SUMMER ASSIGNMENT: 2024-25
Class: XII (Science Stream)

General Instructions:-

1. **All the subject assignments have to be done in separate files using project papers.**
2. **Submission date:- 12th June, Wednesday**
3. **The Summer Break is scheduled from 05th May 2024 – 09th June, 2024. The students will resume the school from 10th June, 2024.**

Note:- These assignments are a part of your internal assessment & will be marked accordingly out of 10.

ENGLISH CORE (301)

Q1. As Principal of Sardar Patel Vidyalaya, Lucknow, draft notice in not more than 50 words informing students of the change in school timings with effect from the 1st of October. State valid reasons for the change.

Q2. You are Secretary of the History Club of Vidya Mandir School. Draft a notice in not more than 50 words informing students of a proposed visit to some important historical sites in your city.

Q3. You are Srinivas/Srinidhi of D.P. Public School, Nagpur. As Student Editor of your school magazine, draft notice in not more than 50 words for your school notice board inviting article sketches from students of all classes.

Q4. You are Secretary of J.P. Narain Housing Society, R.W.A., Meerut. Draft a notice in not more than 50 words stating that the second instalment of maintenance charges falls due on 31st March 2011, and requesting the members to pay before the due date. Sign as Anil/Anita.

Q5. You are President of the Cultural Society of your school. You are planning to organise a cultural programme. Write a notice for the school noticeboard inviting names of students willing to participate. You are Sudhir, the secretary of the society.

Q6. "Our language is a part of our culture and we are proud of it." Describe how regretful M Hamel and the village elders are for having neglected their native language, French.

Q7. Discuss how the story "The Last Lesson" provides strategies for resistance and protection of one's identity and community through its events and characters. Provide relevant textual details to support your argument.

Q8. Deduce why the act of M Hamel writing "Vive La France!" on the blackboard is considered symbolic.

Q9. Would you agree that promises made to poor children are rarely kept? Why do you think this happens in the incidents narrated in "Lost Spring"?

Q10. The bangle makers of Firozabad make beautiful bangles and make everyone happy but they live and dies in squalor. Elaborate the hazards of working in bangle making industry

Q11. The poem by Kamala Das beautifully captures the intricate relationship between a mother and a daughter. Truly the bond that mothers share with their children remains unparalleled and special. Write an article on the topic-"The Role of a Mother". You are Arun/Anuja.

Q12. State the common issues faced by most of the elderly people in the current times with reference to the poem "My Mother at Sixty Six".

Q13. Environment is degrading and humans are the primary reason why the earth's health is in the constant decline. Write an article on the topic "Role of Youth in Preserving the Environment" to create awareness on the issue with contextual reference from the poem by Neruda.

Q14. You are a psychiatrist and your first patient is Charley. His proclamation of the Third Level really surprised you. More importantly the way his wife Louisa took your comment personally is really something that you didn't see coming. Write a diary narrating your experience of the counselling session.

Q15. Imagine that you come across Louisa's diary. What might you find in it about the Third Level? Compose at least one diary entry based on any of the events from the story "The Third Level".

PHYSICS (042)

Q1. An optical instrument uses an objective lens of power 100 D and an eyepiece of power 40 D. The final image is formed at infinity when the tube length of the instrument is kept at 20 cm. (a) Identify the optical instrument. (b) Calculate the angular magnification produced by the instrument.

Q2. In a single slit diffraction experiment, the width of the slit is decreased. How will the (i) size (ii) intensity of the central bright band be affected? Justify your answer.

Q3. (a) Two thin lenses are placed coaxially in contact. Obtain the expression for the focal length of this combination in terms of the focal lengths of the two lenses. (b) A converging lens of refractive index 1.5 has a power of 10 D. When it is completely immersed in a liquid, it behaves as a diverging lens of focal length 50 cm. Find the refractive index of the liquid.

Q4. An object is placed 30 cm in front of a Plano-convex lens with its spherical surface of radius of curvature 20 cm. If the refractive index of the material of the lens is 1·5, find the position and nature of the image formed.

