# DEEP PUBLIC SCHOOL

SENIOR SECONDARY SCHOOL(AFFILIATED TO CBSE)

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## Class XII  A

## HOLIDAY HOMEWORK

## SUBJECT- ENGLISH CORE

**Section A- Unseen Passage**

Q1. Read the passage given below:

I saw 'Jaws', the popular shark movie, the summer it came out, in 1975 and became paranoid about sharks. Though I kept swimming after Jaws, it was always with the vague fear that a shark's teeth could tug on my leg at any moment. Never mind that there'd been only two shark bites since 1900 on the Connecticut coast, where I lived.

 So, when I got this assignment for the National Geographic magazine, I decided to accept and do what I'd never wanted to do: swim with the sharks. I had to go to a place in the Bahamas known as Tiger Beach and dive with tiger sharks, the species responsible for more recorded attacks on humans than any shark except the great white. It was to be my first dive after getting certified—which meant it would be my first dive anywhere other than a swimming pool or a quarry—and without a diver's cage. Most people who got wind of this plan thought I was either very brave or very stupid.

But I just wanted to puncture an illusion. The people who know sharks intimately tend to be the least afraid of them, and no one gets closer to sharks than divers. The divers who run operations at Tiger Beach speak lovingly of the tiger sharks the way people talk about their children or their pets. In their eyes, these sharks aren't man-eaters any more than dogs are.

 The business of puncturing illusions is never just black and white. My fellow divers had hundreds of dives under their belt and on the two-hour boat ride to the site in the morning of our first dive, they kept saying things like, "Seriously, I really can't believe this is your first dive." All this was okay with me until I reached the bottom and immediately had to fend off the first tiger shark, I had ever laid eyes on. However, when I watched the other divers feeding them fish and steering them gently, it became easy to see the sharks in a very benign light.

I think it would be unfair not to mention that though tiger sharks are apex predators. They act as a crucial balancing force in ocean ecosystems, constraining the numbers of animals like sea turtles and limit their behaviour by preventing them from overgrazing the sea grass beds. Furthermore, tiger sharks love warm water, they eat almost anything, have a huge litter and are the hardiest shark species. If the planet and its oceans continue to warm, some species will be winners and others will be

losers, and tiger sharks are likely to be winners.

Based on your understanding of the passage, answer all the questions given below.

1. Cite a point in evidence, from the text, to suggest that the writer's post-Jaws fear was not justified.
2. State any one trait of the writer that is evident from lines 5-10 and provide a reason for your choice.
3. People thought the writer was 'either brave or very stupid'. Why did some people think that he was 'very stupid'?
4. Why does the writer say that people who know sharks intimately tend to be least afraid of them?
5. Rewrite the given sentence by replacing the underlined phrase with another one, from lines 10 – 20.
   Some academicians think that reward, as a form of discipline, is a simple <u>right or wrong</u> issue
6. What does the use of the phrase 'benign light' suggest in the context of the writer's viewpoint about the tiger sharks?
7. Select a suitable phrase from lines 15-25 to complete the following sentence appropriately.
   I agree the team will find this experience tough, but competing will be easier next time after they get this tournament _____.
8. Apex predators serve to keep prey numbers in check. How can we say that tiger sharks are apex predators?
9. Analyse why having a large litter is one of the features that empowers tiger sharks to emerge winners if global warming persists.

Q2 Read the passage given below:

Changing food preferences have brought about rapid changes in the structure of the Indian diet. The rapid proliferation of multinational fastfood companies and the influence of Western culture have replaced traditional home-cooked meals with ready-to-eat, processed foods thus increasing the risk of chronic diseases in urban Indians. Therefore, nurturing healthy eating habits among Indians from an early age would help to reduce health risks.

To date, little is known about the quality and quantity of foods and beverages consumed by urban Indian adolescents. This lack of evidence is a significant barrier to the development of effective nutrition promotion and disease prevention measures. Therefore, a self-administered, semi-quantitative, 59-item meal-based food frequency questionnaire (FFQ) was developed to assess the dietary intake of adolescents. A total of 1026 students (aged 14–16 years) attending private, English-speaking schools in Kolkata completed the survey.

