

DDMS (AMS) P. OBUL REDDY PUBLIC SCHOOL
Accountancy Holiday home work
Goodwill: Nature and valuation – Class XII

General instruction:

1. Answer all the questions on A-4 sheets (write on one side only) and
2. Submit on the re-opening day.

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1. Explain the meaning & nature of goodwill.
2. What is the need for valuation of goodwill?
3. What factors will affect the value of goodwill?
4. What are the types of goodwill?
5. What are the methods of valuation of goodwill?
6. Write the steps of valuation of goodwill as per simple average profit method.
7. Write the steps of valuation of goodwill as per super profit method.
8. Write the steps of valuation of goodwill as per capitalization method.
9. Calculate the value of goodwill at two years purchase of three years average profit.
Three years profits are as follows: 2019 : 15,00,000; 2020: Twice the profit of 2019;
2021: Twice the profit of 2020.
10. Find the value of goodwill at three years purchase of five years average profit as per simple average profit method from the following information. Profits for the last five years as follows: 2017 : Rs.5,00,000; 2018 : Rs.8,00,000; 2019 : Rs.10,00,000; 2020 : Rs.7,00,000; 2021 : Rs.15,00,000.

THE END

CLASS XII

SUBJECT: BIOLOGY

SUMMER HOLIDAY HOMEWORK

1. DECIDE AND CONFIRM YOUR IP IN THE EXCEL SHEET PROVIDED IN GOOGLE CLASSROOM.
2. WORK ON YOUR IP THROUGH THE SUMMER AND SUBMIT WHEN SCHOOL REOPENS.
3. COMPLETE THE DIAGRAMS!
4. REVISE THE LESSONS
 - (a) Reproduction in Organisms
 - (b) Sexual reproduction in Flowering PlantsFOR A TEST WHEN SCHOOL REOPENS

BON VACANCES ET À BIENTÔT!!

DDMS (AMS) P. OBUL REDDY PUBLIC SCHOOL
Business studies Holiday home work
Nature and Significance of Management – Class XII

General instruction:

1. Answer all the questions on A-4 sheets (write on one side only) and
2. Submit on the re-opening day.

| Q. No. | Question description |
|--------|---|
| 1 | <p>Volvo Ltd's target is to produce 10000 shirts per month at a cost of Rs. 100/- per shirt. The Production Manager achieved this target at a cost of Rs. 90/- per shirt. Do you think the 'Production Manager' is effective? Give one reason in support of your answer</p> |
| 2 | <p>Kartik joins a garment factory as a plant supervisor in Lucknow. He observes that the output of some workers is very low as compared to the standards set for their performance. On analyzing the reasons for the same, he finds out that a lot of time of the workers is wasted in getting the requisite materials issued form the store. Whereas on asking, the store keeper complains that there is no harmony in the working of the production department as a whole. Every day the workers approach him at the last minute to procure different kinds of threads, laces, mirrors, buttons etc. if it is not available in the store then he has to place an order with the purchase officer. As a result, a lot of time of the workers is wasted. So, in order to integrate the various production activities, henceforth, Kartik ensures that the store keeper is informed well three days in advance about the requisite materials. Consequently, the store keeper is able to keep the materials ready for the workers every morning in accordance with their requirements.</p> <p>In context of the above case</p> <ol style="list-style-type: none"> 1. Identify and explain the quality of management that Kartik has introduced in the working of the production department as a corrective measure to control the output of the workers. 2. State briefly and two points highlighting the importance of quality of management identified in part (a). |
| 3 | <p>Sridhar's father is working as a section in-charge in a government office. Identify the level of management at which he is working? State any five functions that he has to perform at this level.</p> |

| | |
|---|---|
| 4 | <p>Esha works as the cost and risk management head of a company in power sector. As a result of her excellent managerial competence, the company is able to reduce costs and increase productivity. The company belongs to infrastructure sector, where regular amendments are made in the government regulations and policies. She holds regular meetings to ensure that people in her department are not only aware of the related changes but are also able to adapt to these changes effectively. This helps the company to maintain its competitive edge. She motivates and leads her team in such a manner that individual members are able to achieve personal goals while contributing to the overall organizational objective. In the process of fulfilling her duties for the growth of the organization, she helps in providing competitive services, adopting new technology, creating more employment opportunities etc. for the greater good of the people at large.</p> <p>In context of the above case:</p> <p>Identify the various reasons that have made management so important by quoting lines from the paragraph.</p> |
| 5 | <p>Sonu Nigam' the famous playback singer always spends time for practice and adds his creativity in his singing.</p> <p>Like Sonu Nigam, Mr. Rajiv, manager of Headlines Ltd. uses his creativity and practice management principles under different situations to manage the business. The employees are happy and satisfied as he every day reward employees for their punctuality and efficiency.</p> <ol style="list-style-type: none"> 1. Identify the nature of management highlighted above. 2. Name other two aspects of nature of management. 3. Identify the values followed by Mr. Rajiv. |
| 6 | <p>Alpha Ltd. is a Company that manufacturers mobile phones and accessories. Its profits are declining nowadays. The sales department blames production department for low quality, the production department blames purchase department for not supplying good quality parts.</p> <ol style="list-style-type: none"> 1. What quality of management is lacking in the above case? 2. Explain the nature of the concept. |

THE END

DDMS(AMS) P.OBUL REDDY PUBLIC SCHOOL

HOLIDAY HOMEWORK –CHEMISTRY (XII)

Complete record work for the following salts:

1) Ammonium chloride

2) Lead nitrate

3) Aluminium sulphate

4) Zinc carbonate

5) Barium nitrate

6) Strontium chloride.