Q5. Give reasons for each of the following: (a) The intensity of light at some points on the screen in Young's double slit experiment is zero. (b) In the single slit diffraction experiment, some coloured fringes around the central white maximum are observed on the screen when one uses a source of white light.

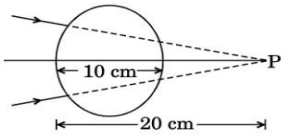
Q6. In the diffraction due to a single slit experiment, the aperture of the slit is 3 mm. If monochromatic light of wavelength 620 nm is incident normally on the slit, calculate the separation between the first order minima and the 3rd order maxima on one side of the screen. The distance between the slit and the screen is 1.5 m.

Q7. Draw a labelled ray diagram of compound microscope, when final image forms at the least distance of distinct vision.

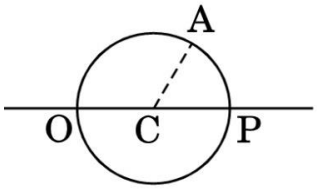
Why is its objective of short focal length and of short aperture, compared to its eyepiece? Explain. The focal length of the objective is 4 cm while that of eyepiece is 10 cm. The object is placed at a distance of 6 cm from the objective lens. (i) Calculate the magnifying power of the compound microscope, if its final image is formed at the near point. (ii) Also calculate length of the compound microscope.

Q8. A convex lens of focal length 20 cm and a concave lens of focal length 15 cm are kept 30 cm apart with their principal axes coincident. When an object is placed 30 cm in front of the convex lens, calculate the position of the final image formed by the combination. Would this result change if the object were placed 30 cm in front of the concave lens? Give reason

Q9. A converging beam of light travelling in air converges at a point P as shown in the figure. When a glass sphere of refractive index 1·5 is introduced in between the path of the beam, calculate the new position of the image. Also draw the ray diagram for the image formed.



Q10. A point 'O' marked on the surface of a glass sphere of diameter 20 cm is viewed through glass from the position directly opposite to the point O. If the refractive index of the glass is 1·5, find the position of the image formed. Also, draw the ray diagram for the formation of the image.



Q11. (a) An electron and a proton are accelerated through the same potential. Which one of the two has (i) greater value of de-Broglie wavelength associated with it, and (ii) lesser momentum ? Justify your answer in each case.

(b) How is the momentum of a particle related with its de-Broglie wavelength ? Show the variation on a graph.

Q12. A photon and a proton have the same de-Broglie wavelength λ. Prove that the energy of the photon is $(2m\lambda c/h)$ times the kinetic energy of the proton.

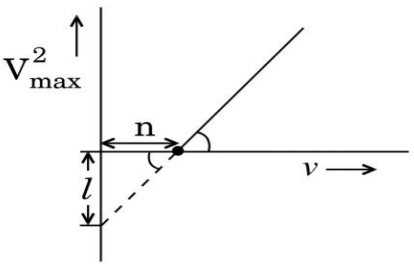
Q13. What are matter waves ? Find the ratio of de Broglie wavelengths associated with proton and alpha particles when both particles (a) are accelerated through the same potential difference. (b)have same velocity

Q14. When a given photosensitive material is irradiated with light of frequency ν, the maximum speed of the emitted photoelectrons equals V_{max}. The graph shown in the figure gives a plot of V_{max}^2 varying with frequency ν. Obtain an expression for

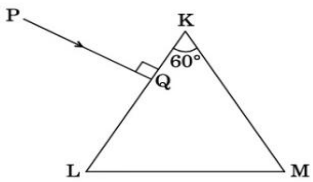
(a) Planck's constant, and

(b) The work function of the given photosensitive material in terms of the parameters 'l', 'n' and the mass 'm' of the electron.