## A sample percentage of the food consumption pattern is displayed (Fig. 1)

Sample percentage of food consumption pattern of
1026 students aged 14 - 16 years
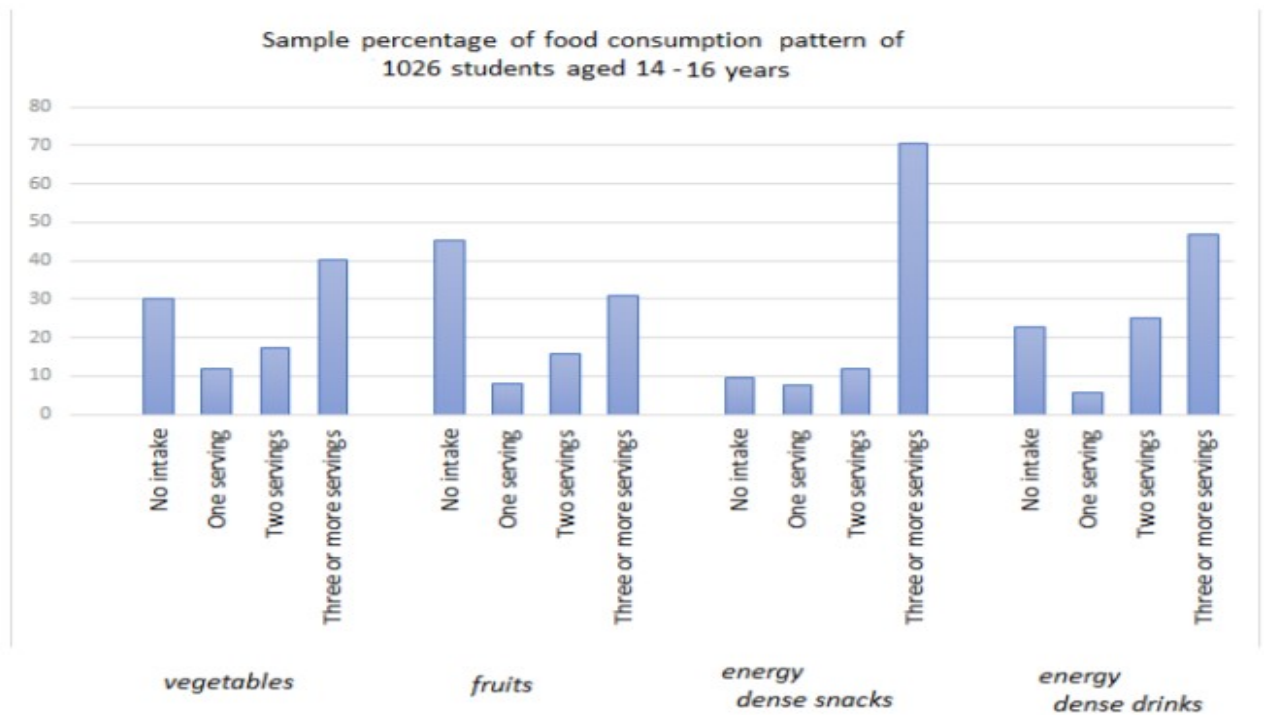


The survey results report poor food consumption patterns and highlights the need to design healthy eating initiatives. Interestingly, while there were no gender differences in the consumption of legumes and fried snacks, the survey found more females consumed cereals, vegetables and fruits than their male counterparts.

In conclusion, the report suggested that schools ought to incorporate food literacy concepts into their curriculum as they have the potential of increasing the fruit and vegetable intake in teenagers. Additionally, healthy school canteen policies with improved availability, accessibility, variety and affordability of healthy food choices would support the consumption of nutritious food in students.

Based on your understanding of the passage, answer ANY SIX out of the seven questions given below.

1. What does the researcher mean by 'changing food preferences'?
2. Why was this survey on the food consumption of adolescents undertaken?
3. With reference to fig.1, write one conclusion about students' consumption of energy-dense drinks.
4. What can be concluded by the 'no intake' data of fruit consumption versus energy dense snacks, with reference to fig.1?
5. There were no gender differences observed in the consumption of healthy foods, according to the survey. Substantiate.
6. Why is 'affordability' recommended as a significant feature of a school canteen policy?
7. Identify a word from lines 9 - 18 indicating that the questionnaire was specifically designed to be completed by a respondent without the intervention of the researcher collecting the data.

**Section B - Notice Writing**

Q1.