Select any one topic related to Chemistry, for Investigatory project and collect information for the same.

Min. number of pages: 10(excluding cover page, certificate , acknowledgement, Bibliography)

Solve the worksheet posted in class group.

AMS P.OBUL REDDY PUBLIC SCHOOL

HOLIDAY HOMEWORK 2022

| CLASS: XII | SUBJECT: COMPUTER SCIENCE |
|--------------|---|
| 1. | <p style="text-align: center;">PROJECT WORK</p> <p>The aim of the project is to create something that is tangible and useful using Python and My SQL connectivity with Insert, Update, Delete, Search and Display Operations. The aim here's to find a real world problem that is worthwhile to solve.</p> <p>For Example Database Name: School</p> <p>For Example Table Name: Student</p> <p>Table Attributes:</p> <p>adm_no int NOT NULL Primary Key name varchar(32) NOT NULL class int NOT NULL mobile_no varchar(10) NOT NULL email_id varchar(32) NOT NULL</p> <p>Required Operations:</p> <p>Insert : To insert a new record in to the Student table Update : To update an existing record based on the adm_no Delete : To delete an existing record based on the adm_no Search : To search for a particular record based on the adm_no Display : To display all the records</p> |
| 2. | <p style="text-align: center;">Project Documentation</p> <p>Complete the project documentation in the attached word file format.</p> |
| Note: | <p>Attach the (i) Project source code i.e. (.py file) and (ii) Completed project documentation word file.</p> <p>Students can select project title of their choice like Student Management, Book Management, Staff Management, Inventory Management etc.</p> |

AMS P.OBUL REDDY PUBLIC SCHOOL

HOLIDAY HOMEWORK 2022

| CLASS: XII | SUBJECT: English core |
|------------|---|
| | <p>Prepare a collage of the photos or/ and pictures drawn by you of quality time (different moments) spent with your mother(mother like figure) and /or depicting how s/he manages her responsibilities. (For example, draw/ take pics of mothers doing various chores or activities at home, market, office (if applicable) like cooking, hosting, serving food, reading stories to kids, giving tea to your grandmother and /or functioning at various roles in her work place) (100-150 words)</p> <p>Write a paragraph/poem to show your relationship with your mother.</p> |
| | <p>Write an anecdote/a story to depict how individuals combat with the situation of adversity and how they overcome. Add an appropriate picture or draw a sketch to support presentation. Make the written piece a work of art</p> |

DDMS (AMS) P. OBUL REDDY PUBLIC SCHOOL

Entrepreneurship Class XII Holiday home work: CBSE PROJECT

Steps to Follow:

1. Conduct a survey via Google forms on the any one of the following topics:
 - Smoking Habits
 - Career Options
 - Money Management
 - Book Reading habits
 - Skill Trading Option in an economic backward neighbourhood
 - Wearing helmets
 - Attitudes of Road users
 - Conservation of electricity
 - Rainwater harvesting
2. Your questionnaire must have 25 questions in all among which,
 - 2 questions can be open ended
 - 20 questions have to be MCQ type with 4 options for each
 - 3 yes or No type questions should be included.
3. For presentation of your responses, you must present them in the form of graphs. For the first 10 questions, you can make bar graphs and for the rest 15 you can make pie charts, or vice versa.
4. Total 25-30 responses are to be collected.

The format for presentation of your project:

1. A cover page – subject name, student details, etc
2. Acknowledgement
3. Index
4. Introduction to the topic
5. Data Analysis and interpretation.
6. Conclusion
7. Bibliography

PLEASE REFER PAGE NUMBER 252 FROM YOUR TEXTBOOK IF YOU HAVE ANY DOUBTS.

THE PROJECT MUST BE HANDWRITTEN

CERTIFICATE WILL BE GIVEN WHICH HAS TO BE ATTACHED TO THE PROJECT FILE.

THE END

DDMS P. OBUL REDDY PUBLIC SCHOOL

HOLIDAY HOMEWORK

HOME SCIENCE XII

Topic: Market survey of any five processed foods, their packaging and label information.

Purpose of the Project: This project is intended to familiarise students with the variety of processed foods available in the market, create awareness about the different types of packaging materials used for processed foods and to generate interest in the study of Label Information.

A) Visit a market and collect information on the following:

Cereal Foods like Breakfast foods, noodles ,Atta, etc.

Diary Products: Milk, Cheese, Butter , Ghee , Ice –Cream etc.

Preserves: Jams, Pickles, squashes, ketchup, sauces etc.

Snacks: Chips, Bhujias, Biscuits etc.

