1. 30 sketches bases on human, animal and nature.
2. Make one creative composition. (Paper size – 15'x20')