(c) How is threshold frequency determined from the plot ? 3

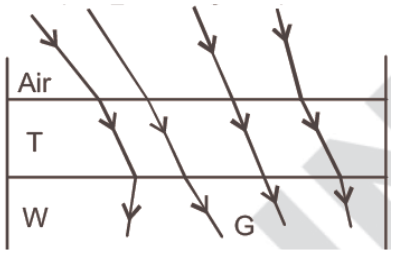


Q15. A triangular prism of refracting angle 60° is made of a transparent material of refractive index 3/2. A ray of light is incident normally on the face KL as shown in the figure. Trace the path of the ray as it passes through the prism and calculate the angle of emergence and angle of deviation.



Q16. The optical density of turpentine is Higher thean that of water while its mass density is lower. Figure shows a layer of turpentine floating over water in a container. For which one of the four rays incident on turpentine in fig, the path shown is correct?

(a) 1 (b) 2 (c) 3 (d) 4



Q17. According to Huygen's construction which of the following wavefront does not exists?

(a) Forward wavewfront (b) Backward wavefront
(c) Cylindrical wavefront (d) Cannot be predicted

Q18. A planoconvex lens of focal length 16 cm, is to be made of glass of refractive index 1.5. The radius of curvature of the curved surface should be

(a) 8 cm (b) 12 cm (c) 16 cm (d) 24 cm

Q19. In a Young's double-slit experiment the fringe width is 0.2 mm. If the wavelength of light used is incresed by 10% and the separation between the slits is also increased by 10%, then the fringe width will be

(a) 0.20 mm (b) 0.401 mm (c) 0.242 mm (d) 0.165 mm

Q20. Using light of wavelength 6000 Å stopping potential is obtained 2.4 volt for photoelectric cell. If light of wavelength 4000 Å is used then stopping potential would be

(a) 2.9 V (b) 1.9 V (c) 3.43 V (d) 9.4 V

CHEMISTRY (043)

Q1. The experimental molecular weight of an electrolyte will always be less than its calculated value of Van't Hoff factor, 'i' is:

(a) Greater than 1 (b) Less than 1 (c) One (d) Zero

Q2. If α is the degree of dissociation of K2SO4, the van't Hoff factor (i) used for calculating the molecular mass is

(a) $1 - 2\,\alpha$ (b) $1 + 2\,\alpha$ (c) $1 - \alpha$ (d) $1 + \alpha$

Q3. The porous membrane used in reverse osmosis plant is made up by

(a) Cellulose acetate (b) Potassium nitrate
(c) Mercuric iodide (d) Starch

Q4. The number of moles of NaCl in 3 litres of 3 M solution is

(a) 1 (b) 3 (c) 9 (d) 27

Q5. If molality of the dilute solution is doubled, the value of the molal depression constant will be

(a) doubled (b) halved (c) tripled (d) unchanged

Q6. In a lead storage battery, the electrolyte H_2SO_4 solution is

(a) 38% (b) 62% (c) 80% (d) 48%

Q7. The emf produced by a voltage cell is

(a) Electrode potential (b) Reduction potential
(c) Cell potential (d) Oxidation potential

Q8. The cell constant of a conductivity cell

(a) Changes with change in concentration of electrolyte
(b) Changes with the nature of electrolyte
(c) Changes with change in temperature of electrolyte
(d) Remains constant for a cell.

Q9. When initial concentration of reactant is double in a reaction, the half-life period is not affected. The order of reaction is

(a) Second (b) Zero
(c) First (d) More than zero but less than first

Q10. The first order rate constant for the decomposition of N2O5 is $6.2 \times 10^{-3} sec^{-1}$. The $t_{1/2}$ of the decomposition
(a) 117.7 sec (b) 111.7 sec (c) 228.4 sec (d) 168.9 sec

Q11. Gases tend to be less soluble in liquids as the temperature is raised. Why?

Q12. What is reverse osmosis? Give one large scale use of it.

Q13. What is a semi permeable membrane?

Q14. Under what condition is Van't Hoff factor less than one?

Q15. Why is glycol and water mixture used in car radiators in cold countries?

Q16. Given reason for the following :-
(a) Aquatic species are more comfortable in cold waters than in warm waters.
(b) To avoid bends scuba divers use air diluted with helium.
(c) Cold drinks bottles are sealed under high pressure of CO2.