Nutrition Supplements: Complan, Bournvita, Horlicks, Milo, Boost and other branded products.

Beverages: fruit juices, carbonated soft drinks, bottled water

NOTE: 2 PRODUCTS IN EACH CATEGORY GIVEN ABOVE.

(B) Note the Packaging material used for these products.

- I. Make a table comparing the types of Packaging materials used for different types of food.**

| NAME OF THE PRODUCT | PACKAGING MATERIAL USED | LABEL INFORMATION | | | | | |
|--|-------------------------|-------------------|------------------|--------|--------------------|-----------------------|----------------|
| | | DATE OF PACKAGING | BEST BEFORE DATE | WEIGHT | CERTIFICATION MARK | NUTRITION INFORMATION | REMARKS IF ANY |
| CEREAL: 1. AASHIRWAAD WHEAT FLOUR 2. KELLOGS CORNFLAKES | | | | | | | |

The above Tabular format need to be followed

- II. From the collected information point out the relative Merits and De-merits of the different packaging materials.
- III. THE ABOVE PROJECT NEED TO BE MADE IN A PORTFOLIO STYLE. (ONE IDEA IS REPRESENTED HERE.)
- IV. https://www.youtube.com/watch?v=Inhtm_50Ou4

RUBRICS FOR ASSESMENT OF HOLIDAY HOMEWORK:

| | | | |
|--|--|---|---|
| Selection Of The Processed Food Products in each category. (2 in each category mandatory) (3 Marks) | Filling up all the information in tabular format. (4Mark) | Analysing the Merits and Demerits. (2 Marks) | Creativity, Neatness, and Authentication (Picture showing that you are doing this study) Submission On time (1 Marks) |
|--|--|---|---|

Total Marks: 10

INSTRUCTIONS:

1. Authentication (Photograph) mandatory
2. Maximum Number of coloured Ruled A4 size paper is 15 pages.
3. Neat Work and Submission on Time
4. The holiday homework needs to be submitted on the school Re-Opening Day itself after the Summer Vacation.

DDMS P OBUL REDDY PUBLIC SCHOOL
LEGAL STUDIES – HOLIDAY HOME WORK

TOPIC : UNDERSTANDING THE PARTS OF JUDICIAL DECISION

Learning outcome: A student will be able understand the various parts of Judicial decision, like Facts, Issues, Judgment, Ratio Decidendi and Obiter Dictum by examining various judgments.

Elements of the project:

- **Synopsis**
 - Parts of judicial decision and their significance
 - Methodology that is being used (doctrinal only)
 - The five cases that are being chosen by the student
 - Reason to choose particular cases
 - Preliminary research resources (books/blogs/articles etc..)

- **Introduction**
 - Parts of judicial decision and their significance
 - Doctrine of stare decisis
 - History of judicial precedent
 - Ratio decidendi
 - Obiter dictum
 - What is the necessity to understand the parts of a judicial decision?

Note : Project is to be hand written. This is in partial fulfillment of the final project, therefore we request all the students to keep the material safe.

----- The End -----

KEY POINTS:

1. For any square matrix of order n , we have 1) $|kA| = k^n |A|$ 2) $|A| = |A^T|$ 3) $(A^{-1})^T = (A^T)^{-1}$
2. i) $(A \pm B)^T = A^T \pm B^T$ ii) $(AB)^T = B^T A^T$ iii) $(AB)^{-1} = B^{-1}A^{-1}$
3. For any two square matrices A and B of same order, we have
 $|AB| = |A| |B|$ $|kAB| = k^n |A| |B|$
4. If A is a square matrix of order n , then $A (\text{adj}A) = (\text{adj}A) A = |A| \cdot I$
5. If A is invertible matrix of order n , then $|\text{adj}A| = |A|^{n-1}$.
6. If A is a square matrix of order n , then $|A \cdot \text{adj}A| = |A|^n$
7. If A is invertible square matrix, then $\text{adj}(\text{adj}A) = |A|^{n-2} A$
8. If A is invertible square matrix, then $|\text{adj}(\text{adj}A)| = |A|^{(n-1)^2}$
9. If A is invertible square matrix, then $\text{adj}(A^T) = (\text{adj}A)^T$
10. If A and B are non singular matrices of same order, I is unit matrix, k is non zero real number such that
 (i) $AI = IA = A$
 (ii) $AB = BA = I$ then $A^{-1} = B$ (or) $B^{-1} = A$
 (iii) $AB = BA = kI$ then $A^{-1} = \frac{1}{k} B$ (or) $B^{-1} = \frac{1}{k} A$

Questions:

1. If A is square matrix of order 3, $|A| \neq 0$ and $|5A| = k|A|$ then write the value of k .
2. If A and B are square matrices of order 3 and $|A| = 5$, $|B| = 3$, then find the value of $|3AB|$.
3. If A and B are square matrices of the same order such that $|A| = 6$ and $AB = I$, then write the value of $|B|$.
4. If A is a square matrix such that $|A| = 5$, write the value of $|AA^T|$.
5. If A is a skew symmetric matrix of order 3, write the value of $|A|$.
6. If $A = \begin{bmatrix} \cos\theta & \sin\theta \\ -\sin\theta & \cos\theta \end{bmatrix}$, then for any natural number n , find the value of $\text{Det}(A^n)$.

