

CARMEL CONVENT SCHOOL, KUNJWANJ

SUMMER VACATION HOMEWORK OF CLASS 12THA (ARTS & COMMERCE)



GENERAL ENGLISH

1. Reading comprehension: Select a classic novel or a contemporary work and write a summary, highlighting the main themes and characters.
2. Essay writing: Choose a current social or environmental issue and write an essay discussing its causes, impacts, and possible solutions.
3. Poetry analysis: Select a poem by a renowned poet and analyze its structure, language, and underlying meaning.
4. Grammar practice: Create a set of sentences using different tenses, voices, and sentence structures to demonstrate your understanding of grammar rules.
5. Vocabulary building: Compile a list of unfamiliar words from a novel or a newspaper article and create flashcards to enhance your vocabulary.
6. Letter writing: Write a formal letter to a local authority or organization expressing your concerns about an issue in your community.
7. Debate preparation: Research and prepare arguments for a debate on a controversial topic, such as the impact of social media or the pros and cons of genetic engineering.
8. Biographical study: Choose a famous author, poet, or playwright and conduct research on their life, works, and literary contributions.
9. Media analysis: Watch a movie or read a book that has been adapted into a film, and write a comparative analysis, discussing the similarities and differences between the two versions.

10. Public speaking: Select a famous speech or TED Talk and deliver a presentation analyzing the rhetorical devices used and its impact on the audience.

Remember to check with your teacher for specific guidelines or additional suggestions for your holiday homework.

BUSINESS STUDIES



PREPARE PRESENTATION ON FOLLOWING TOPICS:

GROUP 1	GROUP 2	GROUP 3
OBJECTIVES OF MANAGEMENT	FUNCTIONS OF MANAGEMENT	PRINCIPLES OF PRINCIPLES

PREPARE ASSIGNMENT OF:

- Discuss the concept of management.
- Discuss the nature of management.
- What are the levels of management?
- What are the functions of management?
- Discuss the principles of management.
- What are the scientific techniques of Taylor?

ECONOMICS

Economics



PREPARE PRESENTATION ON FOLLOWING TOPICS:

GROUP 1	GROUP 2	GROUP 3	GROUP 4
CENTRAL PROBLEMS OF ECONOMY	PRODUCTION POSSIBILITY CURVE	CONCEPT OF UTILITY	DEMAND CURVE

PREPARE ASSIGNMENT OF:

- Differentiate between microeconomics and macroeconomics.
- Why do central problems arise? Explain the problem of allocation of resources. How are central solved in different economies?
- Draw a production possibility curve. What do the points inside and outside this curve indicate. Explain.
- Explain the meaning of consumer equilibrium with the help of table & diagram.
- Explain the law of demand with the help of demand schedule.
- Define increase & decrease in demand. What are the cause of increase and decrease in demand.?
- Discuss the determinants of demand.

ACCOUNTANCY



- Make a COMPREHENSIVE & SPECIFIC PROJECT REPORT Of any renowned company.

The project report will include:

- 1) The history of the Company.
- 2) Journal & Ledgers.
- 3) Subsidiary Books & Trial Balance.
- 4) Financial Statements.
- 5) Ratio Analysis & Cash Flow.
- 6) Auditor's Report
- 7) Graphical Representations of all Ratios.
- 8) Conclusion.
- 9) Bibliography & Webliography.

2) 1. A and B were partners in a firm sharing profits and losses in the ratio of 3:2. They admit C into the partnership with $\frac{1}{6}$ share in the profits. Calculate the new profit sharing ratio?

3) A,B,C were partners in a firm sharing profits in 3:2:1 ratio. They admitted D for 10% profits. Calculate the new profit sharing ratio?

4) A and B were partners in a firm sharing profits in 3:2 ratio. They admitted C for $\frac{3}{7}$ share which he took $\frac{2}{7}$ from A and $\frac{1}{7}$ from B. Calculate new profit sharing ratio?

5) A, B and C were partners in a firm sharing profits in 3:3:2 ratio. They admitted D as a new partner for $\frac{4}{7}$ profit. D acquired his share $\frac{2}{7}$ from A. $\frac{1}{7}$ from B and $\frac{1}{7}$ from C. Calculate new profit sharing ratio?

