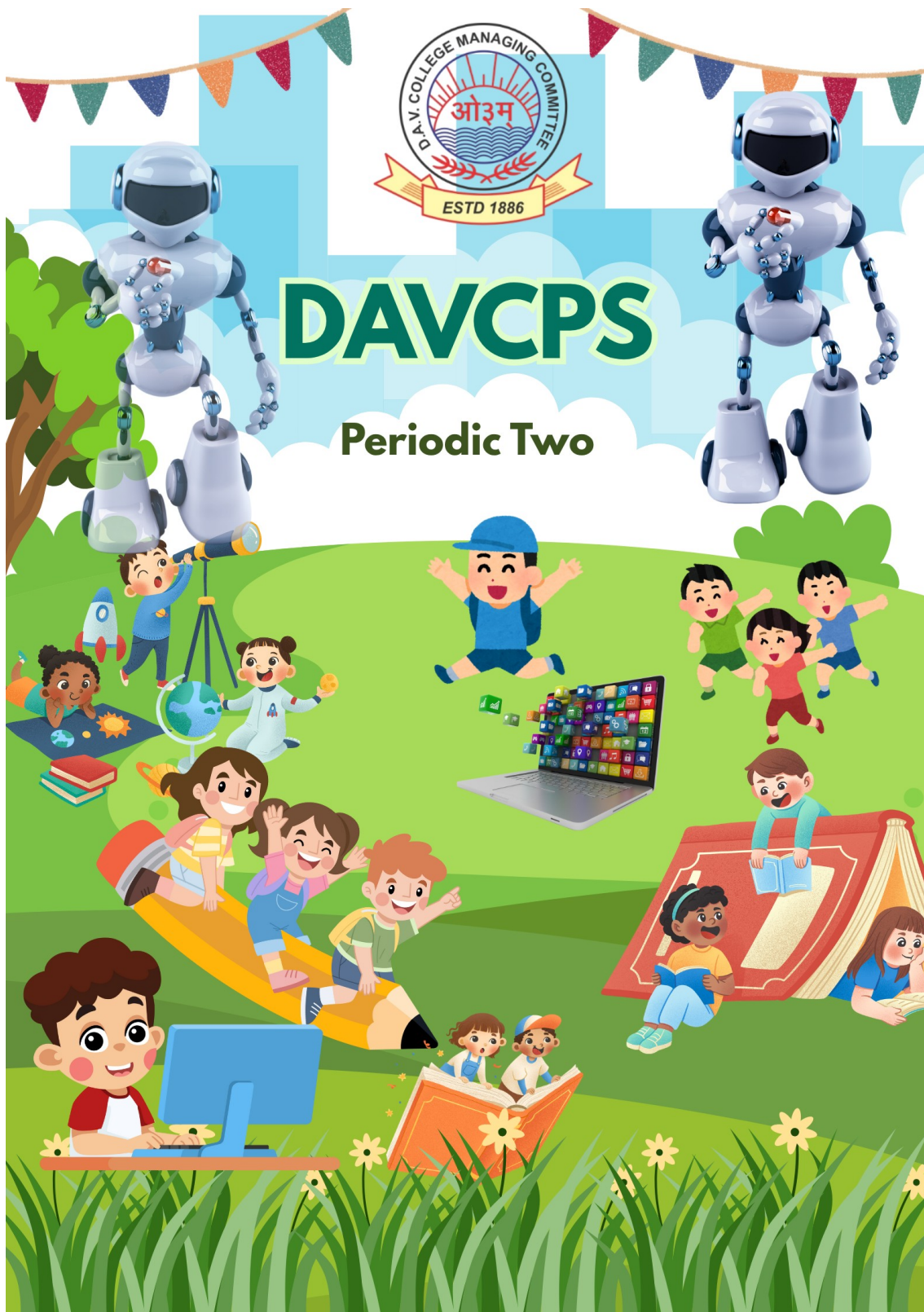


CLASS- XI SUNSHINE



DAVCPS

Periodic Two



Subject: English

1. Book Talk

Choose a book from the given list

1. "Wings of Fire" by APJ Abdul Kalam
2. "Malgudi Days" by R.K. Narayan
3. Wise and Otherwise by Sudha Murthy
4. The Day I Stopped Drinking Milk by Sudha Murthy
5. Playing It My Way by Sachin Tendulkar

- Create a short 2-minute video giving a summary, favorite quote, and lesson learnt.
- Submit a written review too.