7. If A is a matrix of order 3x3 such that $A(\text{adj}A) = 5I$, then find $|\text{adj}A|$.
8. Find $\text{diag}[1 \ 2 \ 3] + \text{diag}[4 \ 5 \ 6]$.
9. Write number of matrices of order 2×3 with each entry 0, 1 or 2.
10. Write number of non-zero matrices of order 2×3 with each entry 0, 1 or 2.
11. Write number of non-zero and non-unit matrices of order 3×3 with each entry 0, 1 or 2.
12. Write an example of matrix of order 3x3

a) Which is non-zero and symmetric b) which is non-zero and skew symmetric

c) which is both symmetric and skew-symmetric

13. Find k and α if $A = \begin{bmatrix} 0 & 2 & 3 \\ -2 & 2\alpha - 1 & -5 \\ -3 & 5 & k^2 - k - 12 \end{bmatrix}$ is skew symmetric.

14. Express $\begin{bmatrix} 1 & 1 & -2 \\ -1 & 4 & 3 \\ 2 & -3 & 2 \end{bmatrix}$ as sum of symmetric and skew symmetric matrices.

15. If $f(x) = x^2 + 4x + 5$ and $A = \begin{bmatrix} 1 & 2 \\ 4 & -3 \end{bmatrix}$, then find $f(A)$.

16. Find i) $[1 \ 2 \ 3] \begin{bmatrix} 4 \\ 5 \\ 6 \end{bmatrix}$ ii) $\begin{bmatrix} 4 \\ 5 \\ 6 \end{bmatrix} [1 \ 2 \ 3]$

17. For what value of x, if $\begin{bmatrix} 1+x & 7 \\ 3-x & 8 \end{bmatrix}$ is (i) singular matrix (ii) non-singular matrix.

18. If $A = \begin{bmatrix} 1 & -2 & 3 \\ -4 & 2 & 5 \end{bmatrix}$ and $B = \begin{bmatrix} 2 & 3 \\ 4 & 5 \\ 2 & 1 \end{bmatrix}$ and $BA = (b_{ij})$, find $b_{21} + b_{32}$.

19. Find the determinant of $\text{diag}[k \ 3k \ 5k]$

20. If $A = \begin{bmatrix} 0 & 0 \\ 2 & 0 \end{bmatrix}$, then find A^{2018}

21. If A is a non-singular matrix such that $A^{-1} = \begin{bmatrix} 15 & 3 \\ -2 & 51 \end{bmatrix}$, then find $(A^T)^{-1}$

22. If A is a square matrix of order 3x3 such that $|A| = 2$, then find $|A \cdot \text{adj}A|$.

23. If A is invertible matrix of order 3x3 and $|A| = 7$ then find $\text{adj}(\text{adj}A)$.

24. If $\begin{vmatrix} x & \sin\theta & \cos\theta \\ -\sin\theta & -x & 1 \\ \cos\theta & 1 & x \end{vmatrix} = 8$, write the value of x.

25. If matrix $A = \begin{bmatrix} 1 & -1 \\ -1 & 1 \end{bmatrix}$ and $A^2 = kA$, then the value of k .
26. (i) If $M \begin{bmatrix} 2 & 0 \\ 1 & 9 \end{bmatrix} = \begin{bmatrix} 4 & 6 \\ 9 & 3 \end{bmatrix}$, find matrix M (ii) If $\begin{bmatrix} 2 & 0 \\ 1 & 9 \end{bmatrix} M = \begin{bmatrix} 4 & 6 \\ 9 & 3 \end{bmatrix}$, find matrix M
27. If $A = \begin{bmatrix} 0 & 1 & 3 \\ 1 & 2 & x \\ 2 & 3 & 1 \end{bmatrix}$ and $A^{-1} = \frac{1}{2} \begin{bmatrix} 1 & -8 & 5 \\ -1 & 6 & -3 \\ 1 & 2y & 1 \end{bmatrix}$, find the value(s) of x and y .
28. Given that $A = \begin{bmatrix} -4 & 4 & 4 \\ -7 & 1 & 3 \\ 5 & -3 & -1 \end{bmatrix}$ and $B = \begin{bmatrix} 1 & -1 & 1 \\ 1 & -2 & -2 \\ 2 & 1 & 3 \end{bmatrix}$, find AB . Use this result to solve the

following system of linear equations:

| | |
|--|---|
| <p>i) $x - y + z = 4$</p> <p>$x - 2y - 2z = 9$</p> <p>$2x + y + 3z = 1$</p> | <p>ii) $-4x - 7y + 5z = 4$</p> <p>$4x + y - 3z = 9$</p> <p>$4x + 3y - z = 1$</p> |
|--|---|