6) Singh, Gupta and Khan are partners in a firm sharing profits in 3:2:3 ratio. They admitted Jain as a new partner. Singh surrendered $\frac{1}{3}$ of his share in favour of Jain:

Gupta surrendered $\frac{1}{4}$ of his share in favour of Jain and Khan surrendered $\frac{1}{5}$ in favour of Jain. Calculate new profit sharing ratio?

7) Firm's Capital in a business is ₹ 2,00,000. The normal rate of return on firm's capital is 15%. During the year 2015 the firm earned a profit of ₹ 48,000. Calculate goodwill on the basis of 3 years purchase of super profit?

8) Rajan and Rajani are partners in a firm. Their capitals were Rajan ₹ 3,00,000; Rajani ₹ 2,00,000. During the year 2015 the firm earned a profit of ₹ 1,50,000. Calculate the value of goodwill of the firm by capitalisation method assuming that the normal rate of return is 20%?

9) Rajesh and Mukesh are equal partners in a firm. They admit Hari into partnership and the new profit sharing ratio between Rajesh, Mukesh and Hari is 4:3:2. On Hari's admission goodwill of the firm is valued at ₹ 36,000. Hari is unable to bring his share of goodwill premium in cash. Rajesh, Mukesh and Hari decided not to show goodwill in their balance sheet. Record necessary journal entries for the treatment of goodwill on Hari's admission.

10) Amar and Akbar are equal partners in a firm. They admitted Anthony as a new partner and the new profit sharing ratio is 4:3:2. Anthony could not bring this share of goodwill ₹ 45,000 in cash. It is decided to do adjustment for goodwill without opening goodwill account. Pass the necessary journal entry for the treatment of goodwill?

POLITICAL SCIENCE



- Make a thorough study of UNO and its agencies
- Study the lesson (UNO) and prepare a PPT to explain in the class.
- Project Work- (File) – (Research Work)
G20- 2023 – A detailed study
- Prepare for UI-Given five lessons in syllabus

PUBLIC ADMINISTRATION



- Civil Services- Personal Administration in India-(In Register)
 - Recruitment Process
 - Training
 - Functions/ Role of Civil Servants
 - Evolution of Civil Services in India
- Make a thorough study of fundamental Rights/fundamental Duties/Directive Principles of state policy.
- PPT on Panchayat Raj System
 - 73rd Constitution Amendment
 - 74th Constitutional Amendment
- Prepare for U1 Exam- Syllabus
Done topics of L.no.2,3,4,7&7

PHYSICAL EDUCATION



- Revise the chapter 1st and 2nd.
- 2. Practical, track and field (400 mtr.) Field and track events.
- 3. Play at home atleast 30 min. Daily to stay fit and healthy.

MATHS



Chapter :- Inverse Trigonometric functions

1. Find the principal value of $\tan^{-1}(1)$.
2. If $\tan^{-1}(x-1)/(x-2) + \tan^{-1}(x+1)/(x+2) = \pi/4$, then find the value of x .
3. Solve: $\tan^{-1} 2x + \tan^{-1} 3x = \pi/4$
4. Find the value of $\cos^{-1}(1/2) + 2 \sin^{-1}(1/2)$.
5. Prove that $\sin^{-1}(3/5) - \sin^{-1}(8/17) = \cos^{-1}(84/85)$.
6. Determine the principal value of $\cos^{-1}(-1/2)$.
7. Find the value of $\cot(\tan^{-1} \alpha + \cot^{-1} \alpha)$.
8. The value of $\tan^{-1} \sqrt{3} - \sec^{-1}(-2)$ is equal to:

Chapter:- Matrices

1. If a matrix has 8 elements, what are the possible orders it can have.
2. Define square matrix
3. The no. of all possible metrics of order 3×3 with each entry 0 or 1 is
4. If A, B are symmetric matrices of same order, then $AB - BA$ is a
5. If A and B are symmetric matrices of the same order, prove that $AB + BA$ is symmetric
6. If A is any square matrix, prove that AA^T is symmetric