Q17. For a dilute solution containing 2.5 g of a non-volatile non-electrolyte solute in 100 g of water, the elevation in boiling point at 1 atm pressure is 2°C. Assuming concentration of solute is much lower than the concentration of solvent, determine the vapour pressure (mm of Hg) of the solution.

Q18. Osmotic pressure of a 0.0103 molar solution of an electrolyte was found to be 0.75 atm at 27°C. Calculate Van' t Hoff factor.

Q19. What is meant by cell constant?

Q20. Define the term molar conductivity,

Q21. Which type of cell is lead storage battery? Write its electrode reaction.

Q22. Which type of cell is mercury cell? Write its electrode reaction.

Q23. Calculate the equilibrium constant for the reaction
$Cu(s) + 2Ag^+(aq) \rightarrow Cu^{2+} + 2Ag(s)$ E^0 cell=0.46 V.

Q24. The standard electrode potential for Daniell cell is 1.1 V. Calculate the standard Gibbs energy for the reaction:
$Zn(s) + Cu^{2+}(aq) \rightarrow Zn^{2+}(aq) + Cu(s)$

Q25. What do you understand by rate of a reaction?

Q26. Distinguish between order and molecularity of a reaction.

Q27. Rate of a reaction is given by the equation: $Rate = [A]^2[B]$.
What are the units for the rate and rate constant for this reaction?

Q28. Name the factors on which the rate of a particular reaction depends.

Q29. The rate constant for a first order reaction is $60\ s^{-1}$. How much time will it take to reduce the initial concentration of the reactant to its 1/16th value?

Q30. During nuclear explosion, one of the products is ^{90}Sr with half-life of 28.1 years. If 1μg of ^{90}Sr was absorbed in the bones of a newly born baby instead of calcium, how much of it will remain after 10 years and 60 years if it is not lost metabolically.

INVESTIGATORY PROJECT (Any One)

Q1. Study of the presence of oxalate ions in guava fruit at different stages of ripening.

Q2. Study of quantity of casein present in different samples of milk.

Q3. Preparation of soybean milk and its comparison with the natural milk with respect to curd formation, effect of temperature, etc.

Q4. Study of the effect of Potassium Bisulphate as food preservative under various conditions (temperature, concentration, time, etc.)

Q5. Study of digestion of starch by salivary amylase and effect of pH and temperature on it.

Q6. Comparative study of the rate of fermentation of following materials: wheat flour, gram flour, potato juice, carrot juice, etc.

Q7. Extraction of essential oils present in Saunf (aniseed), Ajwain (carum), Illaichi (cardamom).

Q8. Study of common food adulterants in fat, oil, butter, sugar, turmeric power, chilli powder and pepper.

MATHEMATICS (041)

Q1. Show that the relation R in the set of real numbers, defined as R= {(a, b): $a \leq b^2$}: is neither reflexive not symmetric nor transitive.

Q2. Let S = {x: x is a resident of Delhi}. A relation R on S is defined by R = {(a, b): a and b are members of a joint family}. Check whether R is an equivalence relation?

Q3. Show that the relation R defined by $(a,b)R\,(c,d) \Rightarrow a+d=b+c$ on the set N X N is an equivalence relation.

Q4. Given that $f(x)=\sin x$ check if function f is one-one for (i) $(0,\pi)$ (ii) $\left(-\frac{\pi}{2},\frac{\pi}{2}\right)$.

Q5. Show that: $\tan\left(\frac{1}{2}\sin^{-1}\frac{3}{4}\right)=\frac{4-\sqrt{7}}{3}$.

Q6. Prove that: $\tan^{-1}\sqrt{x}=\frac{1}{2}\cos^{-1}\left(\frac{1-x}{1+x}\right)$.

Q7. Write the principal value of $\tan^{-1}(\sqrt{3})-\cot^{-1}-(\sqrt{3})$.