29. Use product $\begin{bmatrix} 1 & -1 & 2 \\ 0 & 2 & -3 \\ 3 & -2 & 4 \end{bmatrix} \begin{bmatrix} -2 & 0 & 1 \\ 9 & 2 & -3 \\ 6 & 1 & -2 \end{bmatrix}$ to solve the system of equations

| | | |
|--|--|---|
| <p>i) $x - y + 2z = 1$</p> <p>$2y - 3z = 1$</p> <p>$3x - 2y + 4z = 2$</p> | <p>ii) $-2x + z = 1$</p> <p>$9x + 2y - 3z = 1$</p> <p>$6x + y - 2z = 2$</p> | <p>iii) $-2x + 9y + 6z = 1$</p> <p>$2y + z = 1$</p> <p>$x - 3y - 2z = 2$</p> |
|--|--|---|

30. If $A = \begin{bmatrix} 3 & 1 & 2 \\ 3 & 2 & -3 \\ 2 & 0 & -1 \end{bmatrix}$, find A^{-1} . Hence, solve the system of equations:

$$3x + 3y + 2z = 1 \quad x + 2y = 4 \quad 2x - 3y - z = 5$$

31. If $\begin{bmatrix} 2 & 3 \\ 5 & 7 \end{bmatrix} \begin{bmatrix} 1 & -3 \\ -2 & 4 \end{bmatrix} = \begin{bmatrix} -4 & 6 \\ -9 & x \end{bmatrix}$, write the value of ' x '.

32. Write the element a_{12} of the matrix $A = [a_{ij}]_{2 \times 2}$, whose elements a_{ij} are given by $a_{ij} = e^{2ix} \sin jx$.

33. Write the number of all possible symmetric matrices of order 3×3 with each entry 1 or 2.

34. If $A = \begin{bmatrix} 1 & 2 & 2 \\ 2 & 1 & x \\ -2 & 2 & -1 \end{bmatrix}$ is a matrix satisfying $AA^t = 9I$, find ' x '.

35. Show that all the diagonal elements of a skew-symmetric matrix are zero.

36 If A and B are two non-singular square matrices such that $AB = \begin{bmatrix} 2 & 0 & 0 \\ 0 & 2 & 0 \\ 0 & 0 & 2 \end{bmatrix}$ then find

$\det [\text{adj}(AB^T)]$.

37 If $\begin{bmatrix} 1 & 0 & 0 \\ 0 & y & 0 \\ 0 & 0 & 1 \end{bmatrix} \begin{bmatrix} x \\ -1 \\ z \end{bmatrix} = \begin{bmatrix} 1 \\ 2 \\ 1 \end{bmatrix}$, find $x + y + z$.

38 If A is a square matrix such that $A^2 = I$, then find the simplified value of

$$(A - I)^3 + (A + I)^3 - 7A.$$

39. An amount of Rs.5000 is put into three investments at the rate of interest of 6%, 7% and 8% per annum respectively. The total annual income is Rs.358. If the combined income from the first two investments is Rs.70 more than the income from the third, find the amount of each investment by matrix method.

40. Two schools P and Q want to award their selected students on the values of Discipline, Politeness and Punctuality. The school P wants to award Rs.x each, Rs.y each and Rs. z each for the three respective values to its 3, 2 and 1 students with a total award money of Rs.1000. School Q wants to spend Rs.1500 to award its 4, 1 and 3 students on the respective values (by giving the same award money for three values as before). If the total amount of awards for one prize on each value is Rs.600, using matrices; find the award money for each value.

AMS P.OBUL REDDY PUBLIC SCHOOL

HOLIDAY HOMEWORK 2022

CLASS: XII

SUBJECT: PHYSICAL EDUCATION

Physical Education

GUIDE LINES:

- The project should be of **15-20 pages A4 size white pages** (approx.),
- Only hand-written.
- Must be added pictures relevant for the topic.
- Cover page and index.
- Must be submitted in **file folders**.
- Creativity will carry extra marks .
- MARKS-20

Instructions : Students need to attempt all topics compulsory given below that can even refer any additional material relevant to the topic.

ART INTEGRATION

Your school is hosting CBSE Regional sports meet. Plan and present a Folk Art for the opening ceremony. (5M)

Extension Activity

1. Working in your group, plan in detail the Interhouse Basketball & volleyball matches to be held in your school. (5M)

2.As the sports captain of your school,you are involved in the selection of students for participating in District/Region/Zone matches subsequently. (5M)

List out the criteria you will employ for selection of

(a) Individual Games/sports.

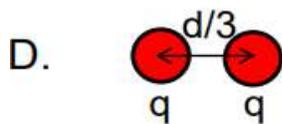
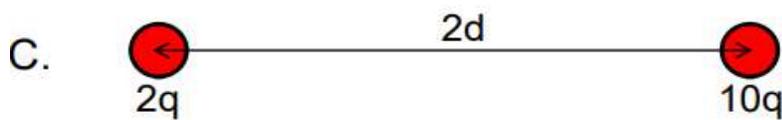
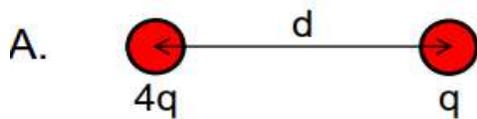
(b) TeamGames/sports.