2. Maintain a scrapbook with weekly entries (6 total), each covering a current event or issue linked to the five themes.

- Environment
- Education
- Role of Women
- Gender Equality
- Health and Hygiene

Include your opinion, vocabulary used, and a creative visual (art, quote, photo, poem).

3. Research and prepare notes for a mock debate: "Should Social Media Be Banned in Schools?"

4. Design a visually appealing poster on the following topics:

- Say No to Plastic – Campaign for eco-awareness.
- Fitness First – Promote a healthy lifestyle in your school.
- Cyber Safety – Raise awareness about online privacy and protection.

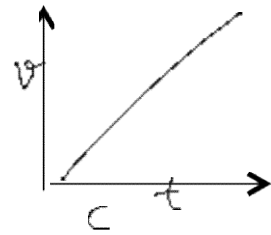
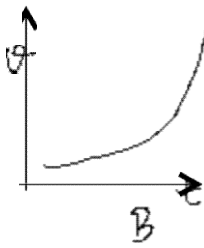
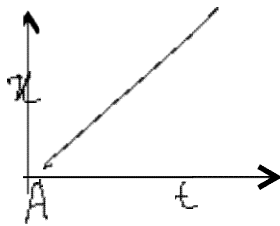
5. Debate Writing: Write both For and Against arguments on the topic: "**Homework Should Be Banned**"

6. Write Speech Writing on one of the following topics:

- "Social Media: A Boon or a Bane?"
- "Importance of Mental Health for Teenagers"
- "Books vs. Screens: What's Better for Learning?"

Subject: Physics

1. The number of significant figures in 0.00150 is
2. $1.513 + 27.3 =$
3. Suppose $A = BC$, where A has the dimension L/M and C has the dimension L/T . Then B has the dimension:
4. Suppose $A = B^n C^m$, where A has dimensions LT , B has dimensions $L^2 T^{-1}$, and C has dimensions LT^2 . Then the exponents n and m have the values:
5. A particle moves along the x axis from x_i to x_f . Of the following values of the initial and final coordinates, which results in a negative displacement?
A. $x_i = 4 \text{ m}, x_f = 6 \text{ m}$ B. $x_i = -4 \text{ m}, x_f = -8 \text{ m}$
C. $x_i = -4 \text{ m}, x_f = 2 \text{ m}$ D. $x_i = -4 \text{ m}, x_f = -2 \text{ m}$
6. A stone is thrown vertically upward with an initial speed of 19.5 m/s. It will rise to a maximum height of:
A. 4.9 m B. 9.8 m C. 19.4 m D. 38.8 m
7. A stone is dropped from a cliff. The graph (carefully note the axes) which best represents its motion while it falls is:



8. A cricket ball is thrown at a speed of 28 ms^{-1} in a direction 30° above horizontal. Find (a) Max Height (b) Time of flight (c) Range
9. A flywheel completes 240 revolutions per minute. Find its angular speed
10. Is $\hat{i} - \hat{j}$ a unit vector? Explain
11. Prove that $\vec{A} = \hat{i} + 2\hat{j} + 3\hat{k}$ and $\vec{B} = 2\hat{i} - \hat{j}$ are perpendicular to each other
12. The resultant of two equal vectors acting at right angles to each other is 14.14 N Find the magnitude of either vector
13. Find the angle between $\vec{A} = \hat{i} + 2\hat{j} - \hat{k}$ and $\vec{B} = -\hat{i} + \hat{j} - 2\hat{k}$
14. A body is projected from the top of a cliff with a velocity 39.2 ms^{-1} . What time it elapses before horizontal and vertical velocities become equal.
15. Adil is running at a speed of 2.5 m/s for five minutes. He then completes the remaining distance by walking for another five minutes at a speed of 1 m/s. Find the average speed of Adil.

16. The position of an object moving along X-axis is given by $x = a + bt^2$, where $a = 8.5\text{m}$, $b = 2.5\text{ms}^{-2}$ and t is measured in seconds. What is velocity at $t = 2$ seconds

17. An insect is trapped in a circular groove of radius 12 cm moves along the groove steadily and completes 7 revolutions in 100 seconds. 2 A. What is the angular speed and linear speed of the motion? B. Is the acceleration vector a constant vector? What is its magnitude?