Due to a sudden landslide and inclement weather, St. Francis School, Vasco has to be closed for a week. As Principal of that school, draft notice in not more than 50 words to be displayed at the school main gate notice board.

Q2.

Your school has planned an excursion to Lonavala near Mumbai during the autumn holidays. Write a notice in not more than 50 words for your school notice board, giving detailed information and inviting the names of those who are desirous to join. Sign as Naresfy/Namita, Head Boy/Head Girl, D.V. English School, Thane, Mumbai.

Q3.

You are Anoop/Arya, the cultural secretary of your school. As part of the national heritage programme, the school has decided to put up a show on ancient art forms. Write a notice to be put up on the school notice board inviting students to watch the show and encourage the artists. Write the notice in not more than 50 words.

Q4.

Your state government has banned the use of plastic bags. Your are Amarjeet, a reporter of The National Herald. Write a report in 100-125 words on how the ban is being ignored and what damage the indiscriminate use of plastic bags in causing to the environment.

Q5.

You visited a Job Fair organised by Ability Foundation at Chennai recently. You were impressed to see that nearly 55 companies from various sectors such as information technology, telecommunication, electronics etc. offered jobs to the final year students of colleges. As a reporter of 'The Deccan Times', Chennai, prepare a report in 100-125 words. You are Peeyush/Priya.

Q6.

You are Pulkil/Prema, a staff reporter of The Times of India. You have been asked to cover an incident of daylight robbery on the outskirts of Delhi when the inmates were present in the house. Write a report in 100-125 words.

## SUBJECT-PHYSICS

1.    A free pith-ball A of 8 g carries a positive charge of $5 \times 10^{-8}$C.   What must be the nature and magnitude of charge that should be given to a second pith-ball B fixed at 5 cm below the former ball so that the upper ball is stationery?

2.    Two equal positive charges each of $2\mu C$ interact with a

third positive charge of 3μC situated as shown. Calculate
the magnitude and direction of force on the 3μC charge.
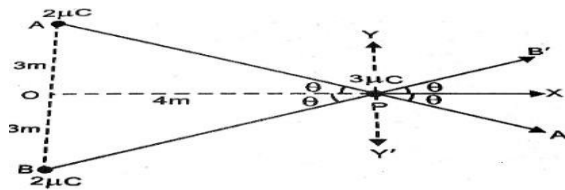


3. Two fixed point charges +4e and +e units are separated by a distance a. where should the third point charge be placed for it to be in equilibrium?

4. $S_1$ and $S_2$ are two hollow concentric spheres enclosing charges Q and 2 Q respectively as shown in fig

   (i) What is the ratio of the electric flux through $S_1$ and $S_2$ ?

   (ii) How will the electric flux through the sphere $S_1$ change, if a medium of dielectric constant 5 is introduced in the space inside $S_1$ in place of air ?
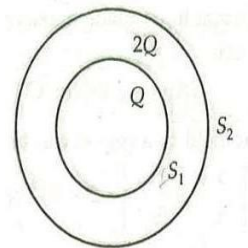


5. An electric field is uniform, and in the positive x direction for positive x and uniform with the same magnitude in the negative x direction for negative x. It is given that A right circular cylinder of length 20 cm and radius 5 cm has its centre at the origin and its axis along the x-axis so that one face is at x = +10 cm and the other is at x = - 10cm
   i. What is the net outward flux through each flat face ?
   ii. What is the flux through the side of the cylinder ?
   iii. What is the net outward flux through the cylinder ?
   iv. What is the net charge inside the cylinder

6. Derive an expression of electric field intensity at a point on equatorial axis of an electric dipole.

7. Show that the force on each plate of a capacitor has a magnitude equal to QE/2, where Q is the charge on the capacitor and E is the magnitude of the electric field between the plates of the capacitor. Explain the origin of factor ½.

8. Two small identical electrical dipoles AB and CD, each of dipole moment 'p' are kept at an angle of $120^0$ as shown in Fig What is the resultant dipole moment of this combination? If this system is subjected to electric field (E) directed along +X direction, what will be the magnitude and direction of the torque acting on this.