ANSWER THE FOLLOWING QUESTION IN 150-200 WORDS

1. Discuss a method you would choose to spread health awareness and harmony in your area. Support your answer with reasons. (5M)

DDMS P.OBUL REDDY PUBLIC SCHOOL. HYDERABAD
Holiday Homework PHYSICS XII

1. In each of the four scenarios listed below, the two charges remain fixed in place as shown. In which case is the force acting between the two charges is the least.



Ans: A

2. An electric dipole of length 2cm has a charge of $\pm 4\text{nC}$. If the dipole is placed in a uniform electric field of 300N/C at an angle of 60° with the electric field, what is the torque on the dipole?

Ans. $12\sqrt{3} \times 10^{-9} \text{ C}\cdot\text{m}$

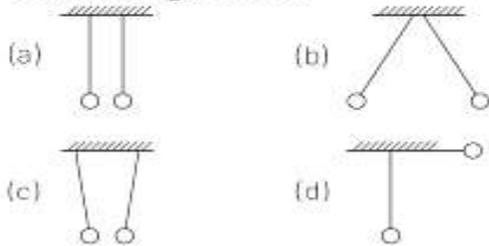
3. If a 50-N force acts on a $250\text{-}\mu\text{C}$ charge, what is the electric field strength?

Ans. $2 \times 10^5 \text{ N/C}$

4. A dipole is placed in a uniform external electric field E . Diagrammatically represent the position of the dipole in stable and unstable equilibrium and write the expressions for the torque acting on the dipole in both the cases.

5.

If a plastic rod rubbed with fur is made to touch two small pith balls suspended nearby, then which figure shows their final configuration?



Ans. (b)

6.

Two point charges placed at a certain distance r in air exert a force F on each other. Then, the distance r' at which these charges will exert the same force in a medium of dielectric constant K is given by

- (a) r (b) r/K
(c) r/\sqrt{K} (d) $r\sqrt{K}$

Ans. (c)

7. Quantisation of charge implies

- (a) charge cannot be destroyed
(b) charge exists on particles
(c) there is a minimum permissible charge on a particle
(d) charge, which is a fraction of a coulomb is not possible.

Ans.(c)

8.

Two point charges $+8q$ and $-2q$ are located at $x = 0$ and $x = L$, respectively. The location of a point on the X -axis at which the net electric field due to these two point charges is zero, is

- (a) $8L$ (b) $4L$ (c) $2L$ (d) $L/4$

Ans: (c)

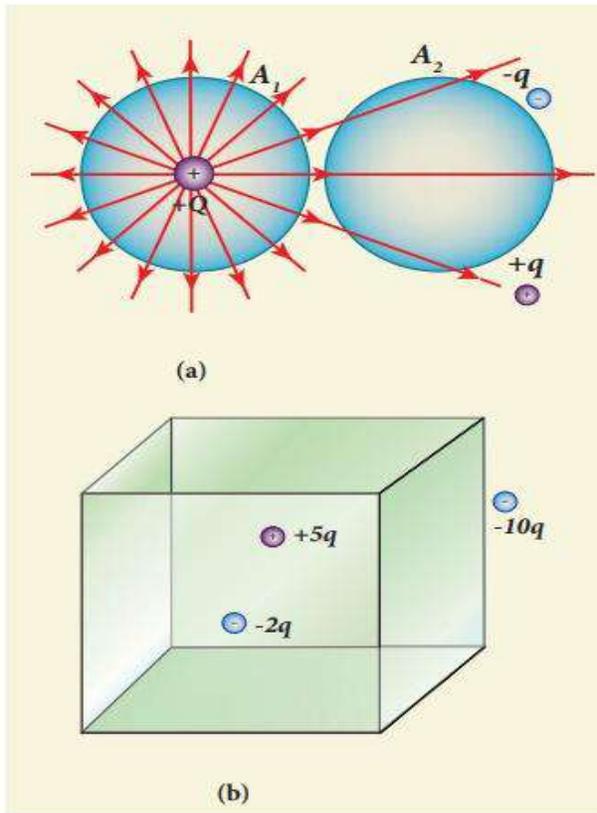
9.

Two spheres have their surface charge densities in the ratio of $2 : 3$ and their radii $3 : 2$. The ratio of the charges on them is

- (a) $3 : 2$ (b) $4 : 2$ (c) $2 : 3$ (d) $2 : 4$

Ans: (a)

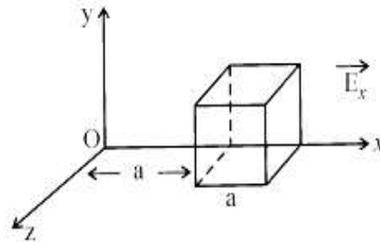
- 10..(i) In figure (a), calculate the electric flux through the closed areas A1 and A2.
(ii) In figure (b), calculate the electric flux through the cube



Ans: (i) Q/ϵ_0 , zero (ii) $3q/\epsilon_0$

11.