18. What are the dimensions of $\frac{a}{b}$ in the relation $F = a\sqrt{x} + bt^2$, where F is force, x is distance and t is time.

19. In the equation $y = A \sin(\omega t - kx)$ where x & t are distance and time respectively. Find the dimensions of ω and k

20. A body of mass (m) is moving in a circle of radius (r) with angular velocity (ω). Obtain an expression for centripetal force acting on it by method of dimension

21. If P , Q and R are physical quantities having different dimensions, which of the following combinations are not meaningful quantities?

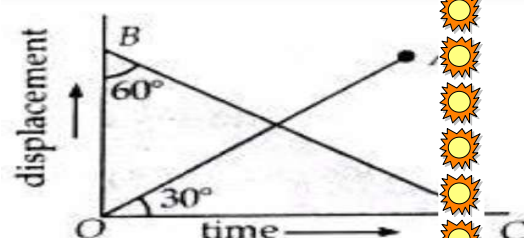
- (a) $(P - Q)/R$ (b) $PQ - R$ (c) PQ/R (d) $(PR - Q^2)/R$ (e) $(R + Q)/P$

22. Assertion : All dimensionally correct equations are numerically correct.

Reason: A dimensionless quantity does not have a unit

23. Young's Modulus of Steel is $1.9 \times 10^{11} \text{ N/m}^2$. Find the Young's modulus of steel in CGS Units

24. The displacement time graph of two bodies P and Q are represented by OA and BC respectively. What is the ratio of velocities of P and Q .



25. The motorboat covers the distance between 2 spots on the river in time 8 hours and 12 hours downstream and upstream respectively. What is the time required by the Boat to cover the same distance in still water.

26. Five equal forces of 10 N each are applied at one point and all are lying in one plane. If the angles between all the forces are equal, find the resultant of these forces.

27. State triangle law of vector addition. Give analytical treatment to find the magnitude and direction of resultant vector using triangle law.

28. A person moves 30 m North, then 20 m East then $30\sqrt{2}$ m South-West. Find his displacement from his original position.

Chemistry holiday homework class 11 th

1. Periodic table passport-travel the elemental world

Activity type: Research + creative design instructions

*Choose 5 elements each from a different group (example group 1, group 2 ,group 17, group 18 ,transition metal)

**Create a passport page for each element include

#symbol ,atomic number, group and period.

#physical and chemical properties

#two everyday uses

#fun fact or historical discovery story

#design each passport with flags stamps and element selfies (draw a character for each element)

2. **Puzzle time-Crossword or element Sudoku**

Activity type: logic + vocabulary

*Create a Crossword Puzzle using key terms from the chapters like mole, molar mass, period, group, valency electronegativity etc.

OR

Make an element sudoku with 9 different element symbols (e.g H,He, Li,Be,B,C,N,O,F) arranged in sudoku format.

3. **Designer poster on**

*How to make chemistry fun

*Chemistry in our daily lives

Use colours images and catches slogans.

Subject: Biology

CELL-THE UNIT OF LIFE

Q1. (a) Define the term-cell.

(b)Name the scientist who observed the honey comb like structures in a thin section of cork under the simple microscope. What did he mean by these structures?

Q2. How did Robert Hook discovered the cell?

Q3. Why is the cell considered as a functional unit of life?

Q4. What is the contribution of following scientists in the field of cell biology?

(a) Anton van Leeuwenhoek

(b) J.E. Purkinje

(c) Robert Brown

(d) Rudolf Virchow

Q5. Who proposed the cell 'cell theory'? Give the main fundamental observations of the cell theory.

Q6. Explain the statement "*Omnis cellulae cellula*".

Q7. Who proposed cell theory and what modifications Rudolf Virchow made in it?

Q8. Describe briefly the various elements of a typical cell.

Q9. Justify the statement- 'Cell is the basic unit of life'.

Q10. How are unicellular organisms adapted to maintain their continuity without division of labour?

Q11. What are the advantages of multicellularity to an organism?

Q12. What is the disadvantage of multicellularity in an organism?

Q13. How would you apply the concept of division of labour to multicellular organism?