Q8. Write the value of $\tan^{-1}\left[2sin\left(2\cos^{-1}\frac{\sqrt{3}}{2}\right)\right]$.

Q9. Find the principal value of $\sec^{-1}\left(sec\left(\frac{-8\pi}{5}\right)\right)$.

Q10. Evaluate: $\sin^{-1}(sin10)$.

Q11. Solve the following for x:

(i) $\cos^{-1}(sin(\cos^{-1}x))=\frac{\pi}{3}$.

(ii) $tan(\cos^{-1}x)=\frac{2}{\sqrt{5}}$.

(iii) $3\sin^{-1}\left(\frac{2x}{1+x^2}\right)-4\cos^{-1}\left(\frac{1-x^2}{1+x^2}\right)+2\tan^{-1}\left(\frac{2x}{1-x^2}\right)=\frac{\pi}{3}$.

Q12. Draw the graph of the $y=\tan^{-1}x$ where $y\epsilon\left[\frac{-\pi}{2},0\right]$.

Q13. Evaluate the following: $\sin\left(2\sin^{-1}\frac{3}{5}\right)$.

Q14. Write the range of one branch of $\sin^{-1}x$, other than the principal branch.

Q15. Write a square matrix of order 2, which is both symmetric and skew symmetric.

Q16. If $A'=\begin{bmatrix}3&4\\-1&2\\0&1\end{bmatrix}$ and B= $\begin{bmatrix}-1&2&1\\1&2&3\end{bmatrix}$, then find A'- B'.

Q17. Solve the following matrix equation for x: $[x \quad 1]\begin{bmatrix}1&0\\-2&0\end{bmatrix}=O$.

Q18. If A =$\begin{bmatrix}1&5\\7&12\end{bmatrix}$ and B = $\begin{bmatrix}9&1\\7&8\end{bmatrix}$, find a matrix C such that 3A + 5B + 2C is a null matrix.

Q19. If $A=\begin{bmatrix}\cos\alpha&-\sin\alpha\\\sin\alpha&\cos\alpha\end{bmatrix}$, then for what value of α is A an identity matrix?

Q20. To promote the making of toilets for women, an organization tried to generate awareness through

(i) House call (ii) letters and (iii) announcements.

The cost of each mode per attempt is given below:

(i) Rs 50 (ii) Rs 20 (iii) Rs 40

The number of attempts made in three villages X, Y and Z are given below:

	(i)	(ii)	(iii)
X	400	300	100
Y	300	250	75
Z	500	400	150

Find the total sum incurred by the organization for the three villages separately, using matrices.

BIOLOGY (044)

General Instructions:-

1. Following are some questions of ch 1 and 2, select ANY 20 of your choice questions and make a separate note book for this assignment.
2. Write question before your answer and present your answer properly.

Q1. Why is the process of fertilization in a flowering plant referred to as double fertilization? **(C.B.S.E 2007)**

Q2. Coconut Palm is monoecious while Date Palm is dioecious. Why are they called so? **(C.B.S.E 2008)**

Q3. Fertilization is essential for production of seeds.

(i) Give one example of an angiosperm that produces seed without fertilization. Name the process.

(ii) Explain two ways by which seeds develop without fertilization. **(C.B.S.E 2009)**

Q4. Draw a longitudnal section of a post pollinated pistil to who entry of pollen tube into mature embryo sac. Label filiform apparatus, chalazal end, hilum, antipodals, male gametes and secondary nucleus. **(C.B.S.E 2010)**

Q5. Where does triple fusion take place in a flowering plant? Why is it so called? Mention its significance. **(C.B.S.E 2010)**

Q6. (a) Mention any four strategies adopted by flowering plants to prevent self-pollination.
(b) Why is geitonogamy also referred to geneticalautogamy? **(C.B.S.E 2010)**

Q7. How many haploid cells are present in a mature female gametophyte of a flowering plant? Name them. **(C.B.S.E 2010)**

Q8. Differentiate between geitonogamy and xenogamy in plants. Which one between the two will lead to inbreeding depression and why? **(C.B.S.E 2011)**