9. Two small spheres each of mass "m" kg and charge q coulomb are suspended from a point by insulating threads each of l metre length, but of negligible mass. If $\Theta$ is the angle which each string makes with the verticle when equilibrium has been reached, show that
   $q^2 = 4mgl^2 sin^2\Theta tan\Theta(4\pi\epsilon\Theta)$

10. Two small charged spheres contain charges $+q_1$ and $+q_2$ respectively. A charge dq is removed from sphere containing charge $q_1$ and is transferred to the other. Find the charge on each sphere for maximum electric force between them.

11. Two opposite corners of a square carry Q charge each and the
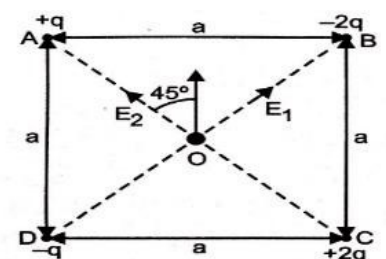
othertwo opposite corners of the same square carry q charge each.

If the resultant force on q is zero, how are Q and q related?

12. Two-point charges +q and -2q are placed at the vertices B and C of an equilateral triangle ABCof side a. obtain the expression for magnitude and direction of resultant electric force at the vertex A due to these two charges.

13. A pendulum bob of mass 80 milligram and carrying a charge of $2 \times 10^{-8}$C is at rest in a horizontal uniform electric field of $2 \times 10^{4}$ Vm$^{-1}$. Find the tension in the thread of the pendulum and the angle it makes with the vertical. What are the magnitude and direction of electric field atcentre of the square, if q=$1.0 \times 10^{-8}$C and a=5cm?

14. State Gauss's Theorem in electrostatics. Using this theorem derive an expression of electricfield intensity due to a line charge..

15. (a) Define electric flux .Write its SI units.

(b) Using Gauss's law , prove that the electric field at a point due to a uniformly chargesinfinite plane sheet is independent of the distance from it.

(c) How is the field directed if (i) the sheet is positively charged , (ii) negatively charged ?

16. Obtain the formula for the electric field due to a long thin wire of uniform linear charge density λ without using Gauss's law.

## PROJECT WORK

Make Investigatory project on any one of the topic:-

1. To study various factors on which the internal resistance/EMF of a cell depends.

2. To study the variations in current flowing in a circuit containing an LDR because of a variation in (a) the power of the incandescent lamp, used to 'illuminate' the LDR (keeping all the lamps at a fixed distance). (b) the distance of a incandescent lamp (of fixed power) used to 'illuminate' the LDR.

3. To find the refractive indices of (a) water (b) oil (transparent) using a plane mirror, an equi convex lens (made from a glass of known refractive index) and an adjustable object needle.

4. To investigate the relation between the ratio of (i) output and input voltage and (ii) number of turns in the secondary coil and primary coil of a self-designed transformer.

5. To investigate the dependence of the angle of deviation on the angle of incidence using a hollow prism filled one by one, with different transparent fluids.

6. To estimate the charge induced on each one of the two identical styrofoam (or pith) balls suspended in a vertical plane by making use of Coulomb's law.

**7.** To study the factor on which the self-inductance of a coil depends by observing the effect of this coil, when put in series with a resistor/(bulb) in a circuit fed up by an A.C. source of adjustable frequency.

**8.** To study the earth's magnetic field using a tangent galvanometer.

# SUBJECT-CHEMISTRY

1. Why is sulphuric acid not used during the reaction of alcohols with KI?

2. Arrange each set of compounds in the order of increasing boiling points.

a) Bromomethane, Bromoform, Chloromethane, Dibromomethane.

b) 1-Chloropropane, Isopropyl chloride, 1-chlorobutane.

3. Which of the following has the highest dipole moment? (i) $CH_2Cl_2$ (ii) $CHCL_2$ (iii) $CCl_4$

4. Which compound in each of the following pairs will react faster in SN 2 reaction with OH? (i) $CH_3Br$ or $CH_3I$ (ii) $(CH_3)_3 CCl$ or $CH_3Cl$

5. Explain why

(i) the dipole moment of chlorobenzene is lower than that of cyclohexyl chloride?

(ii) alkyl halides, though polar, are immiscible with water?

(iii) Grignard reagents should be prepared under anhydrous conditions?