7. find X
$$\begin{bmatrix} -2 & -3 & x & -1 \\ 1 & 1 & 1 & 3 \end{bmatrix} = \begin{bmatrix} -1 \\ 3 \end{bmatrix}$$

8. Give example of matrices such that $AB = 0$, $BA = 0$, $A \neq 0$, $B \neq 0$

9. $A = \begin{bmatrix} 0 & 1 & -1 \\ -1 & 0 & 1 \\ 1 & -1 & 0 \end{bmatrix}$ Show that, is skew symmetric matrix.

10. $\begin{vmatrix} x & y & 1 \\ 3y & x & 2 \end{vmatrix} = \begin{vmatrix} 3 \\ 5 \end{vmatrix}$ find x and y.

12. If A is a square matrix such that $A^2 = A$, then $(I + A)^3 - 7A$ is equal to

13. Construct a 3×4 matrix, whose $\frac{1}{2}|-3i + j|$ element are given by $a_{ij} =$

Chapter – Determinants

1. Find the area of the triangle whose vertices are (3, 8), (-4, 2) and (5, 1).

2. The monthly incomes of Aryan and Babban are in the ratio 3 : 4 and their monthly expenditures are in the ratio of 5 : 7. If each saves ? 15,000 per month, find their monthly incomes, using the matrix method.

3. solve the system of equations (CBSE. 2017):

$$2x + 3y + 10z = 2$$

$$4x - 6y + 5z = 5$$

$$6x + 9y - 20z = -4$$

Activity -1

To draw the graph of $1 \sin x -$, using the graph of $\sin x$ and demonstrate the concept of mirror reflection (about the line $y = x$)

Activity -2

To explore the principal value of the function $\sin^{-1}x$ using a unit circle.



Q: List all the wastes that you generate at home, school or during your trip to other places, could you very easily reduce? Which would be difficult or rather impossible to reduce?

Q: a) A decade back, the enormous vehicular traffic in Delhi had made Delhi rank 4th among most polluted cities of the world. Two measures taken by the Delhi government brought marked improvement in air quality by 2005. What are these two measures and how did they reduce air pollution?

b) What is the norm set by Euro-II for petrol and diesel vehicles?

Q: Public all over India is very much concerned about the deteriorating air quality in large parts of north India. Alarmed by this situation, the residents welfare association of your locality organized an awareness programme entitled "bury not burn". They invited you being a biology student to participate.

a) How would you justify your arguments that promote burying and discourage burning?

b) With the help of flow charts, one for each practice, depict the chain of events that follow.

Q: Make a project on any one topic given below:

Waste Management/Wildlife conservation/Sewage treatment/Energy Conservation/Wetland Management.

Collect the data and record it in the given format:

- A) Index
- B) Acknowledgement
- C) Introduction
- D) Theory(Refer books and internet for this)
- E) Questionnaire/ Case studies
- F) Experience
- G) Conclusion
- H) Bibliography

Read the chapter - Soil Degradation

Revise the chapter - Air pollution and Water pollution



Computer SCIENCE

Prepare PowerPoint for below given topics:

Networking and its advantages

1. Types of Networks: PAN, LAN, MAN, WAN
2. Transmission Media: Twisted pair cable, Coaxial cable, Optical fiber, Infra-Red, Satellite transmission.
3. Network Topologies: Bus, Star, Ring
4. Modem
5. Cyber safety and security

Cyber Bullying:

1. Preventive Measures
2. Computer Safety and Security
3. Internal Safety and Ethics
4. Safe Social Networking
5. Safe Email Practices
6. Dos and Don'ts for Cyber Safety

Practical Work:

1. Write a program to convert Temperature from Fahrenheit to centigrade and Vice- versa.
2. Write a program using a class to store the mark list of 5 and to print highest Marks and Average Marks.
3. Write a C++ program to calculate perimeter and area of a square whose side is 2.5 cm.
4. WAP to use Parameterized constructors.
5. WAP to calculate area of a circle, rectangle and square using Function Overloading.