Q9. State one advantage and one disadvantage of cleistogamy. **(C.B.S.E. 2012)**

Q10. Write the cellular contents carried by the pollen tube. How does the pollen tube gain entry into the embryo sac? **(C.B.S.E 2012)**

Q11. Differentiate perisperm and endosperm giving one example of each. **(C.B.S.E 2012)**

Q12. (a) Trace the development of embryo after synagmy in a dicot plant.
(b) Endosperm development precedes embryo development. Explain.
(c) Draw a diagram of a mature dicot embryo and label cotyledons, plumule, radicle, hypocotyl in it. **(C.B.S.E 2009)**

Q13. Explain double fertilization and trace the post fertilization events in sequential order leading to seed formation in a typical dicotyledonous plant. **(C.B.S.E 2010)**

Q14. Give reasons why
(i) Most zygotes in angiosperms divide only after certain amount of endosperm is formed.
(ii) Groundnut seeds are exalbuminous and Caster seeds are albuminous.
(iii) Micropyle remains as a small pore in the seed coat of a seed.
(iv) Integuments of an ovule harden and the water content is highly reduced as the seed matures.
(v) Apple and Cashew are not called true fruits. **(C.B.S.E. 2011)**

Q15. (a) Explain the characteristic features of wind pollinated flowers. How are insect pollinated followers different from them?
(b) Explain the mutually rewarding relationship between Yucca plant and species of moth. **(C.B.S.E. 2011)**

Q16. (a) How does microspore mother cell develop into mature pollen grain in angiosperms?
(b) Describe the structure of a mature pollen grain and draw a labelled diagram of its two celled stage. **(C.B.S.E. 2012)**

Q17. Why are beehives kept in a crop field during flowering period? Name any two crop fields where this is practised. **(C.B.S.E. 2014)**

Q18. Write the location and function of Sertoli cells in humans. **(C.B.S.E. 2012)**

Q19. When do the oogenesis and spermato? Mention the difference between spermiogenesis and spermiation. **(C.B.S.E. 2012)**

Q20. Explain the function of umbilical cord. **(C.B.S.E. 2012)**

Q21. What is monospermy? How is polyspermy prevented in humans? **(C.B.S.E. 2007)**

Q22. What is pregnancy hormone? Why is it so called? Name two sources of the hormone in a human female. (C.B.S.E. 2007)

Q23. Why is the human placenta referred to as haemochorial type? Explain. **(C.B.S.E. 2008)**

Q24. Where are fimbriae present in a human female reproductive system? Give their function. **(C.B.S.E. 2009)**

Q25. Name the source of gonadotropins in human females. Explain the changes brought about in the ovary by these hormones during menstrual cycle. **(C.B.S.E. 2009)**

Q26. Spermatogenesis in human males is a hormone regulated process. Justify. **(C.B.S.E. 2010)**

Q27. (a) Where do the signals for parturition originate in humans?
(b) Why is it important to feed the new born babies on colostrum? **(C.B.S.E. 2012)**

Q28. Give a schematic representation of of oogenesis in humans. Mention the number of chromosomes at each stage. Correlate the life phases of the individual with the stages of the process. **(C.B.S.E. 2008)**

Q29. Draw a diagrammatic sectional view of human ovary showing different stages of oogenesis alongwith corpus luteum. **(C.B.S.E. 2009)**

Q30. (a) Draw a diagrammatic labeled sectional view of a seminiferous tubule of a human.
(b) Describe in sequence the process of spermatogenesis in humans. **(C.B.S.E. 2010)**

Q31. (a) Draw a labeled diagram of the human female reproductive system.
(b) Enumerate the events in the ovary of a human female during (i) Follicular phase (ii) Lufeal phase of menstrual cycle. **(C.B.S.E. 2010)**

Q32. (a) Write the specific location and functions of the following cells in human males.
(i) Leydig cells (ii) Sertoli cells (iii) Primary spermatocyle

Q33. (b) Explain the role of two accessory glands in human male reproductive system. **(C.B.S.E. 2011)**

Q34. Draw the diagram by the instruction given below...