6. Arrange the compounds of each set in order of reactivity towards SN2 displacement:

a) 2-Bromo-2-methylbutane, 1-Bromopentane, 2-Bromopentane.

b) 1-Bromo-3-methylbutane, 2-Bromo-2-methylbutane, 2-Bromo-3-methylbutane.

c) 1-Bromobutane, 1-Bromo-2, 2-dimethylpropane, 1-Bromo-2-methylbutane, 1-Bromo3-methylbutane.

7. p-Dichlorobenzene has higher melting point and lower solubility than 0- and misomers. Discuss

8. The treatment of alkyl chlorides with aqueous KOH leads to the formation of alcohols but in presence of alcoholic KOH, alkenes are the major products.

9. Which is a better nucleophile, a bromide ion or an iodide ion?

10. What are chiral and achiral objects?

11. What is plane polarized light?

12. What do you understand by the term optical activity of compounds?

13. Explain why thionyl chloride method is preferred for preparing alkyl chlorides from alcohols?

14. What is an asymmetric carbon?

15. Explain as to why haloarenes are much less reactive than haloalkanes towards nucleophilic substitution reactions.

Or

Which compound in each of the following pairs will react faster in SN2 reaction with –OH? Why? a) CH3 Br or CH3I b) (CH3)3CCl or CH3Cl

16. Which ones in the following pairs of substances undergoes SN2 substitution reaction faster and why?

17. Which one in the following pairs undergoes SN1 substitution reaction faster and why?

18. What are enantiomers? Draw the structures of the possible enantiomers of 3- methylpent 1-ene.

## PROJECT WORK:

### Make a project on any one of the following topics:

  Study of the presence of oxalate ions in guava fruit at different stages of ripening.

• Study the quantity of casein present in different samples of milk.

• Preparation of soybean milk and its comparison with natural milk with respect to curd formation, the effect of temperature, etc.

• Study of the effect of Potassium Bisulphate as a food preservative under various conditions (temperature, concentration, time, etc.)

• Study of digestion of starch by salivary amylase and effect of pH and temperature on it.

• Comparative study of the rate of fermentation of the following materials: wheat flour, gram flour, potato juice, carrot juice, etc.

• Extraction of essential oils present in Saunf (aniseed), Ajwain (carum), Illaichi (cardamom).

• Study of common food adulterants in fat, oil, butter, sugar, turmeric power, chilli powder and pepper.

## SUBJECT-MATHEMATICS

### CHAPTER- MATRICES AND DETERMINANTS

1. If $A_\alpha = \begin{bmatrix} cos\alpha & sin\alpha \\ -sin\alpha & cos\alpha \end{bmatrix}$ ,then prove that (i) $A_\alpha \, A_\beta = A_{\alpha+\beta}$

   (ii) $(A_\alpha)^n = \begin{bmatrix} \cos n\,\alpha & \sin n\,\alpha \\ -\sin n\,\alpha & \cos n\,\alpha \end{bmatrix}$ for every positive integer n.     (CBSE2004)

2. If $A = \begin{bmatrix} 1 & 2 & 2 \\ 2 & 1 & 2 \\ 2 & 2 & 1 \end{bmatrix}$, then prove that $A^2-4A-5I=0$. (CBSE2008)

3. If $A = \begin{bmatrix} 3 & 2 & 0 \\ 1 & 4 & 0 \\ 0 & 0 & 5 \end{bmatrix}$, then prove that $A^2-7A-10I=0$. (CBSE)

4. If $A = \begin{bmatrix} -1 \\ 2 \\ 3 \end{bmatrix}$ and $B = [-2 \quad -1 \quad -4]$, Verify that $(AB)^T=B^TA^T$. (CBSE 2005)

5. Express the following matrices as the sum of symmetric and skew symmetric matrix-

(i) $\begin{bmatrix} 3 & 2 & 7 \\ 1 & 4 & 3 \\ -2 & 5 & 8 \end{bmatrix}$ (ii) $\begin{bmatrix} 4 & 2 & -1 \\ 3 & 5 & 7 \\ 1 & -2 & 1 \end{bmatrix}$ (iii) $\begin{bmatrix} 3 & -2 & 4 \\ 3 & -2 & -5 \\ -1 & 1 & 2 \end{bmatrix}$ (CBSE2007,08,10)

6. Using properties of determinants prove

(i) $\begin{vmatrix} x & y & z \\ x^2 & y^2 & z^2 \\ x^3 & y^3 & z^3 \end{vmatrix} = xyz(x-y)(y-z)(z-x)$. (CBSE2010,11)