Q14. How do multicellular organisms have a greater capacity for survival than the unicellular ones?

Q15. What are the advantages for an organism to have tissues instead of the type of cells.

Q16. Define the term- cellular totipotency .

Q17. Describe briefly the shapes and size of various cells. State the various factors that control them.

Q18. The shape of the cells varies with the function they have to perform. Enlist few examples for this.

Q19. The shape of the cells varies with the function they have to perform. Enlist few examples.

Q20. The cells of unicellular organism are usually spherical whereas those of multicellular tend to be many sided. Why?

CELL CYCLE AND CELL DIVISION

Q1. What is cell cycle?

Q2. What is interphase? Discuss briefly its various phases.

Q3. Why the resting stage interphase is the most active stage of the cell cycle?

Q4. What is Go (quiescent phase) of cell cycle?

Q5. What is mitosis? Describe briefly the various events that occur during this process in a cell.

Q6. Enumerate the significance of mitosis?

Q7. Why is mitosis called equational division?

Q8. Where does mitosis take place in plants and animals? What is the net result of mitosis?

Q9. Is the cytoplasm of a cell, like the nucleus, shared equally by the daughter cells during mitosis?

Q10. Why is it necessary for the daughter cells to possess the same number of chromosomes as were present in the parent cell?

Q11. Give the sequence of the events occurring during prophase of mitosis.

Q12. How does cytokinesis in plant cell differ from that in animal cells?

Q13. Differentiate:

- (a) Chromatin and chromatid**
- (b) Centromere and centroile**
- (c) Karyokinesis and cytokinesis**

Q14. (a) What is meiosis? Where does it occur?

(b)What is the result of meiosis?

Q15. Describe the various events that occur during the process of meiosis in a cell.

Q16. What are homologous chromosomes? What happens to homologous during meiosis?

Q17. What is the significance of meiosis?

Q18. What is the difference between gametic and zygotic meiosis?

Q19. Why is meiosis called the reductional division, whereas mitosis is called equational division?

Q20. Name the forces, which help in chromosomal movement during cell division.

Q21. What are the different ways in which pairing occurs during zygotene

Q22. List the different sub-stages of prophase I of meiosis.

Q23. What are chiasmata? State their significance.

Q24. Describe the following:

(a) Synapsis

(b) Bivalent.

Q25. What are the differences between mitosis and meiosis?

Q26. What is the relationship between meiosis and fertilization?

Q27. Why is sexual reproduction always bring about variations in the offspring?

Q28. Distinguish between metaphase of mitosis and metaphase I of meiosis.

Q29. What are the differences between plant animal cell divisions?

Q30. Why is cell division necessary?

Q31. Distinguish anaphase of mitosis from anaphase I of meiosis.

Q32. Why does a multicellular organism require two types of cell division? Which of the two produces the greater number of cells?

Q33. A well known biologist stated that the life history of an organism could be summed up as 'gametic fusion, equational division and reductional division'.
Comment.

Q34. Where does the process of mitosis occur?

Subject: Physical Education

CURRENT AFFAIRS NEWS

- You Have To Make 15 Small Sheets In Which You Will Write Current Affairs News.
- All Of You Have To Write The Sports News From 5th To 20th June.
- Make The Sheets Creative By Showing Newspaper Cuttings (Photographs , Dates , Headlines).



Power point presentation

- 5 sitting and 5 standing yoga asana have to be prepared and you have to put your photograph while doing yoga asana and also the method has to be explained.
- You have to make a short video of 10 to 15 minutes in which you will show yourself doing all the yoga asanas.
- Whatever yoga asanas you prepare the will be practical test after the summer vacation.



PharmEasy

BIOGRAPHY OF ATHLETES

- Students Will Create A Creative File.
- Everyone Has To Write A Biography About 5 International Female Athletes Of India.
- Everyone Has To Write A Biography About 5 International Male Athletes Of India.
- All Athletes Should Have Separate Game.

POINTE TO KEEP IN MIND

PHOTOGRAPH

EARLY LIFE AND
EDUCATION

ATHLETICS
CAREER

ACHIEVEMENTS

AWARDS AND RECOGNITION

Subject: Fine Arts

Practice of drawing on A3 size drawing file



Thankyou

*Enjoy your
Holidays*