(i) Identify the figure that illustrates ovulation and mention the stage of oogenesis it represents.
(ii) Name the ovarian hormone and pituitary hormone that has caused the above mentioned event.
(iii) Explain the changes that occur in the uterus simultaneously in anticipation.
(iv) Draw a labeled sketch of human ovum prior to fertilization.

OR

(i) Identify the figure that illustrates corpus luteum and name the pituitary hormone that influences its formation.
(ii) Specify the endocrine function of corpus luteum. How does it influence uterus? Why is it essential?
(iii) Draw a labeled sketch of Graafian follicle. **(C.B.S.E. 2012)**

INFORMATICS PRACTICES (065)

Q1. Write SQL commands for the questions from (i) to (xii) and write output(s) from (xiii) to (xv) based on the following table DEPARTMENT.

AdmNo	Name	Address	Join_Date	Fee	Semester	Grade
1256	Aditya	B-4, Dwarka, Mumbai	2016-07-23	45000	I	A1
5678	Amit	Sec 5, R.K.Puram	2015-06-15	35000	III	B2
1425	Karina	B3/2, V.Vihar, Patna	2013-06-22	26000	II	C1
8954	Bikram	Sec 2, Pune	2012-03-13	75000	I	A2
1789	Vijay	123/a, Mumbai	2014-02-17	35000	II	B1
8376	Ganesh	53/2, Chandigarh	2012-10-05	0	II	C3
2938	Bharath	11/7, Chennai	2012-06-24	25000	II	B2
6498	Tarun	117-n, Delhi	2016-05-25	32000	I	A1
5420	Rajan	56-e, Ahemadabad	2014-02-27	32000	III	B2
8567	Anita	73/c, Faridabad	2012-08-22	38000	I	C2

i. Display all the details.
ii. Display Admission Number and Name of the students.
iii. Display the all the details of C1 grade students.
iv. Display the Name and Join Date of all the students who have got A1 grades.
v. Display the Name and Fees of all the students who are studying in Semester I and III.
vi. Display the details of all students who have paid fees more than Rs.35,000.
vii. Display the admission no., name and address of all the students who have paid the fees less than Rs.30,000.
viii. Display the details of students who have paid the fees in the range Rs.30,000 – Rs.40,000 (Both values inclusive).
ix. Display the name and address of all the students who have paid the fees in the range Rs.25,000 – Rs.35,000 (Both values exclusive).
x. Display the details of the students whose have not paid any fees.
xi. Display the details of all scholars whose date of join is before 30/June/2012.
xii. Display the Name. Fee and Grade of the student with the admission number 1425.
xiii. SELECT ADMNO, NAME FROM DEPARTMENT WHERE FEES > 40000;
xiv. SELECT NAME, JOIN_DATE FROM DEPARTMENT WHERE JOIN_DATE >= '2016-01-01';
xv. SELECT * FROM DEPARTMENT WHERE GRADE IN ('B2', 'C1');

PHYSICAL EDUCATION (048)

Write a Practical manual on Volleyball/ Basketball/ Handball with colored picture in your practical book according to CBSE board External practical 2024-25 (Refer the pdf file which was shared)

***Record File shall include:

- Practical-1: Fitness tests administration. (SAI Khelo India Test)
- Practical-2: Procedure for Asanas, Benefits & Contraindication for any two Asanas for each lifestyle disease.
- Practical-3: * Anyone IOA recognized Sport/Game of choice. Labelled diagram of Field & Equipment. Also mention its Rules, Terminologies & Skills.

1. **Cover it with Red color paper**
2. Label it with all the details with plain white stickers (refer previous year practical manual)
3. Stick pictures on blank pages only
4. Detail index should be there

PSHYCOLOGY (037)

Q1. Prepare a project report on different intelligence of people around your environment. Make a comparative study with respect to minimum 5 categories of different people around you.

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