(ii) $\begin{vmatrix} x & y & z \\ x^2 & y^2 & z^2 \\ y+z & z+x & x+y \end{vmatrix} = (x-y)(y-z)(z-x)(x+y+z)$.
(CBSE2007,08,10)

(iii) If $x \neq y \neq z$ and $\begin{vmatrix} x & x^2 & 1+x^3 \\ y & y^2 & 1+y^3 \\ z & z^2 & 1+z^3 \end{vmatrix} = 0$, then prove that $xyz = -1$. (CBSE2011)

(iv) For any scalar $p$ prove that $\begin{vmatrix} x & x^2 & 1+px^3 \\ y & y^2 & 1+py^3 \\ z & z^2 & 1+pz^3 \end{vmatrix} = (1+pxyz)(x-y)(y-z)(z-x)$.

(v) Without expanding prove that $\begin{vmatrix} 1 & a & a^2-bc \\ 1 & b & b^2-ca \\ 1 & c & c^2-ab \end{vmatrix} = 0$. (CBSE 2002)

(vi) Without expanding prove that $\begin{vmatrix} 1 & 1+p & 1+p+q \\ 2 & 3+2p & 1+3p+2q \\ 3 & 6+3p & 1+6p+3q \end{vmatrix} = 1$. (CBSE2009)

(vii) Show that $\begin{vmatrix} b+c & c+a & a+b \\ q+r & r+p & p+q \\ y+z & z+x & x+y \end{vmatrix} = 2\begin{vmatrix} a & b & c \\ p & q & r \\ x & y & z \end{vmatrix}$. (CBSE2004,06,10,12)

(viii) $\begin{vmatrix} 1+a & 1 & 1 \\ 1 & 1+b & 1 \\ 1 & 1 & 1+c \end{vmatrix} = abc\left(1+\frac{1}{a}+\frac{1}{b}+\frac{1}{c}\right) = abc+bc+ca+ab$.
(CBSE2004,09,12)

(ix) $\begin{vmatrix} (b+c)^2 & a^2 & a^2 \\ b^2 & (c+a)^2 & b^2 \\ c^2 & c^2 & (a+b)^2 \end{vmatrix} = 2abc(a+b+c)^3$. (CBSE2006,10)

(x) $\begin{vmatrix} (b+c)^2 & ba & ca \\ ab & (c+a)^2 & cb \\ ac & bc & (a+b)^2 \end{vmatrix} = 2abc(a+b+c)^3$. (CBSE2006,10)

(xi) $\begin{vmatrix} 1+a^2-b^2 & 2ab & -2b \\ 2ab & 1-a^2+b^2 & 2a \\ 2b & -2a & 1-a^2-b^2 \end{vmatrix} = (1+a^2+b^2)^3.$

(CBSE2009,10C)

(xii) $\begin{vmatrix} 3a & -a+b & -a+c \\ -b+a & 3b & -b+c \\ -c+a & -c+b & 3c \end{vmatrix} = 3(a+b+c)(ab+bc+ca).$ $(CBSE2006C, 13)$

7. Solve (i) $\begin{vmatrix} a+x & a-x & a-x \\ a-x & a+x & a-x \\ a-x & a-x & a+x \end{vmatrix} = 0$ (CBSE2004,05,11)

(ii) $\begin{vmatrix} a+x & x & x \\ x & a+x & x \\ x & x & a+x \end{vmatrix} = 0$ (CBSE2011)

8. If the points $(2,-3)$ , $(\lambda,-1)$ and $(0,4)$ are collinear , find the value of $\lambda$.

9. Find the equation of line joining the points A(1,3) and B(0,0) using determinants and find k if D(k,0) is a point such that the area of $\triangle ABC$ is 3sq. Units. (CBSE 2013)

10. Show that A $= \begin{bmatrix} 2 & -3 \\ 3 & 4 \end{bmatrix}$ satisfies the equation $x^2-6x+17=0. Hence\ find\ A^{-1}.$

(CBSE2007)

11. Show that the matrix A$=\begin{bmatrix} 1 & 2 & 2 \\ 2 & 1 & 2 \\ 2 & 2 & 1 \end{bmatrix}$ satisfies the equation A²-4A-5I=0 and hence find A⁻¹