Define electric flux and write its SI unit. The electric field components in the figure shown are : $E_x = \alpha x$, $E_y = 0$, $E_z = 0$ where $\alpha = \frac{100 \text{ N}}{\text{Cm}}$. Calculate the charge within the cube, assuming $a = 0.1\text{m}$.



Ans: $(0.1)\epsilon_0$

12. Two charges q_1 and q_2 are placed in vacuum at a distance d and the force acting between them is F . If a medium of dielectric constant 8 is introduced around them, the force now will be

- (a) $F/8$ (b) $F/2$ (c) $F/4$ (d) $8F$ Ans: (a)

13. Two charges of equal magnitudes kept at a distance r exert a force F on each other. If each charge is halved and the distance between them is doubled, then the new force acting on each charge is

- (a) $\frac{F}{8}$ (b) $\frac{F}{4}$
 (c) $4F$ (d) $\frac{F}{16}$

Ans:(d)

14. Total electric flux coming out of a unit positive charge kept in air is

- (a) ϵ_0 (b) ϵ_0^{-1}
 (c) $(4\pi\epsilon_0)^{-1}$ (d) $4\pi\epsilon_0$

Ans:(b)

15. The magnitude of electric field intensity E is such that, an electron placed in it would experience an electrical force equal to its weight, is given by

- (a) mge (b) mg/e (c) e/mg (d) e^2g/m^2

Ans:(b)

16. An electric dipole is placed at an angle of 30° with an electric field of intensity $2 \times 10^5 \text{ NC}^{-1}$, it experiences a torque of 4 Nm . Calculate the charge on the dipole if the dipole length is 2 cm .

- (a) 8 mC (b) 4 mC (c) $8 \mu\text{C}$ (d) 2 mC

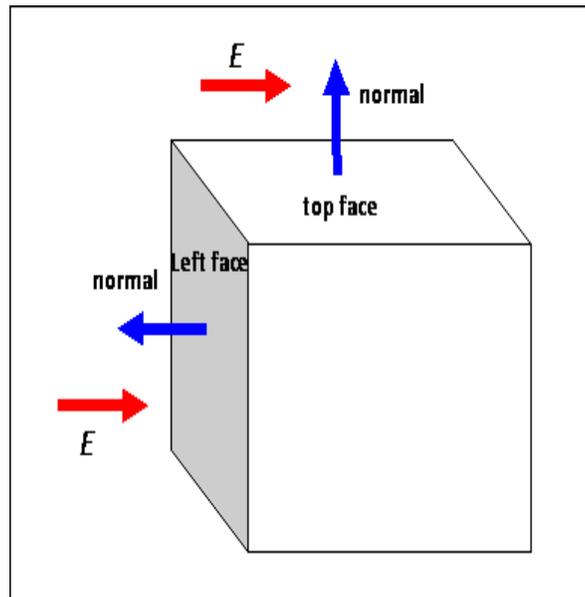
Ans:(d)

17. When 10^{14} electrons are removed from a neutral metal sphere, the charge on the sphere becomes

Ans:

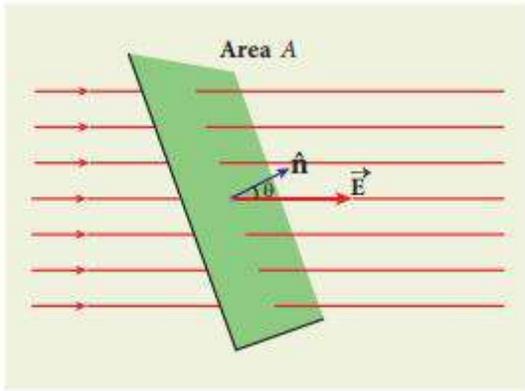
$16\mu\text{C}$

18. A cube of side 2 cm is placed in a region of electric field $E = 120 \text{ N/C}$. Calculate the electric flux through (i) the top face (ii) the left face



Ans: (i) zero (ii) $-48 \times 10^{-3} \text{ Nm}^2/\text{C}$

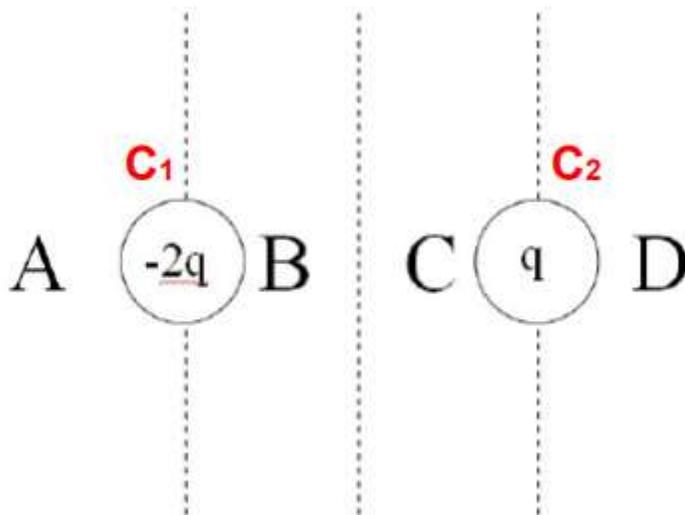
19. Calculate the electric flux through the rectangle of sides 20 cm and 10 cm kept in the region of a uniform electric field 100 NC^{-1} . The angle θ is 60° . Suppose θ becomes zero, what is the electric flux?