12. If $A = \begin{bmatrix} 3 & -2 \\ 4 & -2 \end{bmatrix}$, find the value of $\lambda$ so that $A^2 = \lambda A - 2I. Hence\ find\ A^{-1}.$ (CBSE2007)

13. $If\ A^{-1} = \begin{bmatrix} 3 & -1 & 1 \\ -15 & 6 & -5 \\ 5 & -2 & 2 \end{bmatrix} and\ B = \begin{bmatrix} 1 & 2 & -2 \\ -1 & 3 & 0 \\ 0 & -2 & 1 \end{bmatrix}, find\ (AB)^{-1}.$ (CBSE2012)

14. $Using\ elementry\ operations\ find\ the\ inverse\ of\ the\ following\ matrices$

(i) $\begin{bmatrix} 2 & 5 \\ 1 & 3 \end{bmatrix}$ (ii) $\begin{bmatrix} 2 & -1 & 4 \\ 4 & 0 & 2 \\ 3 & -2 & 7 \end{bmatrix}$ (iii) $\begin{bmatrix} 1 & 3 & -2 \\ -3 & 0 & 1 \\ 2 & 1 & 0 \end{bmatrix}$ (iv) $\begin{bmatrix} -1 & 1 & 2 \\ 1 & 2 & 3 \\ 3 & 1 & 1 \end{bmatrix}$

15. Solve the following system of linear equatios by matrix method (every year one question of 6 marks)

(i) $8x+4y+3z=18, 2x+y+z=5, x+2y+z=5.$

(ii) $\frac{2}{x}+\frac{3}{y}+\frac{10}{z}=4, \frac{4}{x}-\frac{6}{y}+\frac{5}{z}=1, \frac{6}{x}+\frac{9}{y}+\frac{-2}{z}=2.$

(ii) If A$=\begin{bmatrix} 1 & -1 & 0 \\ 2 & 3 & 4 \\ 0 & 1 & 2 \end{bmatrix} and\ B = \begin{bmatrix} 2 & 2 & -4 \\ -4 & 2 & -4 \\ 2 & -1 & 5 \end{bmatrix}$ are two square matrices, find AB and hence solve the system of linear equations: $x-y=3, 2x+3y+4z=17, y+2z=7.$

(iii) If A$=\begin{bmatrix} 2 & -3 & 5 \\ 3 & 2 & -4 \\ 1 & 1 & -2 \end{bmatrix}$ , find A⁻¹ and hence find the system of linear equations: $2x-3y+5z=11, 3x+2y-4z=-5, x+y+2z=-3.$

(iv) A school wants to award its students for the values of honesty , regularity and hard work with a total cash award of ₹ 6000. Three times the award money for hard work added to that given for honesty amounts to ₹ 11000. The award money given for honesty and hard work together is double the one given for regularity .Represent the above situation algebraically and find the award for each value, using matrix method.

Apart from these values ,namely, honesty, regularity and hard work, suggest one more value which the school must include for award.

Two institution decided to award three employees for the three values of resourcefulness, competence and determination in the form of prizes at the rate of ₹x, ₹y and ₹z respectively per person. The first institution decided to award respectively 4,3 and 2 employees with a total prize money of ₹ 37000 and the second institution decided to award respectively 5,3 and 4 employees with a total prize money of ₹ 47000.If all the three prizesper person together amount to ₹ 12000 , then using matrix method find the values of x, y and z. What values are described in this equations?

## SUBJECT-PHYSICAL EDUCATION

1. 1 game and sports -
history of game ,skill ,court, diagram, specification and record.
2. sports award, arjuna award ,,khel,Dhyan chand award .
3. 10 asans of lifestyle disease ,4 pranayam ,draw( diagram draw or paste, merits ,procedure and contradiction.
4. 5 types of disorder, characteristics, causes, cure.
5. posture deformities -pictures, short note, reasons, treatments/remedies.
6. Test and measurement in sports- Apher test/motor fitness test ,cardio vascular test - Harvard step test and Rockport test ,Ricky and Jonas senior citizen fitness test .
7. classification sport injuries- soft tissues and joint injuries.
8. Types of movement, right about all of types of movement and paste pictures .
9. BMI test of 10 students.
10. Athletics -draw 400 meter track with all specifications, shortcut and long jump.