Ans: $1 \text{ Nm}^2/\text{C}$, $2 \text{ Nm}^2/\text{C}$

20. Electric field lines provide information about
 (a) field strength (b) direction (c) nature of charge (d) all of these
 Ans: (d)

21. Two point charges (C_1 and C_2) are fixed as shown in the setup below. Now consider a third test charge with charge $-q$ that you can place anywhere you want in regions A, B, C, or D. In which region could you place the test charge so that the net force on the test charge is zero?



Ans: D

AMS P.OBUL REDDY PUBLIC SCHOOL

HOLIDAY HOMEWORK 2022

| CLASS: XII | | SUBJECT: POLITICAL SCIENCE | |
|-------------------|---|----------------------------|--|
| TOPICS | CHOOSE ANY ONE FROM THE FOLLOWING : <ul style="list-style-type: none">➤ Presence of 3rd world in global politics.➤ New centres of power➤ Green politics, need of the hour.➤ Emergency 1975 = Saving 'INDIRA'➤ The Nehru- Jinnah theory of division➤ Do opposition parties still exist in Indian politics?➤ US Dominance in World Politics.➤ Ukraine – Russia war➤ Recent Developments in Indian Politics. South Asia in the Post-Cold War Era | | |
| Guidelines | Introduction Statement of Purpose/Need and Objective of the Study, Hypothesis/Research Question, Review of Literature, Presentation of Evidence, Key Words, Methodology, Questionnaire, Data Collection. Significance and relevance of the topic; challenges encountered while conducting the research. NO. OF PAGES 30- 40 | | |
| | | | |

DDMS P OBUL REDDY PUBLIC SCHOOL

HOLIDAY HOMEWORK 2022

Class: XII

Subject: Psychology

Instructions:

- ❖ Write a reflection paper on the specific topic given below in not less than 4-5 pages.
- ❖ It is an individual assignment.
- ❖ This paper should be absolutely hand written.
- ❖ To be submitted in a file folder with your name, class and section on the day of school reopening.

| SL. No | Topic | Name of the student |
|--------|--|--|
| 1 | Effect of parental conflicts on children. | Chinmayee Sudiksha Avaneesh |
| 2 | Your view on gender roles in society. | Aakanksh Isha Divya |
| 3 | Role of media on increasing violence and aggression in adolescents | Sri Harshitha Shuchi Siddhi |
| 4 | Loneliness in Adolescents: Causes / Impact on Mental Health. | Sohita Vaishnavi Hansuja Adarsini |
| 5 | Causes behind teenage suicides. | Suhani Satvik Lekhana |
| 6 | Impact of insomnia on physical health of adolescents. | Adhya Dhiriti Reetam |

| | | |
|----|--|---|
| 7 | Peer group and its impact on your attitude and relationships with family. | Archita Govind Priya Haripriya |
| 8 | Causes / Impacts of bullying in Adolescents | Gopika Neha Yogita |
| 9 | What is leadership according to you? How do you interpret? | Soujanya Jiya Aditya |
| 10 | What kind of perception about the world needs to be practiced at your age? Why and how its impacts the personality? | Tanvi Anukruti Mani Apurva |
| 11 | How anti-social behaviors in teenagers are manifesting? Causes and your view point on it. | Rudrani Lahana Sree Vaibhavi |
| 12 | How and what do you understand by performance and social anxiety in society? Discuss the ways in which people can overcome it. | Shreya Disha Srikirthi |
| 13 | Initiation vs Inhibition – Why and how is it happening in adolescents? Discuss with instances. | Srividya Vishesh Dhvani |
| 14 | According to you, why adjustment is important and how can we adjust in various situations without being reactive. | Nupur Siri Niharika |
| 15 | How important it is to motivate yourself and what are different ways to sustain it in realistic world? | Vidula Ghritika Sreevalli |

AMS P. OBUL REDDY PUBLIC SCHOOL

HOLIDAY HOMEWORK 2022-23

| CLASS: XII | | SUBJECT: SOCIOLOGY | |
|-------------------|--|---------------------------|--|
| TOPICS | <p><u>CHOOSE ANY ONE FROM THE FOLLOWING :</u></p> <ul style="list-style-type: none">* Changing role of women in Indian society.* Ecological movements in India: Issues and concern.* Effects of Globalization on Culture and Traditions.* Tribal development: A far-fetched Reality.* Youth culture: Influence and Significance.* Caste in Politics and Politics in Caste | | |
| Guidelines | <ul style="list-style-type: none">❖ Introduction❖ Statement of Purpose/Need and Objective of the Study,Hypothesis/Research Question,❖ Review of Literature,❖ Presentation of Evidence, Key Words, Methodology,Questionnaire,❖ Data Collection.❖ Significance and relevance of the topic❖ Limitations/ Challenges encountered while conducting the research. NO. OF PAGES 30- 40 | | |
| | | | |